



MINISTRY OF HEALTH  
MALAYSIA

# MALAYSIA

## NATIONAL HEALTH ACCOUNTS

### HEALTH EXPENDITURE REPORT

# 2011-2021



# MNHA



# **MALAYSIA NATIONAL HEALTH ACCOUNTS HEALTH EXPENDITURE REPORT 2011-2021**

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## MESSAGE FROM THE DIRECTOR-GENERAL OF HEALTH MALAYSIA

As the shadow of non-communicable diseases (NCDs) comes to light again, there is a need to focus on primary health care (PHC) to curb the rising burden of NCDs and rapidly ageing populations that threaten to increase the cost and financial sustainability of health systems. PHC is key for strong, resilient, and efficient health systems. Building PHC systems that provide integrated, people-centered services while shifting away from disease focused treatment towards preventive measures with a stronger emphasis on maintaining health and well-being is crucial. The future of PHC demands that communities and individuals to be empowered about their health care.

Taking into account the importance of PHC, the Malaysia National Health Account (MNHA) has been tracking primary health care expenditure using a standardised framework, which ensures comparability across countries and over time. National Health Accounts (NHA) estimates can significantly influence policy by monitoring health expenditure patterns. It provides decision makers a holistic picture of the health sector. More recently, it has also become a crucial data contributor to health care reform initiatives.

As per the latest findings of the MNHA Health Expenditure Report, in 2021, Malaysia's total expenditure on health (TEH) was estimated at RM78.2 billion, or 5.1% of its gross domestic product (GDP). Public sources of financing remained higher than the private, with total public sources health expenditure of 57.9% or RM45.3 billion which is mostly contributed by COVID-19 pandemic response. Out-of-pocket (OOP) was the second-highest source of funding at 31.5%, after the Ministry of Health (MOH). The highest health expenditure by provider of health care was in hospitals at RM39.4 billion, or 50.4% of TEH. For the function of health care, health expenditure for curative care services was the highest at RM45.2 billion, or 57.8% of TEH. Looking at PHC expenditure, it occupied 25.9% of TEH, amounted to RM20.3 billion. Whereas for COVID-19, the estimated health expenditure was RM7.6 billion, or 9.7% of TEH, with MOH as the primary source of financing at RM5.8 billion, or 76.5%.

I would like to take this opportunity to thank all the input given by the MNHA Steering Committee and MNHA Technical Advisory Committee. I look forward to the continued production of the Health Expenditure Report and variations in the trend over the years. Also, a special appreciation goes out to the MNHA team for their exceptional commitment and hard work in producing this report.

**Datuk Dr Muhammad Radzi bin Abu Hassan**  
Director-General of Health Malaysia



## MESSAGE FROM THE DEPUTY SECRETARY GENERAL (FINANCE) MINISTRY OF HEALTH, MALAYSIA

Malaysia's healthcare system has undergone robust changes over the past two years. In 2021, government health spending was focused on managing the evolving COVID-19 pandemic while tackling challenges due to non-communicable diseases (NCDs). Various measures had been taken to combat the pandemic. The National COVID-19 Immunisation Programme (PICK) was introduced in February 2021 as an approach to curb the spread of the coronavirus. PICK successfully covered 84.3% of the population (completed second dose).

COVID-19 pandemic has demonstrated the need to build strong and resilient health systems that will ensure the well-being of the population. Evidence-based documented information on financing resources, health care providers and health care services supports effective resource prioritization that can lead to a stronger health care system. Tracking health expenditure can result in better provision of health opportunities, which can strengthen our healthcare system.

Malaysia's National Health Accounts (MNHA) has continued its efforts to produce COVID-19 health expenditure estimation subaccounts. MNHA has been critical in tracking the country's healthcare expenditure in order to demonstrate the flow of funds in the health system and monitor estimated health expenditure patterns. The latest publication of the Malaysia National Health Account, Health Expenditure Reports 2011–2021, highlights the health expenditure based on NHA triaxial framework. Reported expenditure data are macro level expenditures, which are based on national and international framework.

I would like to extend my appreciation to the Planning Division, and the MNHA team for their immense effort in producing this report, as well as to all the public and private stakeholders who made great contributions to the report. I hope this unwavering support will continue in the future for better outcomes.

**Dato' Sri Norazman Ayob**  
Deputy Secretary General (Finance)  
Ministry of Health, Malaysia



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# LIST OF ABBREVIATIONS

<b>AADK</b>	<i>Agensi Anti Dadah Kebangsaan</i> (National Anti-Drug Agency)
<b>AG</b>	Accountant General
<b>AGD</b>	Accountant General's Department of Malaysia
<b>BNM</b>	<i>Bank Negara Malaysia</i> (Central Bank of Malaysia)
<b>CHE</b>	Current Health Expenditure
<b>COICOPS</b>	Classification of Individual Consumption by Purpose
<b>CORPS</b>	Corporations
<b>DOSH</b>	Department of Occupational Safety and Health
<b>DOSM</b>	Department of Statistics Malaysia
<b>EPF</b>	Employees Provident Fund
<b>EMRS</b>	Emergency Medical Rescue Services
<b>EPU</b>	Economic Planning Unit
<b>FOMCA</b>	Federation of Malaysia Consumers Association
<b>FOMEMA</b>	Foreign Worker's Medical Examination Monitoring Agency
<b>FT</b>	Federal Territory
<b>GDP</b>	Gross Domestic Product
<b>GHED</b>	Global Health Expenditure Database
<b>HC</b>	ICHA code for functions of health services
<b>HC.R</b>	ICHA code for health-related services
<b>HER</b>	Health Expenditure Report
<b>HES</b>	Household Expenditure Survey
<b>HIES</b>	Household Income and Expenditure Survey
<b>HF</b>	ICHA code for sources of financing for health services
<b>HP</b>	ICHA code for providers of health services
<b>HQ</b>	Headquarters
<b>ICHA</b>	International Classification for Health Accounts
<b>IJN</b>	<i>Institut Jantung Negara</i> (National Heart Institute)
<b>IMF</b>	International Monetary Fund
<b>ISN</b>	<i>Institut Sukan Negara</i> (National Sports Institute)



<b>IT</b>	Information Technology
<b>JAKOA</b>	<i>Jabatan Kemajuan Orang Asli</i> (Department of Orang Asli Development)
<b>JBA</b>	<i>Jabatan Bekalan Air</i> (Water Supply Department)
<b>JHAQ</b>	Joint Health Accounts Questionnaire
<b>JKM</b>	<i>Jabatan Kebajikan Masyarakat</i> (Social Welfare Department)
<b>JPA</b>	<i>Jabatan Perkhidmatan Awam</i> (Public Service Department)
<b>KL</b>	Kuala Lumpur
<b>KN</b>	<i>Kerajaan negeri</i> (State government)
<b>KWAP</b>	<i>Kumpulan Wang Persaraan</i>
<b>KWC</b>	<i>Kumpulan Wang COVID-19</i>
<b>LA/PBT</b>	Local authorities ( <i>Pihak berkuasa tempatan</i> )
<b>LPPKN</b>	<i>Lembaga Penduduk dan Pembangunan Keluarga Negara</i> (National Population and Family Development Board)
<b>LTH</b>	<i>Lembaga Tabung Haji</i> (Pilgrims Fund Board)
<b>MAIN</b>	<i>Majlis Agama Islam Negeri</i> (Zakat Collection Centre)
<b>MCO</b>	Managed Care Organisation
<b>MF</b>	MNHA code for functions of health care
<b>MKN</b>	<i>Majlis Keselamatan Negara Malaysia</i> (Malaysian National Security Council)
<b>MNHA</b>	Malaysia National Health Accounts
<b>MOD</b>	Ministry of Defence
<b>MOF</b>	Ministry of Finance
<b>MOH</b>	Ministry of Health
<b>MOE</b>	Ministry of Education
<b>MOSTI</b>	Ministry of Science Technology and Innovation
<b>MP</b>	MNHA code for providers of health care
<b>MR</b>	MNHA code for health-related functions
<b>MS</b>	MNHA code for sources of financing
<b>NA</b>	Not Available
<b>NADMA</b>	National Disaster Management Agency ( <i>Agensi Pengurusan Bencana Negara</i> )

<b>NCU</b>	National Currency Unit
<b>NGO/NPISH</b>	Non-Governmental Organization/Non-profit institutions serving households
<b>NHA</b>	National Health Accounts
<b>NIOSH</b>	National Institute of Occupational Safety and Health
<b>NRI</b>	Non-residual items
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OFA</b>	Other federal agencies
<b>OOP</b>	Out-of-pocket
<b>PC</b>	Primary Care
<b>PHC</b>	Primary Health Care
<b>PPE</b>	Personal protective equipment
<b>PSD</b>	Public Service Department
<b>PSE</b>	Public Sector Expenditure
<b>PSHE</b>	Public Sector Health Expenditure
<b>RI</b>	Residual items
<b>RM</b>	<i>Ringgit Malaysia</i> (Malaysia Currency)
<b>RMK</b>	<i>Rancangan Malaysia</i>
<b>ROW</b>	Rest of the world
<b>SHA</b>	System of Health Accounts
<b>SHA 1.0</b>	System of Health Accounts, Version 1.0 (published in 2000)
<b>SHA 2011</b>	System of Health Accounts, 2011 Edition
<b>SOCSSO</b>	Social Security Organisation
<b>SOP</b>	Standard Operating Procedure
<b>SSB</b>	State statutory body
<b>TCM</b>	Traditional and Complementary Medicine
<b>TEH</b>	Total Expenditure on Health
<b>UKAS</b>	<i>Unit Kerjasama Awam Swasta</i> (Public Private Partnership Unit)
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>WHO</b>	World Health Organization
<b>WB</b>	World Bank

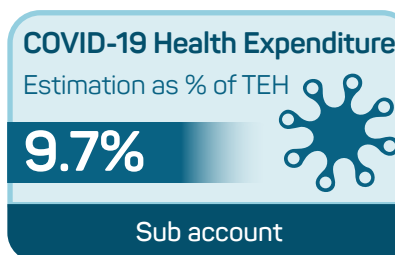
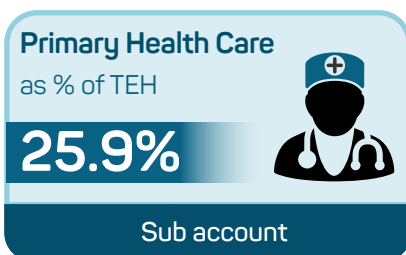
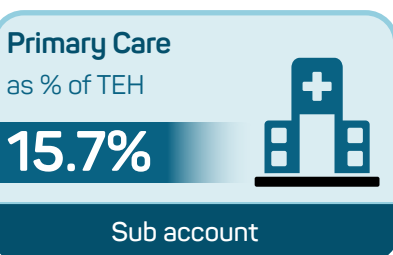
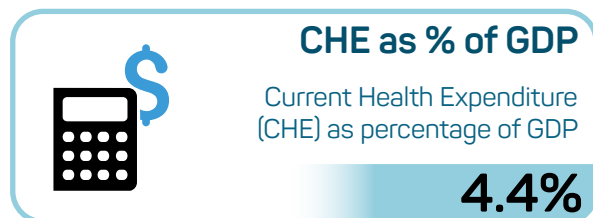
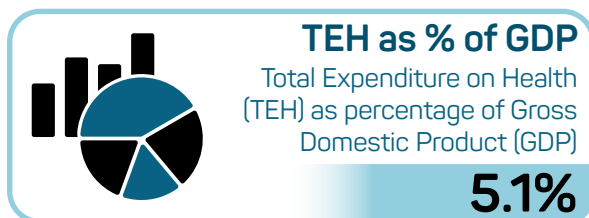
# EXECUTIVE SUMMARY OF 2021

**TEH**  
Total Expenditure of Health  
**RM 78,220 m**



Malaysia is an upper middle-income country with a health care system that delivers a comprehensive range of services through a combination of public and private health care 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
- 11 years of National health Expenditure data (2011-2021)



# REPORT INFORMATION

MNHA HER (2011-2021) contains eleven years of national health expenditure data from 2011 to 2021, estimated using standardised and internationally acceptable National Health Accounts (NHA) methodology. The Malaysia National Health Accounts Health Expenditure Report 2011-2021 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 classification. 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 2011 to 2021 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-tabulations 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-tabulations 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 estimation to gauge the impact of COVID-19 pandemic on health spending in 2021.

Colour Scheme for Charts/Figures:

-  Public sectors
-  Private sectors
-  Private & public sectors



# 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-10, RMK-11 & RMK-12 (2011-2021). 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 has 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 2011 to 2021. 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 community 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 twentytwo public agencies, which include the National Anti-Drug Agency (AADK), 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) and Emergency Medical Rescue Services (EMRS). 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 177 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:

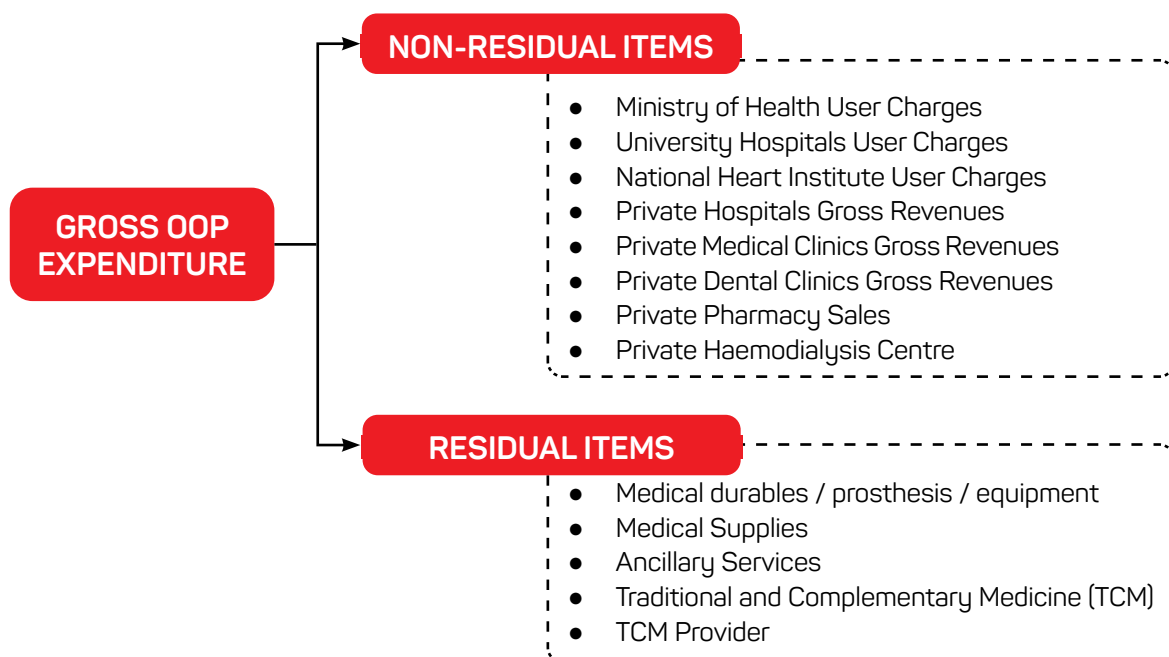
$$\text{OOP Health Expenditure} = (\text{Gross OOP Health Expenditure} - \text{Third Party Payer Reimbursement}) + \text{OOP Expenditure for Health Education \& Training}$$

#### 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 healthcare 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.

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

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, 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.

**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	na
Deflators Base Year 2010	na	na	na	na	na	100	105
GDP Deflator Base Year 2010 (Splicing Method)	<b>85</b>	<b>88</b>	<b>92</b>	<b>102</b>	<b>96</b>	<b>100</b>	<b>105</b>

Note: Derived values in bold

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

$$= (100/118) \times 113$$

$$= 96$$

For year 2008:

$$= (100/118) \times 120$$

$$= 102$$

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)	na	32,000	35,000	39,000	41,000	46,000	49,000	51,000
TEH Constant (RM Million)	na	<b>35,520</b>	<b>37,000</b>	<b>40,840</b>	<b>42,533</b>	<b>47,278</b>	<b>49,899</b>	<b>51,000</b>

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

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

Where:-

- $V_{\text{cox}}$  is the value expressed in constant values for the year for which constant prices are to be calculated (Year x)
- $V_{\text{curx}}$  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:-

- $V_{\text{curx}} = \text{RM}49,000$
- $D_i = 111$
- $D_x = 109$

Then:

$$\begin{aligned} V_{\text{cox}} &= \text{RM}49,000 \times (111/109) \\ &= \text{RM}49,899 \end{aligned}$$

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

## TOTAL EXPENDITURE ON HEALTH

### 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 2021, Malaysia spent RM78,220 million on health. TEH for Malaysia between 2011 till 2021 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 3.9% to 5.1%. In 2021, there was an increase in TEH as a percentage of GDP due to a significant rise in TEH value for 2021.

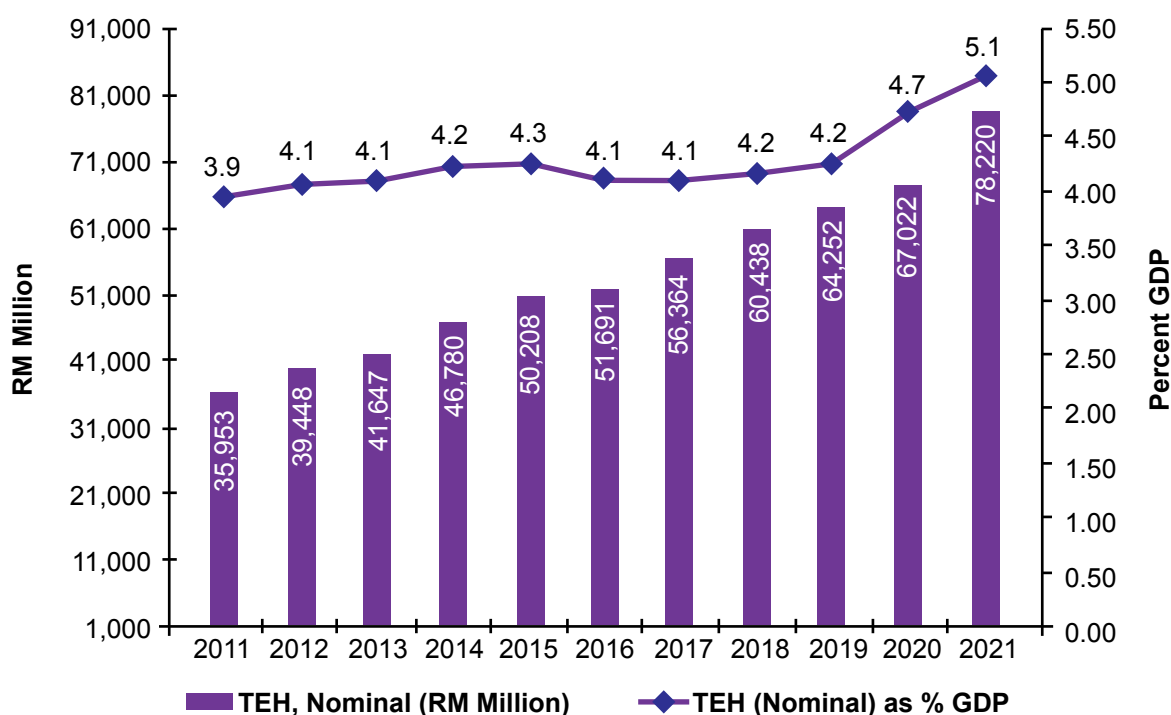
**TABLE 4.1: Total Expenditure on Health, 2011-2021 (RM Million & Percent GDP)**

Year	TEH, Nominal (RM Million)	TEH, Constant (RM Million)*	Total GDP, Nominal (RM Million)**	MNHA Derived GDP Deflator	TEH (Nominal) as % GDP
2011	35,953	41,385	911,733	97	3.94
2012	39,448	44,958	971,252	98	4.06
2013	41,647	47,382	1,018,614	98	4.09
2014	46,780	51,940	1,106,443	100	4.23
2015	50,208	55,951	1,176,941	100	4.27
2016	51,691	56,665	1,249,698	102	4.14
2017	56,364	59,537	1,372,310	105	4.11
2018	60,438	63,445	1,447,760	106	4.17
2019	64,252	67,381	1,512,738	106	4.25
2020	67,022	70,921	1,418,000	105	4.73
2021	78,220	78,220	1,545,372	111	5.06

\*Constant values estimated using MNHA derived GDP deflators

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

**FIGURE 4.1: Trend for Total Expenditure on Health, 2011-2021 (RM Million & Percent GDP)**



## 4.2 PER CAPITA HEALTH EXPENDITURE

In nominal value, per capita expenditure on health ranged from RM1,237 in 2011 to RM2,401 in 2021. In comparison, per capita health expenditure as

constant values ranged from RM1,424 in 2011 to RM2,401 in 2021 (Table 4.2 and Figure 4.2).

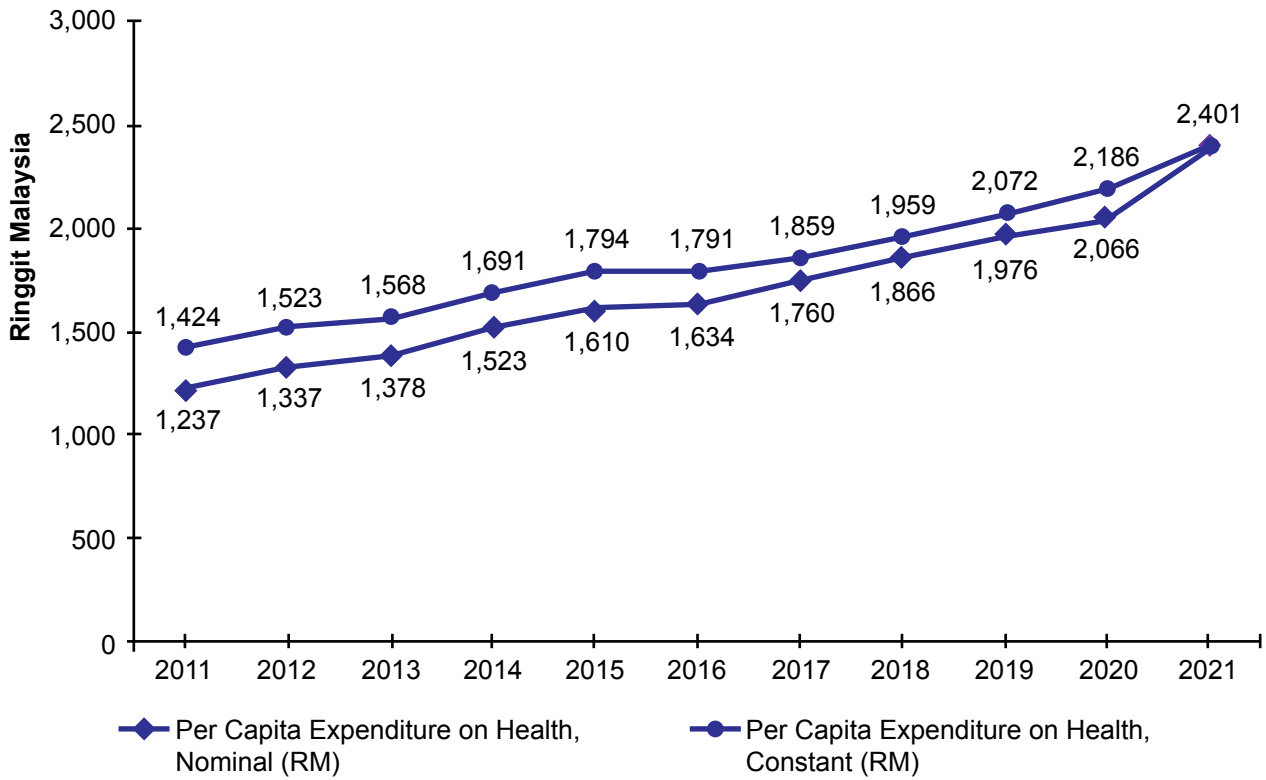
**TABLE 4.2: Per Capita Expenditure on Health, 2011-2021 (Nominal & Constant, RM)**

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**
2011	35,953	41,385	1,237	1,424	29,062,000
2012	39,448	44,958	1,337	1,523	29,510,000
2013	41,647	47,382	1,378	1,568	30,213,700
2014	46,780	51,940	1,523	1,691	30,708,500
2015	50,208	55,951	1,610	1,794	31,186,100
2016	51,691	56,665	1,634	1,791	31,633,500
2017	56,364	59,537	1,760	1,859	32,022,600
2018	60,438	63,445	1,866	1,959	32,382,300
2019	64,252	67,381	1,976	2,072	32,523,000
2020	67,022	70,921	2,066	2,186	32,447,400
2021	78,220	78,220	2,401	2,401	32,576,300

\*Constant values estimated using MNHA derived GDP Deflators

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

**FIGURE 4.2: Per Capita Expenditure on Health, 2011-2021 (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 2021 as the reference year.

There are thirteen states and three Federal Territories, namely Kuala Lumpur, Labuan and Putrajaya. The state population is based on Department of Statistics Malaysia report. In 2021, Selangor had both the largest population of about 7 million people and the highest expenditure on health of RM12,289 million, as shown in Table 4.3 and Figure 4.3.

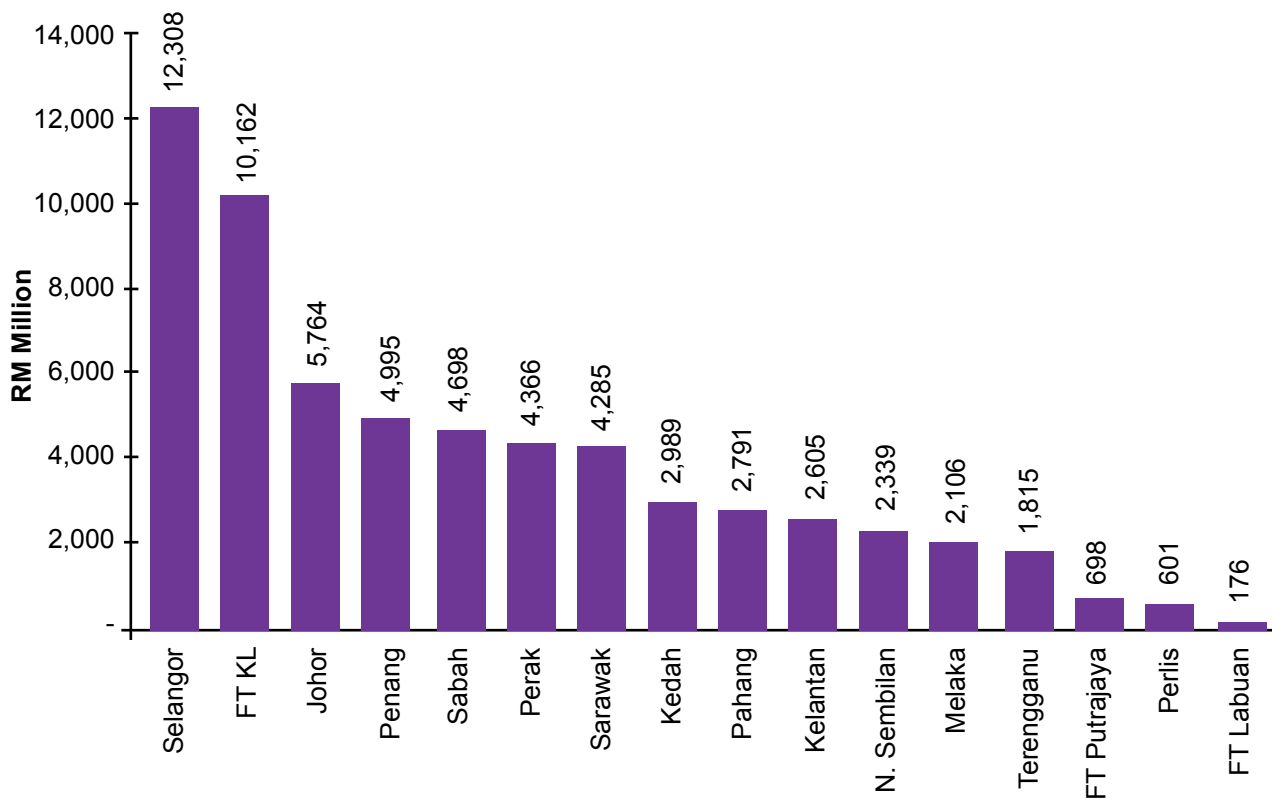
**TABLE 4.3: State Population and Health Expenditure, 2021**

State	Population*	Expenditure (RM Million)
Selangor	7,014,700	12,308
FT KL	1,964,000	10,162
Johor	4,020,000	5,764
Penang	1,740,000	4,995
Sabah	3,412,600	4,698
Perak	2,465,600	4,356
Sarawak	2,515,800	4,285
Kedah	2,151,700	2,989
Pahang	1,601,500	2,791
Kelantan	1,812,300	2,605
N. Sembilan	1,204,200	2,339
Melaka	1,004,500	2,106
Terengganu	1,170,700	1,815
FT Putrajaya	115,200	698
Perlis	287,600	601
FT Labuan	96,000	176
**National (unable to allocate)	na	15,533
<b>Total</b>	<b>32,576,400</b>	<b>78,220</b>

\*Source: Department of Statistics Malaysia (DOSM)

\*\*Note: Unable to allocate by states

FIGURE 4.3: Health Expenditure by States, 2021 (RM Million)



# CHAPTER 5

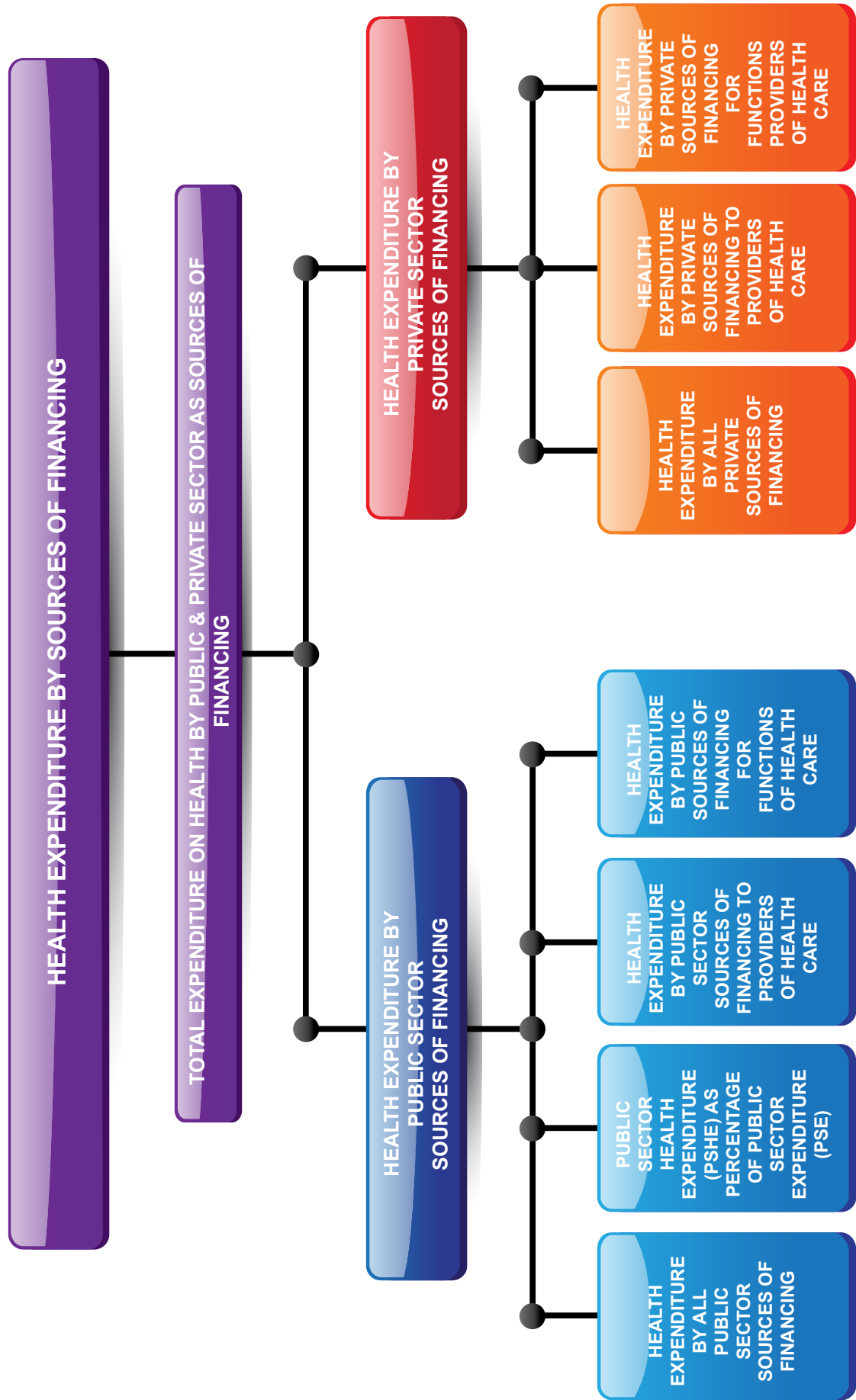
## HEALTH EXPENDITURE BY SOURCES OF FINANCING

Sources of financing for health care services and products include multiple public and private sector agencies. The public sources of health care financing are the federal government, state government, local authorities, social security funds and all other public entities. Private sources of health care 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 health expenditure specifically by both public and private sources of health care financing 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 SOURCES OF FINANCING

Among the various sources of health care financing in 2021, Ministry of Health (MOH) sourced the highest expenditure amounting to RM38,586 million or 49.3% of TEH (Table 5.1a and Figure 5.1a). This is followed by private household out-of-pocket (OOP) spending of RM24,643 million (31.5%) and private insurance spending of RM5,535 million (7.1%). Other federal agencies (including statutory bodies) spent RM3,131 million (4.0%), whereas the Ministry of Education (MOE) spent RM 1,785 million (2.2%) and all corporations (other than health insurance) spent RM1,513 million (1.9%).

The trend of expenditure by sources of health care financing over the past 11 years shows that overall, the top 3 funders are persistently MOH, OOP expenditure and private insurance (Table 5.1b and Table 5.1c).

In 2021, the public and private sources of health care financing spent RM45,250 million (58% of TEH) and RM32,969 million (42% of TEH), respectively. A similar pattern is noted throughout the 2011-2021 time series, where the public sector health expenditure remains higher than the private sector health expenditure. Both public and private sector health expenditure generally showed an increasing trend throughout the 11 years (Table 5.1d and Figure 5.1b).

**TABLE 5.1a: Total Expenditure on Health by Sources of Financing, 2021**

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1	Ministry of Health (MOH)	38,586	49.33
MS2.4	Private household out-of-pocket expenditures (OOP)	24,643	31.51
MS2.2	Private insurance enterprises (other than social insurance)	5,535	7.08
MS1.1.9	Other federal agencies (including statutory bodies)	3,131	4.00
MS1.1.2	Ministry of Education (MOE)	1,785	2.28
MS2.6	All corporations (other than health insurance)	1,513	1.93
MS2.3	Private MCOs and other similar entities	1,030	1.32
MS1.1.2.2	Other state agencies (including statutory bodies)	520	0.67
MS1.2.2	Social Security Organization (SOCSO)	433	0.55
MS1.1.2.1	(General) State government	249	0.32
MS1.1.3	Local authorities (LA)	248	0.32
MS2.5	Non-profit institutions serving households (NGO)	206	0.26
MS1.1.1.3	Ministry of Defence (MOD)	197	0.25
MS1.2.1	Employees Provident Fund (EPF)	102	0.13
MS9	Rest of the world (ROW)	43	0.05
<b>Total</b>		<b>78,220</b>	<b>100.00</b>



FIGURE 5.1a: Total Expenditure on Health by Sources of Financing, 2021

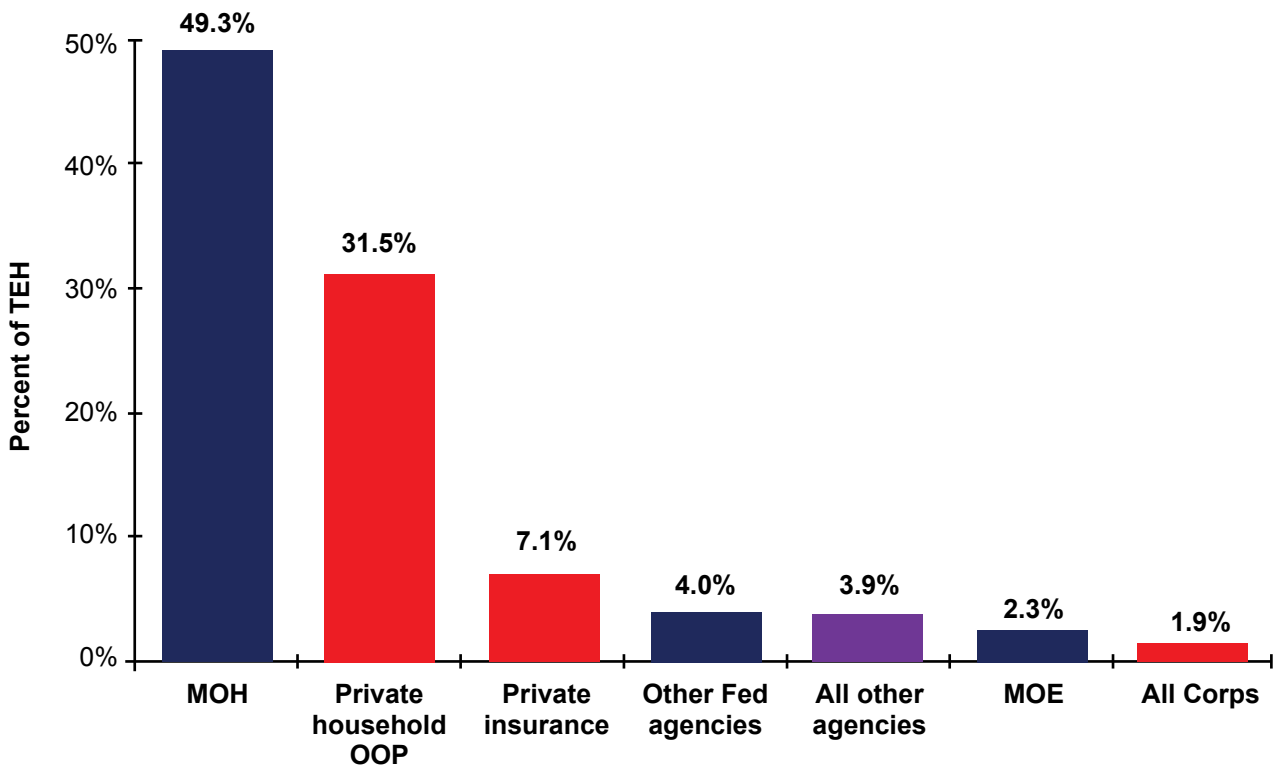


TABLE 5.1b: Total Expenditure on Health by Sources of Financing, 2011-2021 (RM Million)

MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1.1	Ministry of Health (MOH)	16,496	18,239	19,038	21,782	22,671	22,230	24,716	26,503	28,859	31,002	38,586
MS1.1.2	Ministry of Education (MOE)	1,245	1,311	1,261	1,376	1,295	1,256	1,227	1,287	1,548	1,425	1,785
MS1.1.3	Ministry of Defence (MOD)	140	172	175	186	169	154	132	103	150	135	197
MS1.1.9	Other federal agencies (including statutory bodies)	1,813	1,678	1,677	1,805	1,886	2,021	2,076	2,120	2,244	2,530	3,131
MS1.1.2.1	(General) State government	90	105	78	86	90	97	111	150	124	207	249
MS1.1.2.2	Other state agencies (including statutory bodies)	129	137	189	212	346	385	392	467	502	504	520
MS1.1.3	Local authorities (LA)	142	150	188	164	178	138	154	194	249	264	248
MS1.2.1	Employees Provident Fund (EPF)	39	38	42	46	52	56	58	67	83	79	102
MS1.2.2	Social Security Organisation (SOC-SO)	157	176	219	264	261	310	329	410	394	409	433
MS2.2	Private insurance enterprises (other than social insurance)	2,614	2,774	2,916	3,203	3,623	3,846	4,085	4,313	4,875	4,971	5,535
MS2.3	Private MCOs and other similar entities	243	302	287	437	621	824	871	913	982	917	1,030
MS2.4	Private household out-of-pocket expenditures (OOP)	11,466	12,649	13,933	15,373	16,391	17,593	19,541	21,319	22,392	22,617	24,643
MS2.5	Non-profit institutions serving households (NPISH)	312	363	78	40	69	87	92	92	90	210	206
MS2.6	All corporations (other than health insurance)	1,064	1,352	1,564	1,803	2,550	2,690	2,573	2,494	1,756	1,668	1,513
MS9	Rest of the world (ROW)	3	2	3	4	5	4	5	5	4	82	43
<b>Total</b>		<b>35,953</b>	<b>39,448</b>	<b>41,647</b>	<b>46,780</b>	<b>50,208</b>	<b>51,691</b>	<b>56,364</b>	<b>60,438</b>	<b>64,252</b>	<b>67,022</b>	<b>78,220</b>

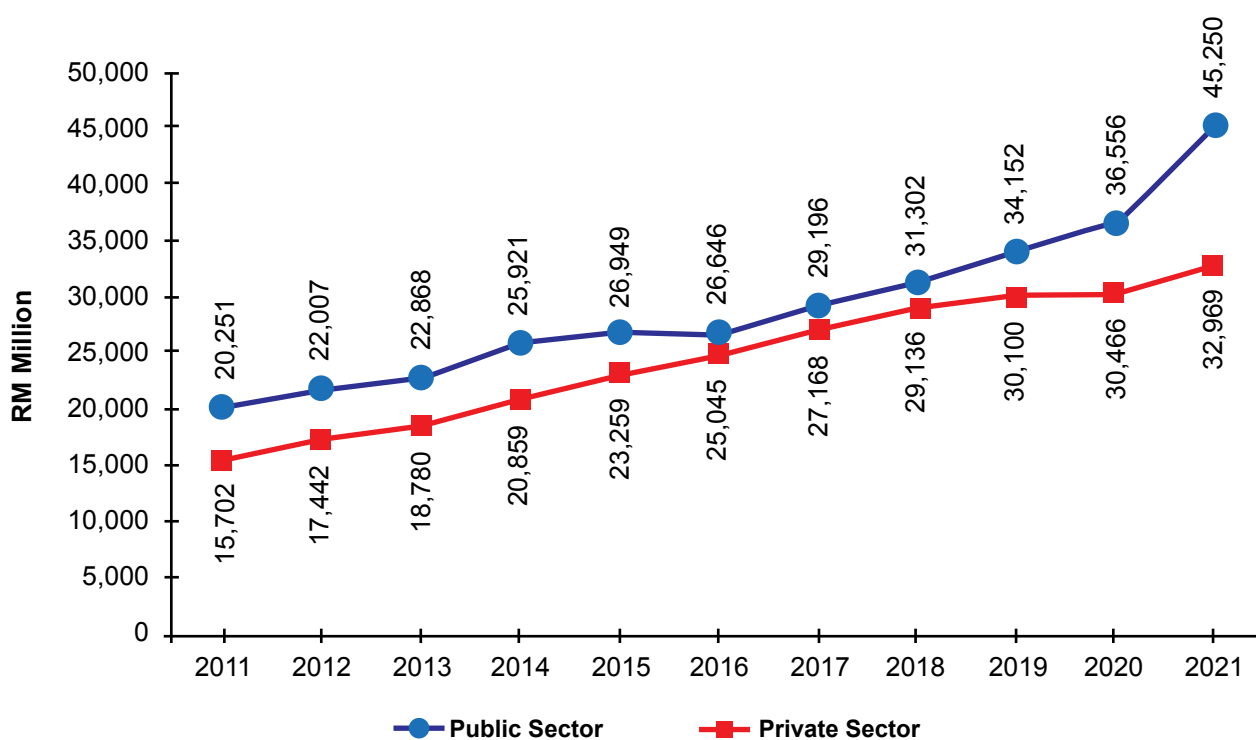
TABLE 5.1c: Total Expenditure on Health by Sources of Financing, 2011-2021 (Percent, %)

MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1.1	Ministry of Health (MOH)	45.88	46.24	45.71	46.56	45.15	43.00	43.85	43.85	44.92	46.26	49.33
MS1.1.2	Ministry of Education (MOE)	3.46	3.32	3.03	2.94	2.58	2.43	2.18	2.13	2.41	2.13	2.28
MS1.1.3	Ministry of Defence (MOD)	0.39	0.44	0.42	0.40	0.34	0.30	0.23	0.17	0.23	0.20	0.25
MS1.1.9	Other federal agencies (including statutory bodies)	5.04	4.25	4.03	3.86	3.76	3.91	3.68	3.51	3.49	3.78	4.00
MS1.2.1	(General) State government	0.25	0.27	0.19	0.18	0.18	0.19	0.20	0.25	0.19	0.31	0.32
MS1.2.2	Other state agencies (including statutory bodies)	0.36	0.35	0.45	0.45	0.69	0.74	0.69	0.77	0.78	0.75	0.67
MS1.3	Local authorities (LA)	0.39	0.38	0.45	0.35	0.36	0.27	0.27	0.32	0.39	0.39	0.32
MS2.1	Employees Provident Fund (EPF)	0.11	0.10	0.10	0.10	0.10	0.11	0.10	0.11	0.13	0.12	0.13
MS2.2	Social Security Organisation (SOCSO)	0.44	0.45	0.53	0.57	0.52	0.60	0.58	0.68	0.61	0.61	0.55
MS2.2	Private insurance enterprises (other than social insurance)	7.27	7.03	7.00	6.85	7.22	7.44	7.25	7.14	7.59	7.42	7.08
MS2.3	Private MCOs and other similar entities	0.68	0.77	0.69	0.93	1.24	1.59	1.55	1.51	1.53	1.37	1.32
MS2.4	Private household out-of-pocket expenditures (OOP)	31.89	32.06	33.45	32.86	32.65	34.03	34.67	35.27	34.85	33.75	31.51
MS2.5	Non-profit institutions serving households (NPISH)	0.87	0.92	0.19	0.08	0.14	0.17	0.16	0.15	0.14	0.31	0.26
MS2.6	All corporations (other than health insurance)	2.96	3.43	3.75	3.85	5.08	5.20	4.56	4.13	2.73	2.49	1.93
MS9	Rest of the world (ROW)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.12	0.05
Total		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, 2011-2021**

Year	Public Sector		Private Sector		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 (%)	
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	26,949	53.67	23,259	46.33	50,208
2016	26,646	51.55	25,045	48.45	51,691
2017	29,196	51.80	27,168	48.20	56,364
2018	31,302	51.79	29,136	48.21	60,438
2019	34,152	53.15	30,100	46.85	64,252
2020	36,556	54.54	30,466	45.46	67,022
2021	45,250	57.85	32,969	42.15	78,220

**FIGURE 5.1b: Total Expenditure on Health by Sources of Financing (Public vs. Private), 2011-2021**



## 5.2 HEALTH EXPENDITURE BY PUBLIC SOURCES OF FINANCING

This section describes health expenditure according to MNHA classification of public sources of health care financing for the year 2021, followed by time series data for 2011-2021.

### 5.2.1 Health Expenditure by All Public Sources of Financing

In 2021, the Public Sector Health Expenditure (PSHE) was RM45,250 million or 58% of TEH. An analysis of the public sources of health care financing showed that the highest expenditure was by MOH with a spending of RM38,586 million (85.2% of PSHE). This was followed by other federal agencies (including statutory bodies) at RM3,131

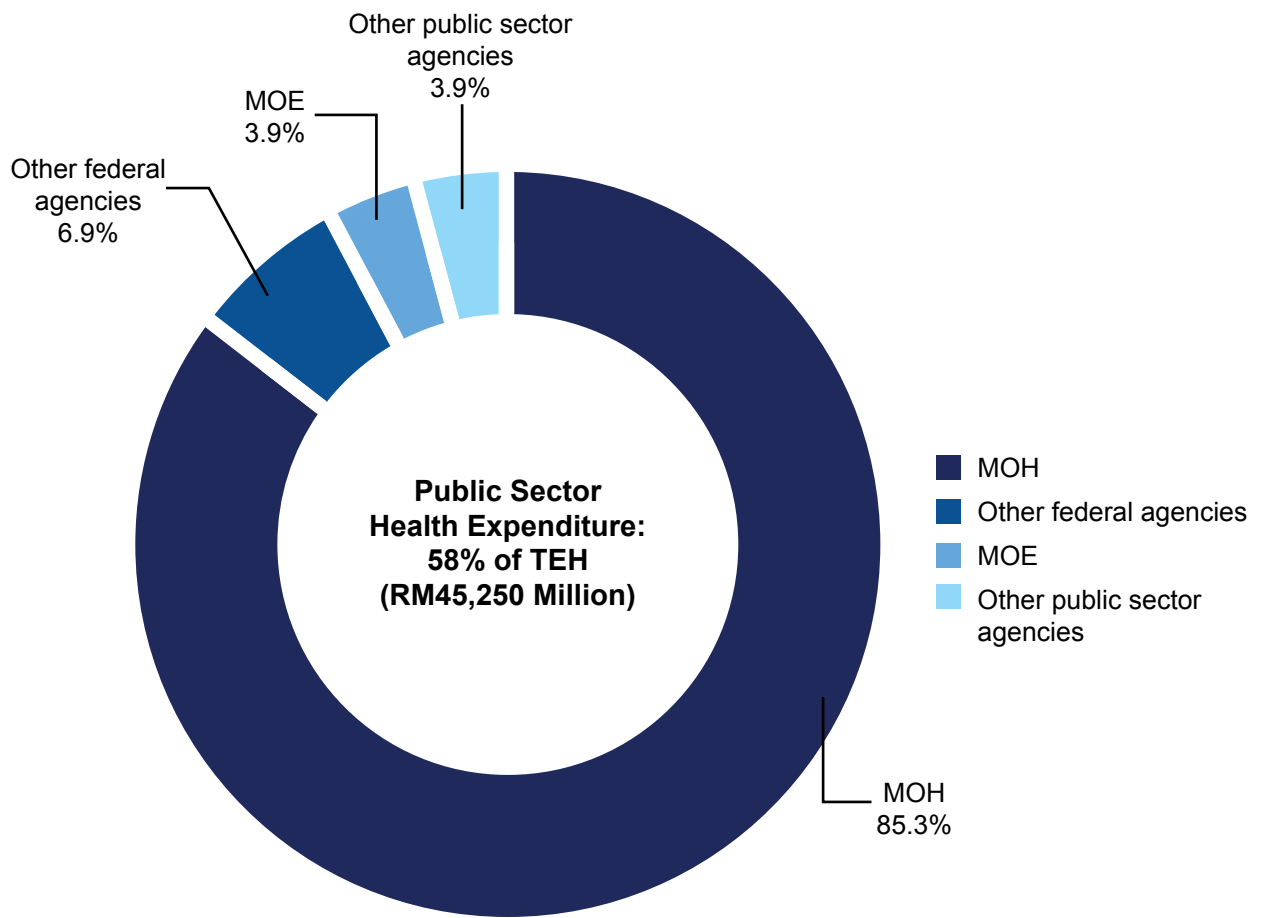
million (6.9%), MOE at RM1,785 million (3.9%), other state agencies (including statutory bodies) at RM520 million (1.2%) and SOCSO at RM433 million (0.9%). The remaining public sources of healthcare financing spent RM796 million or 1.7% of PSHE (Table 5.2.1a and Figure 5.2.1).

The trend of expenditure by public sources of health care financing over the past 11 years shows that the top 3 funders are persistently MOH, other federal agencies (including statutory bodies) and MOD (Table 5.2.1b and Table 5.2.1c). MOH as the largest financier in the public sector, had more than 2-fold increase in expenditure, spending RM16,496 million in 2011 to RM38,586 million in 2021. This MOH expenditure contributed to 81-85% of public sector health expenditure since 2011.

**TABLE 5.2.1a: Health Expenditure by Public Sources of Financing, 2021**

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1	Ministry of Health (MOH)	38,586	85.27
MS1.1.9	Other federal agencies (including statutory bodies)	3,131	6.92
MS1.1.2	Ministry of Education (MOE)	1,785	3.94
MS1.1.2.2	Other state agencies (including statutory bodies)	520	1.15
MS1.2.2	Social Security Organisation (SOCSO)	433	0.96
MS1.1.3	Local authorities (LA)	248	0.55
MS1.1.2.1	(General) State government	249	0.55
MS1.1.1.3	Ministry of Defence (MOD)	197	0.43
MS1.2.1	Employees Provident Fund (EPF)	102	0.23
<b>Total</b>		<b>45,250</b>	<b>100.00</b>

FIGURE 5.2.1: Health Expenditure by Public Sources of Financing, 2021



**TABLE 5.2.1b: Health Expenditure by Public Sector Sources of Financing, 2011-2021 (RM Million)**

MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1.1	Ministry of Health (MOH)	16,496	18,239	19,038	21,782	22,671	22,230	24,716	26,503	28,859	31,002	38,586
MS1.1.2	Ministry of Education (MOE)	1,245	1,311	1,261	1,376	1,295	1,256	1,227	1,287	1,548	1,425	1,785
MS1.1.1.3	Ministry of Defence (MOD)	140	172	175	186	169	154	132	103	150	135	197
MS1.1.1.9	Other federal agencies (including statutory bodies)	1,813	1,678	1,677	1,805	1,886	2,021	2,076	2,120	2,244	2,530	3,131
MS1.1.2.1	(General) State government	90	105	78	86	90	97	111	150	124	207	249
MS1.1.2.2	Other state agencies (including statutory bodies)	129	137	189	212	346	385	392	467	502	504	520
MS1.1.3	Local authorities (LA)	142	150	188	164	178	138	154	194	249	264	248
MS1.2.1	Employee Provident Funds (EPF)	39	38	42	46	52	56	58	67	83	79	102
MS1.2.2	Social Security Organisation (SOCSSO)	157	176	219	264	261	310	329	410	394	409	433
<b>Total</b>		<b>20,251</b>	<b>22,007</b>	<b>22,868</b>	<b>25,921</b>	<b>26,949</b>	<b>26,646</b>	<b>29,196</b>	<b>31,302</b>	<b>34,152</b>	<b>36,556</b>	<b>45,250</b>

**TABLE 5.2.1c: Health Expenditure by Public Sector Sources of Financing, 2011-2021 (Percent, %)**

MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1.1	Ministry of Health (MOH)	81.46	82.88	83.25	84.03	84.13	83.43	84.66	84.67	84.50	84.81	85.27
MS1.1.2	Ministry of Education (MOE)	6.15	5.96	5.51	5.31	4.80	4.71	4.20	4.11	4.53	3.90	3.94
MS1.1.1.3	Ministry of Defence (MOD)	0.69	0.78	0.77	0.72	0.63	0.58	0.45	0.33	0.44	0.37	0.43
MS1.1.1.9	Other federal agencies (including statutory bodies)	8.95	7.63	7.33	6.96	7.00	7.58	7.11	6.77	6.57	6.92	6.92
MS1.1.2.1	(General) State government	0.45	0.48	0.34	0.33	0.33	0.37	0.38	0.48	0.36	0.57	0.55
MS1.1.2.2	Other state agencies (including statutory bodies)	0.64	0.62	0.83	0.82	1.28	1.44	1.34	1.49	1.47	1.38	1.15
MS1.1.3	Local authorities (LA)	0.70	0.68	0.82	0.63	0.66	0.52	0.53	0.62	0.73	0.72	0.55
MS1.2.1	Employee Provident Funds (EPF)	0.19	0.17	0.18	0.18	0.19	0.21	0.20	0.21	0.24	0.22	0.23
MS1.2.2	Social Security Organisation (SOCSSO)	0.78	0.80	0.96	1.02	0.97	1.16	1.13	1.31	1.15	1.12	0.96
<b>Total</b>		<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## 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 sources of healthcare

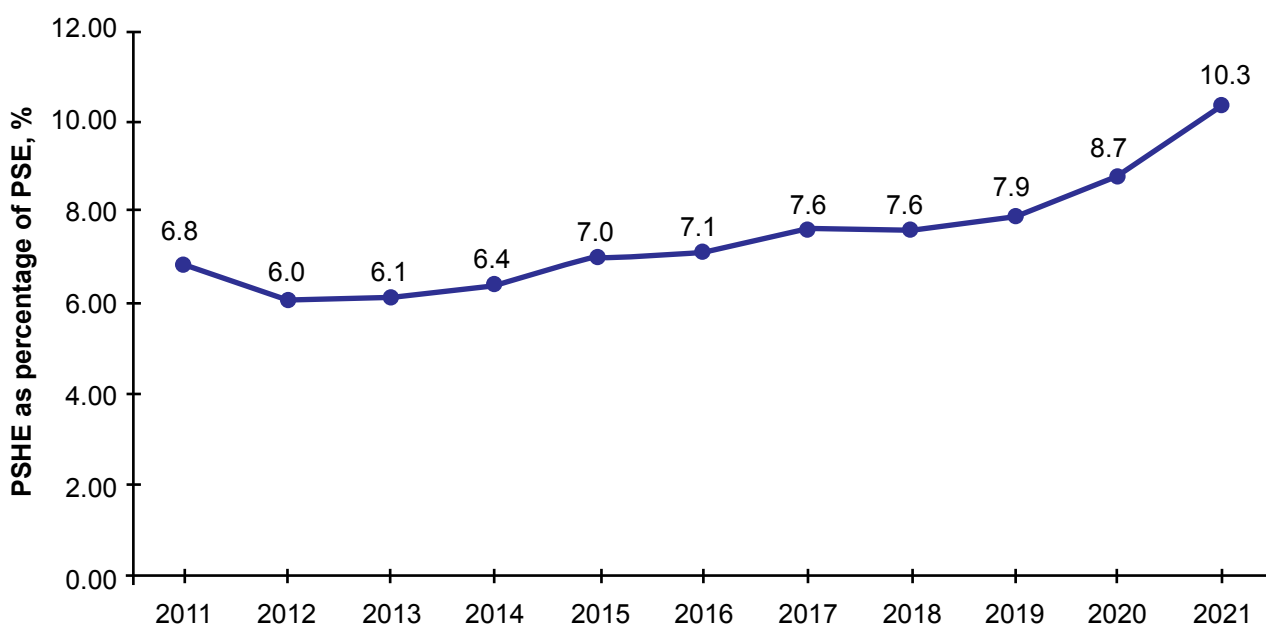
financing, namely federal government, state government, local authorities, social security funds and all other public entities. PSHE has more than doubled in RM value from RM20,251 million (6.8% of PSE) in 2011 to RM45,250 million (10.3% of PSE) in 2021 (Table 5.2.2 and Figure 5.2.2).

**TABLE 5.2.2: Trend for Public Sector Health Expenditure (PSHE), 2011-2021 (RM Million, Percent PSE)**

Year	Public Sector Health Expenditure (PSHE) (RM Million)	Public Sector Expenditure (PSE)* (RM Million)	PSHE as % PSE
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	26,949	383,727	7.02
2016	26,646	375,488	7.10
2017	29,196	384,576	7.59
2018	31,302	410,481	7.63
2019	34,152	432,697	7.89
2020	36,556	418,996	8.72
2021	45,250	437,964	10.33

\*Source: Treasury Malaysia website Fiscal Outlook 2022, Section 6: Consolidated Public Sector

**FIGURE 5.2.2: Trend for Public Sector Health Expenditure (PSHE) as Percentage of Public Sector Expenditure (PSE), 2011-2021**





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

Cross-tabulations of public sources of financing to providers of health care respond to the question of where these publicly sourced funds were spent or who provided the health care services and products.

In 2021, majority of public sources of financing health expenditure was at hospitals (includes general hospitals, psychiatric hospitals and speciality hospitals) with a spending of RM23,054 million (50.9% of PSHE). This is followed by spending on providers of ambulatory health care at RM11,896 million (26.2%), general health

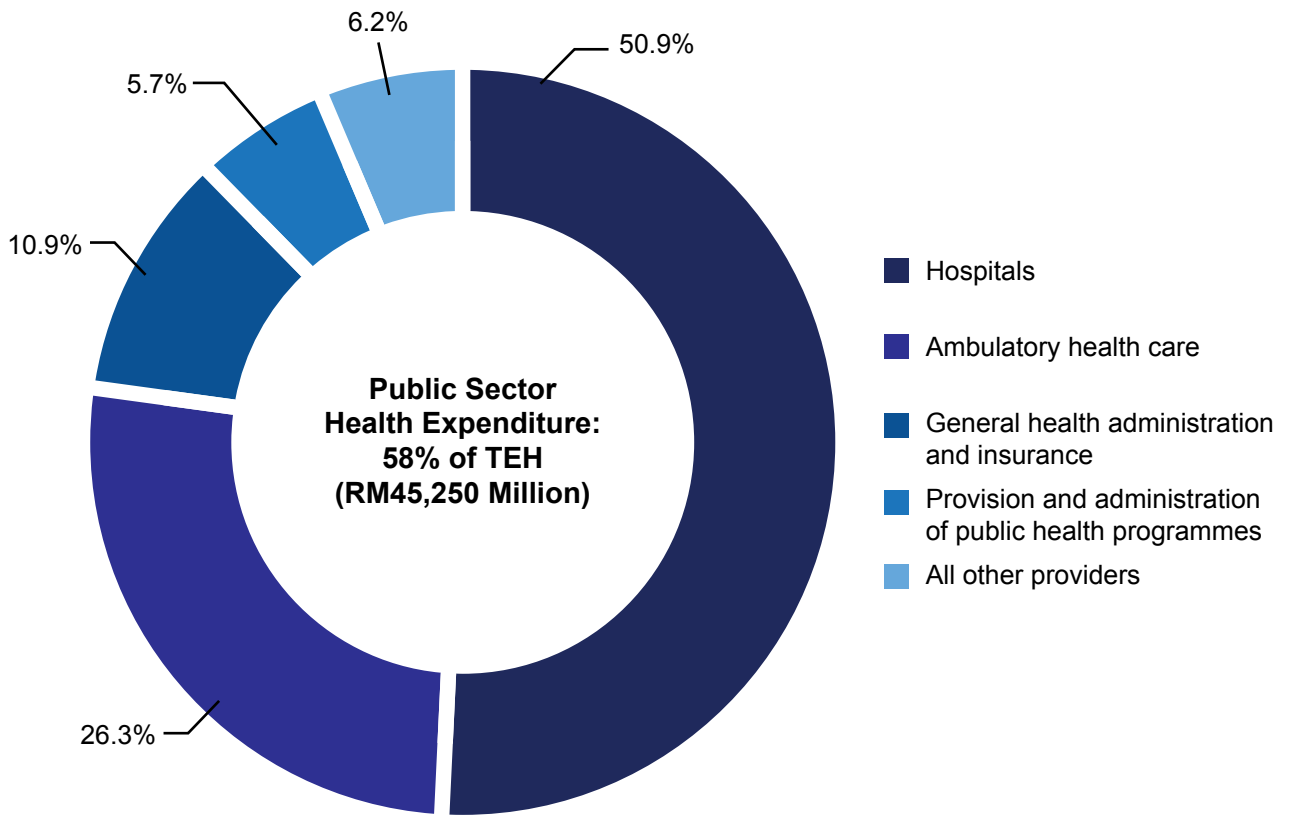
administration & insurance at RM4,942 million (10.9%) and provision & administration of public health programmes at RM2,570 million (5.6%). The remaining expenditure to all other providers of health care services and products was RM2,789 million or 6.1% of PSHE (Table 5.2.3a and Figure 5.2.3).

The trend in spending by public sources of health care financing over the past 11 years shows that the top 3 providers of health care where the funds are being spent are at hospitals, providers of ambulatory health care and general health administration & insurance (Table 5.2.3b and Table 5.2.3c).

**TABLE 5.2.3a: Public Sector Health Expenditure to Providers of Health Care, 2021**

MNHA Code	Providers of Health Care	RM Million	Percent
MP1	All hospitals	23,054	50.95
MP3	Providers of ambulatory health care	11,896	26.29
MP6	General health administration and insurance	4,942	10.92
MP5	Provision and administration of public health programmes	2,570	5.68
MP8	Institutions providing health-related services	1,737	3.84
MP7	Other industries (rest of the Malaysian economy)	761	1.68
MP4	Retail sale and other providers of medical goods	288	0.64
MP9	Rest of world (ROW)	1	< 0.01
MP2	Nursing and residential care facilities	1	< 0.01
<b>Total</b>		<b>45,250</b>	<b>100.00</b>

FIGURE 5.2.3: Public Sector Health Expenditure to Providers of Health Care, 2021



**TABLE 5.2.3b: Public Sector Health Expenditure to Providers of Health Care, 2011-2021 (RM Million)**

MNHA Code	Providers of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MP1	All hospitals	11,357	13,350	13,706	15,762	16,371	16,581	17,632	18,867	20,262	20,659	23,054
MP2	Nursing and residential care facilities	2	2	1	1	1	1	1	1	1	50	1
MP3	Providers of ambulatory health care	2,745	3,191	3,554	4,186	4,374	4,538	4,950	5,509	6,150	6,645	11,896
MP4	Retail sale and other providers of medical goods	135	168	202	220	332	338	357	237	227	251	288
MP5	Provision and administration of public health programmes	1,125	1,449	1,163	1,427	1,411	1,597	1,535	1,315	1,679	2,485	2,570
MP6	General health administration and insurance	3,207	2,332	2,753	2,692	2,902	1,966	3,264	3,618	4,126	4,445	4,942
MP7	Other industries (rest of the Malaysian economy)	118	137	271	198	138	158	148	149	144	139	761
MP8	Institutions providing health-related services	1,562	1,376	1,216	1,435	1,416	1,465	1,308	1,606	1,562	1,883	1,737
MP9	Rest of the world (ROW)	1	1	1	1	4	2	1	1	1	1	1
<b>Total</b>		<b>20,251</b>	<b>22,007</b>	<b>22,868</b>	<b>25,921</b>	<b>26,949</b>	<b>26,646</b>	<b>29,196</b>	<b>31,302</b>	<b>34,152</b>	<b>36,556</b>	<b>45,250</b>

**TABLE 5.2.3c: Public Sector Health Expenditure to Providers of Health Care, 2011-2021 (Percent, %)**

MNHA Code	Providers of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MP1	All Hospitals	56.08	60.66	59.94	60.81	60.75	62.23	60.39	60.27	59.33	56.51	50.95
MP2	Nursing and residential care facilities	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00
MP3	Providers of ambulatory health care	13.55	14.50	15.54	16.15	16.23	17.03	16.95	17.60	18.01	18.18	26.29
MP4	Retail sale and other providers of medical goods	0.67	0.76	0.88	0.85	1.23	1.27	1.22	0.76	0.67	0.69	0.64
MP5	Provision and administration of public health programmes	5.56	6.59	5.09	5.50	5.24	5.99	5.26	4.20	4.92	6.80	5.68
MP6	General health administration and insurance	15.83	10.60	12.04	10.38	10.77	7.38	11.18	11.56	12.08	12.16	10.92
MP7	Other industries (rest of the Malaysian economy)	0.58	0.62	1.19	0.76	0.51	0.59	0.51	0.48	0.42	0.38	1.68
MP8	Institutions providing health-related services	7.71	6.25	5.32	5.53	5.25	5.50	4.48	5.13	4.57	5.15	3.84
MP9	Rest of the world (ROW)	0.00	0.00	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00
<b>Total</b>		<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

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

Cross-tabulations of public sources of financing to functions of health care respond to the question of what type of health care services and products were these publicly sourced funds spent on.

In 2021, majority of public sources of financing health expenditure was spent for curative care services, amounting to RM24,005 million (53.1% of PSHE). This is followed by spending for public health services (including health promotion & prevention) at RM9,664 million (21.4%), capital formation at RM5,436 million (12.0%), health

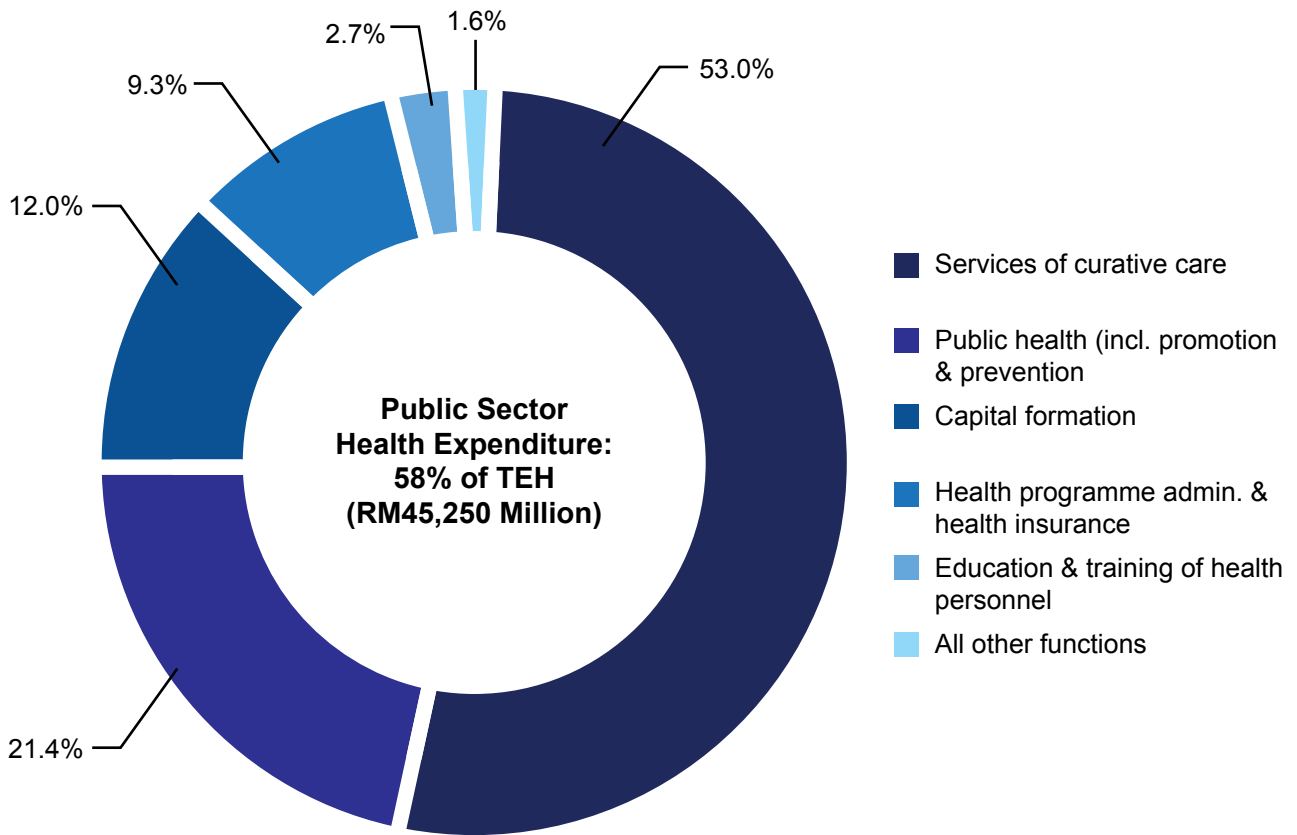
programme administration & health insurance at RM4,186 million (9.3%) and education & training of health personnel at RM1,234 million (2.7%). The total expenditure for all other functions of health care services and products was RM725 million or 1.6% of PSHE (Table 5.2.4a and Figure 5.2.4).

The trend in spending by public sources of health care financing over the past 11 years shows that the top 4 functions of health care for which the funds are being spent on are for services of curative care, public health services (including health promotion & prevention), capital formation of health care provider institutions and health programme administration & health insurance (Table 5.2.4b and Table 5.2.4c).

**TABLE 5.2.4a: Public Sector Health Expenditure for Functions of Health Care, 2021**

MNHA Code	Functions of Health Care	RM Million	Percent
MF1	Services of curative care	24,005	53.05
MF6	Public health services (including health promotion and prevention)	9,664	21.36
MR1	Capital formation of health care provider institutions	5,436	12.01
MF7	Health programme administration and health insurance	4,186	9.25
MR2	Education and training of health personnel	1,234	2.73
MR3	Research and development in health	320	0.71
MF5	Medical goods dispensed to out-patients	229	0.51
MF4	Ancillary services to health care	175	0.39
MF3	Services of long-term nursing care	1	< 0.01
<b>Total</b>		<b>45,250</b>	<b>100.00</b>

FIGURE 5.2.4: Public Sector Health Expenditure for Functions of Health Care, 2021



**TABLE 5.2.4b: Public Sector Health Expenditure for Functions of Health Care, 2011-2021 (RM Million)**

MNHA Code	Functions of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MF1	Services of curative care	12,950	15,021	15,013	17,719	18,623	19,013	20,638	22,285	23,018	22,077	24,005
MF3	Services of long-term nursing care	1	1	0	1	1	0	0	1	1	50	1
MF4	Ancillary services to health care	224	228	310	268	276	260	284	287	243	244	175
MF5	Medical goods dispensed to out-patients	107	138	169	183	289	285	307	187	175	106	229
MF6	Public health services (including health promotion and prevention)	996	1,201	1,961	1,838	1,928	2,028	2,163	2,358	3,280	4,534	9,664
MF7	Health programme administration and health insurance	2,165	1,916	2,242	2,936	2,903	2,110	3,067	2,866	3,783	4,021	4,186
MR1	Capital formation of health care provider institutions	2,179	2,038	1,817	1,488	1,455	1,433	1,376	1,656	1,967	3,931	5,436
MR2	Education and training of health personnel	1,584	1,407	1,288	1,430	1,415	1,466	1,308	1,607	1,548	1,357	1,234
MR3	Research and development in health	46	56	67	58	59	51	52	57	137	237	320
	<b>Total</b>	<b>20,251</b>	<b>22,007</b>	<b>22,868</b>	<b>25,921</b>	<b>26,949</b>	<b>26,646</b>	<b>29,196</b>	<b>31,302</b>	<b>34,152</b>	<b>36,556</b>	<b>45,250</b>

**TABLE 5.2.4c: Public Sector Health Expenditure for Functions of Health Care, 2011-2021 (Percent, %)**

MNHA Code	Functions of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MF1	Services of curative care	63.95	68.26	65.65	68.36	69.11	71.35	70.69	71.19	67.40	60.39	53.05
MF3	Services of long-term nursing care	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00
MF4	Ancillary services to health care	1.10	1.03	1.35	1.03	1.03	0.98	0.97	0.92	0.71	0.67	0.39
MF5	Medical goods dispensed to out-patients	0.53	0.63	0.74	0.70	1.07	1.07	1.05	0.60	0.51	0.29	0.51
MF6	Public health services (including health promotion and prevention)	4.92	5.46	8.58	7.09	7.15	7.61	7.41	7.53	9.60	12.40	21.36
MF7	Health programme administration and health insurance	10.69	8.71	9.81	11.33	10.77	7.92	10.51	9.16	11.08	11.00	9.25
MR1	Capital formation of health care provider institutions	10.76	9.26	7.94	5.74	5.40	5.38	4.71	5.29	5.76	10.75	12.01
MR2	Education and training of health personnel	7.82	6.40	5.63	5.52	5.25	5.50	4.48	5.13	4.53	3.71	2.73
MR3	Research and development in health	0.23	0.26	0.29	0.23	0.22	0.19	0.18	0.18	0.40	0.65	0.71
	<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

### 5.3 HEALTH EXPENDITURE BY PRIVATE SOURCES OF FINANCING

This section describes health expenditure according to MNHA classification of private sources of health care financing for the year 2021, followed by time series data for 2011-2021.

#### 5.3.1 Health Expenditure by All Private Sources of Financing

In 2021, private sector health expenditure was RM32,969 million or 42.1% of TEH. An analysis of the private sources of health care financing showed that the highest contribution was by private household out-of-pocket (OOP) expenditure amounting to RM24,643 million or 74.7% of private sector health expenditure. The subsequent highest spending was by private insurance enterprises (other than social insurance) which included personal, family and company insurance/ takaful policies, at RM5,535 million (16.8%).

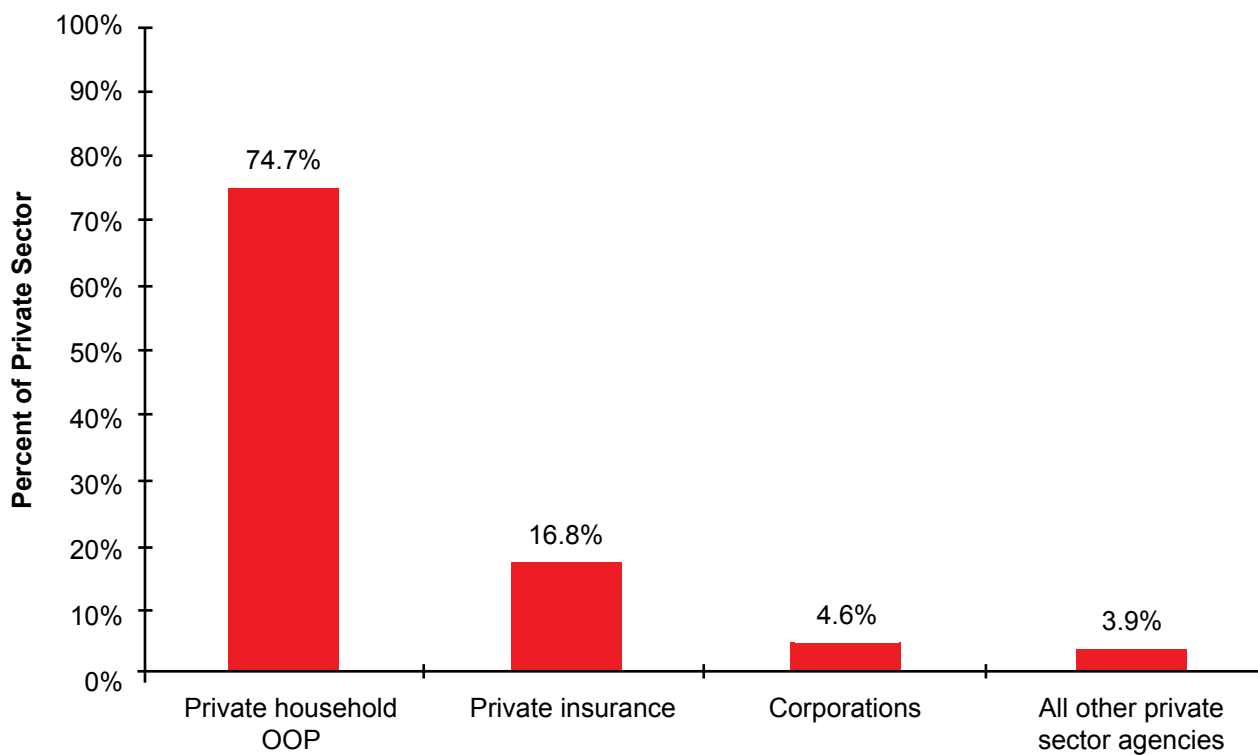
All corporations (other than health insurance) contributed RM1,513 million (4.6%) expenditure which was exclusive of group/company purchases of employee insurance, which were reported under private insurance enterprises expenditure. The remaining private sources of healthcare financing spent RM1,278 million or 3.9% of private sector health expenditure (Table 5.3.1a and Figure 5.3.1)

The trend of expenditure by private sources of health care financing over the past 11 years shows that the top 2 funders are persistently private OOP expenditure and private insurance enterprises (Table 5.3.1b and Table 5.3.1c). Private household OOP expenditure, as the largest contributor in the private sector, had progressively increased expenditure more than 2-fold, contributing RM11,466 million in 2011 to RM24,643 million in 2021. This private household OOP expenditure contributed to 70-75% of private sector health expenditure since 2011.

**TABLE 5.3.1a: Health Expenditure by Private Sector Sources of Financing, 2021**

MNHA Code	Sources of Financing	RM Million	Percent
MS2.4	Private household out-of-pocket expenditure (OOP)	24,643	74.75
MS2.2	Private insurance enterprises (other than social insurance)	5,535	16.79
MS2.6	All corporations (other than health insurance)	1,513	4.59
MS2.3	Private MCOs and other similar entities	1,030	3.12
MS2.5	Non-profit institutions serving households (NGO)	206	0.62
MS9	Rest of the world (ROW)	43	0.13
<b>Total</b>		<b>32,969</b>	<b>100.00</b>

FIGURE 5.3.1: Health Expenditure by Private Sources of Financing, 2021





**TABLE 5.3.1b: Health Expenditure by Private Sources of Financing, 2011-2021 (RM Million)**

MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS2.2	Private insurance enterprises (other than social insurance)	2,614	2,774	2,916	3,203	3,623	3,846	4,085	4,313	4,875	4,971	5,535
MS2.3	Private MCOs and other similar entities	243	302	287	437	621	824	871	913	982	917	1,030
MS2.4	Private household out-of-pocket expenditure (OOP)	11,466	12,649	13,933	15,373	16,391	17,593	19,541	21,319	22,392	22,617	24,643
MS2.5	Non-profit institutions serving households (NPISH)	312	363	78	40	69	87	92	92	90	210	206
MS2.6	All corporations (other than health insurance)	1,064	1,352	1,564	1,803	2,550	2,690	2,573	2,494	1,756	1,668	1,513
MS9	Rest of the world (ROW)	3	2	3	4	5	4	5	5	4	82	43
	<b>Total</b>	<b>15,702</b>	<b>17,442</b>	<b>18,780</b>	<b>20,859</b>	<b>23,259</b>	<b>25,045</b>	<b>27,168</b>	<b>29,136</b>	<b>30,100</b>	<b>30,466</b>	<b>32,969</b>

**TABLE 5.3.1c: Health Expenditure by Private Sources of Financing, 2011-2021 (Percent, %)**

MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS2.2	Private insurance enterprises (other than social insurance)	16.65	15.91	15.53	15.36	15.58	15.36	15.04	14.80	16.20	16.32	16.79
MS2.3	Private MCOs and other similar entities	1.55	1.73	1.53	2.10	2.67	3.29	3.21	3.13	3.26	3.01	3.12
MS2.4	Private household out-of-pocket expenditure (OOP)	73.02	72.52	74.19	73.70	70.47	70.25	71.93	73.17	74.39	74.24	74.75
MS2.5	Non-profit institutions serving households (NPISH)	1.99	2.08	0.41	0.19	0.30	0.35	0.34	0.32	0.30	0.69	0.62
MS2.6	All corporations (other than health insurance)	6.78	7.75	8.33	8.64	10.96	10.74	9.47	8.56	5.84	5.47	4.59
MS9	Rest of the world (ROW)	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.27	0.13
	<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

### 5.3.2 Health Expenditure by Private Sources of Financing to Providers of Health care

Cross-tabulations of private sector sources of financing to providers of health care respond to the question of where these privately sourced funds were spent or who provided the health care services and products.

In 2021, majority of private sources of financing health expenditure was at hospitals (inclusive of general hospitals, psychiatric hospitals and speciality hospitals) with a spending of RM16,351 million (49.6% of private sector health expenditure). This is followed by providers of ambulatory health

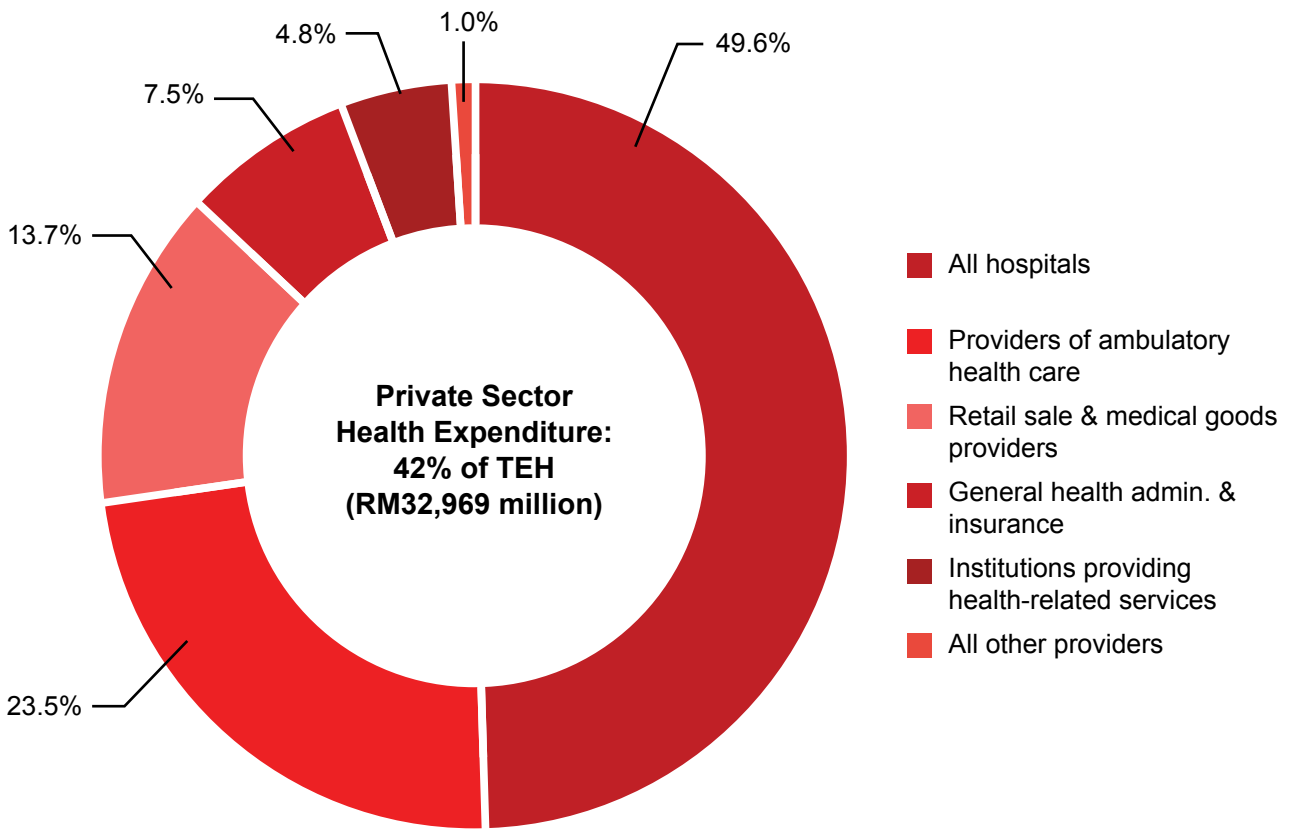
care at RM7,736 million (23.5%) and providers of retail sales & medical goods at RM4,518 million (13.7%). The remaining expenditure to all other providers of health care services and products was RM4,365 million or 13.2% of private sector health expenditure (Table 5.3.2a and Figure 5.3.2).

The trend in spending by private sources of health care financing over the past 11 years show that the top 3 providers of health care where the funds are being spent are at hospitals, providers of ambulatory health care and providers of retail sales & medical goods (Table 5.2.3b and Table 5.2.3c). Expenditure for these 3 provider categories show more than a 2-fold increase since 2011.

**TABLE 5.3.2a: Private Sector Health Expenditure to Providers of Health Care, 2021**

MNHA Code	Providers of Health Care	RM Million	Percent
MP1	All hospitals	16,351	49.59
MP3	Providers of ambulatory health care	7,736	23.46
MP4	Retail sale and other providers of medical goods	4,518	13.70
MP6	General health administration and insurance	2,458	7.45
MP8	Institutions providing health-related services	1,581	4.80
MP7	Other industries (rest of the Malaysian economy)	222	0.67
MP5	Provision and administration of public health programmes	89	0.27
MP9	Rest of the world (ROW)	11	0.03
MP2	Nursing and residential care facilities	3	0.01
<b>Total</b>		<b>32,969</b>	<b>100.00</b>

FIGURE 5.3.2: Private Sector Health Expenditure to Providers of Health Care, 2021



**TABLE 5.3.2b: Private Sector Health Expenditure to Providers of Health Care, 2011-2021 (RM Million)**

MNHA Code	Providers of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MP1	All hospitals	7,278	7,697	8,256	9,030	10,443	11,430	12,780	13,836	15,356	15,142	16,351
MP2	Nursing and residential care facilities	14	18	1	1	1	4	1	3	0	3	3
MP3	Providers of ambulatory health care	3,906	4,582	5,201	6,125	6,361	6,643	7,177	7,459	7,693	7,235	7,736
MP4	Retail sale and other providers of medical goods	1,774	1,961	2,172	2,701	3,061	3,287	3,494	4,322	3,900	4,016	4,518
MP5	Provision and administration of public health programmes	11	17	3	3	23	30	19	19	4	406	89
MP6	General health administration and insurance	1,467	1,629	1,343	1,312	1,559	1,723	1,705	1,564	1,444	1,828	2,458
MP7	Other industries (rest of the Malaysian economy)	269	293	338	358	408	443	467	454	192	222	222
MP8	Institutions providing health-related services	880	1,160	1,460	1,320	1,388	1,471	1,505	1,461	1,500	1,606	1,581
MP9	Rest of the world (ROW)	101	85	6	10	14	14	21	17	10	8	11
	<b>Total</b>	<b>15,702</b>	<b>17,442</b>	<b>18,780</b>	<b>20,859</b>	<b>23,259</b>	<b>25,045</b>	<b>27,168</b>	<b>29,136</b>	<b>30,100</b>	<b>30,466</b>	<b>32,969</b>

**TABLE 5.3.2c: Private Sector Health Expenditure to Providers of Health Care, 2011-2021 (Percent, %)**

MNHA Code	Providers of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MP1	All hospitals	46.35	44.13	43.96	43.29	44.90	45.64	47.04	47.49	51.02	49.70	49.59
MP2	Nursing and residential care facilities	0.09	0.10	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01
MP3	Providers of ambulatory health care	24.87	26.27	27.70	29.36	27.35	26.52	26.42	25.60	25.56	23.75	23.46
MP4	Retail sale and other providers of medical goods	11.30	11.24	11.57	12.95	13.16	13.12	12.86	14.83	12.96	13.18	13.70
MP5	Provision and administration of public health programmes	0.07	0.10	0.01	0.01	0.10	0.12	0.07	0.07	0.01	1.33	0.27
MP6	General health administration and insurance	9.35	9.34	7.15	6.29	6.70	6.88	6.28	5.37	4.80	6.00	7.45
MP7	Other industries (rest of the Malaysian economy)	1.72	1.68	1.80	1.72	1.76	1.77	1.72	1.56	0.64	0.73	0.67
MP8	Institutions providing health-related services	5.61	6.65	7.78	6.33	5.97	5.88	5.54	5.02	4.98	5.27	4.80
MP9	Rest of the world (ROW)	0.65	0.49	0.03	0.05	0.06	0.06	0.08	0.06	0.03	0.03	0.03
	<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

### 5.3.3 Health Expenditure by Private 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 of what type of health care services and products were these privately sourced funds spent on.

In 2021, majority of private sources of financing health expenditure was spent for curative care services, amounting to RM21,199 million (64.3% of private sector health expenditure). This is followed by spending for medical goods dispensed to out-patients at RM5,280 million (16.0%), health programme administration & health insurance at RM2,458 million (7.5%), capital formation at RM1,610 million (4.9%), education & training of

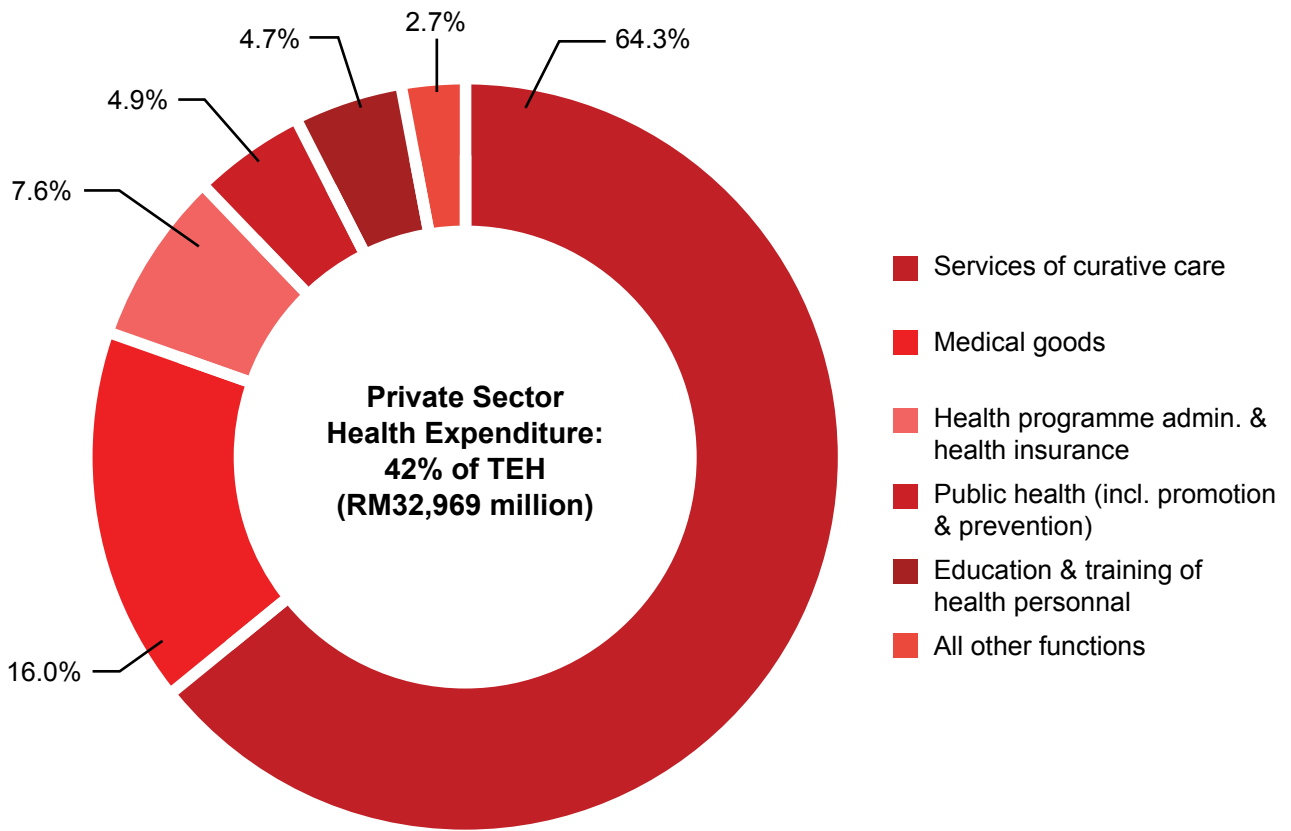
health personnel at RM1,538 million (4.7%) and public health services (including health promotion & prevention) at RM800 million (2.4%). The remaining expenditure for all other functions of health care services and products was RM85 million or 0.2% of private sector health expenditure (Table 5.3.3a and Figure 5.3.3).

The trend in spending by private sources of health care financing over the past 11 years show that the top 3 functions of health care for which the funds are being spent on are for services of curative care, medical goods dispensed to out-patients and health programme administration & health insurance (Table 5.3.3b and Table 5.3.3c). Expenditure for services of curative care and medical goods dispensed to out-patients have more than doubled since 2011.

**TABLE 5.3.3a: Private Sector Health Expenditure for Functions of Health Care, 2021**

MNHA Code	Functions of Health Care	RM Million	Percent
MF1	Services of curative care	21,199	64.30
MF5	Medical goods dispensed to out-patients	5,280	16.02
MF7	Health programme administration and health insurance	2,458	7.45
MR1	Capital formation of health care provider institutions	1,610	4.88
MR2	Education and training of health personnel	1,538	4.67
MF6	Public health services (including health promotion and prevention)	800	2.43
MF4	Ancillary services to health care	44	0.13
MR3	Research and development in health	38	0.11
MF3	Services of long-term nursing care	3	0.01
<b>Total</b>		<b>32,969</b>	<b>100.00</b>

FIGURE 5.3.3: Private Sector Health Expenditure for Functions of Health Care, 2021



**TABLE 5.3.3b: Private Sector Health Expenditure for Functions of Health Care, 2011-2021 (RM Million)**

MNHA Code	Functions of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MF1	Services of curative care	10,288	11,151	12,179	13,686	14,823	15,891	17,709	18,728	20,329	19,827	21,199
MF2	Services of rehabilitative care	1	0	na	na	na	na	na	na	na	na	na
MF3	Services of long-term nursing care	14	18	1	1	4	1	1	3	0	3	3
MF4	Ancillary services to health care	72	86	97	112	78	40	44	44	108	58	44
MF5	Medical goods dispensed to out-patients	2,135	2,339	2,561	3,115	3,644	3,965	4,216	5,059	4,642	4,647	5,280
MF6	Public health services (including health promotion and prevention)	582	724	843	933	1,295	1,378	1,319	1,301	819	823	800
MF7	Health programme administration and health insurance	1,468	1,629	1,343	1,312	1,559	1,723	1,705	1,565	1,445	1,826	2,458
MR1	Capital formation of health care provider institutions	251	317	272	343	433	539	634	881	1,197	1,621	1,610
MR2	Education and training of health personnel	879	1,153	1,461	1,328	1,398	1,483	1,524	1,521	1,551	1,628	1,538
MR3	Research and development in health	12	25	23	28	29	22	16	34	9	33	38
	<b>Total</b>	<b>15,702</b>	<b>17,442</b>	<b>18,780</b>	<b>20,859</b>	<b>23,259</b>	<b>25,045</b>	<b>27,168</b>	<b>29,136</b>	<b>30,100</b>	<b>30,466</b>	<b>32,969</b>

**TABLE 5.3.3c: Private Sector Health Expenditure for Functions of Health Care, 2011-2021 (Percent, %)**

MNHA Code	Functions of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MF1	Services of curative care	65.52	63.93	64.85	65.61	63.73	63.45	65.18	64.28	67.54	65.08	64.30
MF2	Services of rehabilitative care	0.01	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	0.09	0.10	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01
MF4	Ancillary services to health care	0.46	0.49	0.52	0.54	0.34	0.16	0.16	0.15	0.36	0.19	0.13
MF5	Medical goods dispensed to out-patients	13.60	13.41	13.64	14.94	15.67	15.83	15.52	17.36	15.42	15.25	16.02
MF6	Public health services (including health promotion and prevention)	3.70	4.15	4.49	4.47	5.57	5.50	4.85	4.47	2.72	2.70	2.43
MF7	Health programme administration and health insurance	9.35	9.34	7.15	6.29	6.70	6.88	6.28	5.37	4.80	5.99	7.45
MR1	Capital formation of health care provider institutions	1.60	1.82	1.45	1.65	1.86	2.15	2.34	3.03	3.98	5.32	4.88
MR2	Education and training of health personnel	5.60	6.61	7.78	6.37	6.01	5.92	5.61	5.22	5.15	5.34	4.67
MR3	Research and development in health	0.08	0.14	0.12	0.14	0.12	0.09	0.06	0.12	0.03	0.11	0.11
	<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## CHAPTER 6

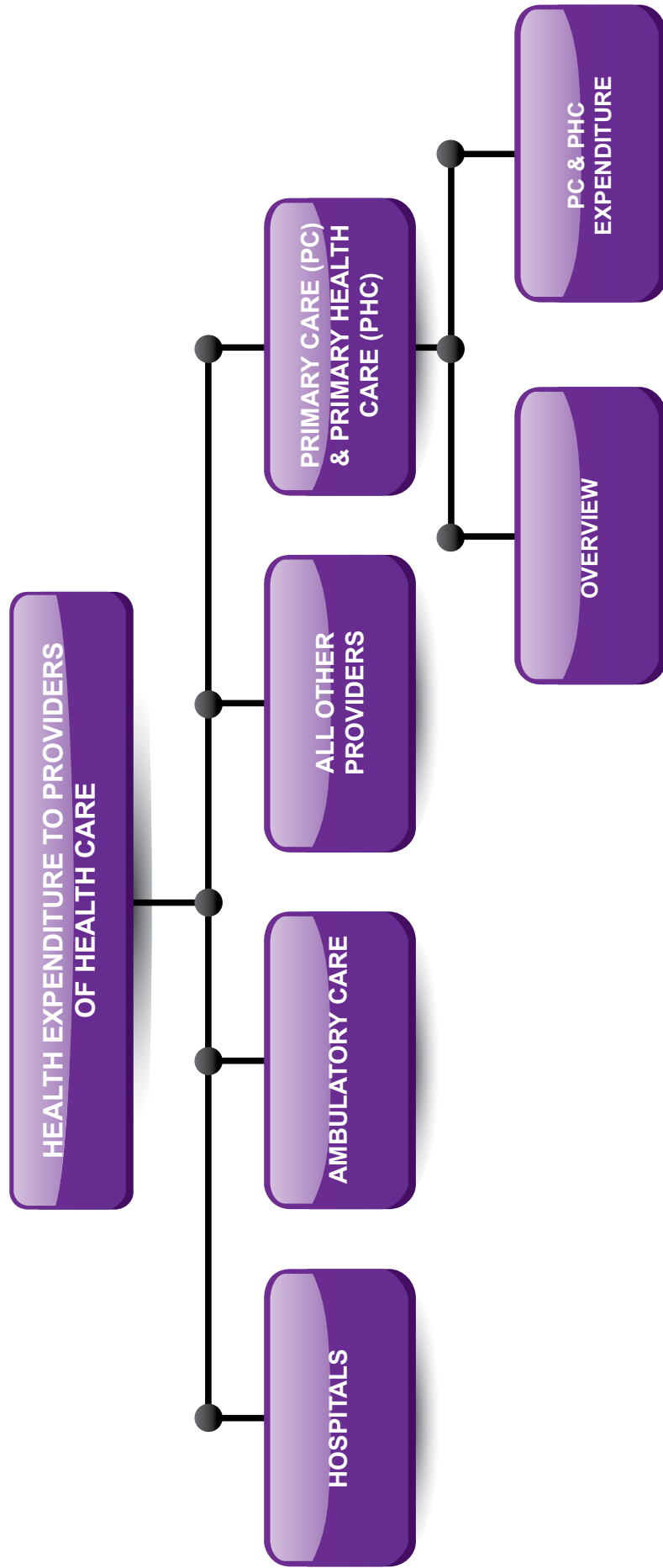
### HEALTH EXPENDITURE TO PROVIDERS OF HEALTH CARE

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, provision and administration of public health programme providers, general health administration and insurance, other industries, institutions providing health related services and rest of the world.

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 2021, the analysis of providers of health care showed that all hospitals consumed RM39,405 million or 50.4% of TEH (Table 6.1a and Figure 6.1). This was followed by providers of ambulatory health care at RM19,632 million (25.1%), general health administration and insurance providers at RM7,399 million (9.5%), and retail sale and other providers of medical goods at RM4,805 million (6.1%). The remaining providers of health care services and products amounted to RM6,978 million or 8.9% of TEH.

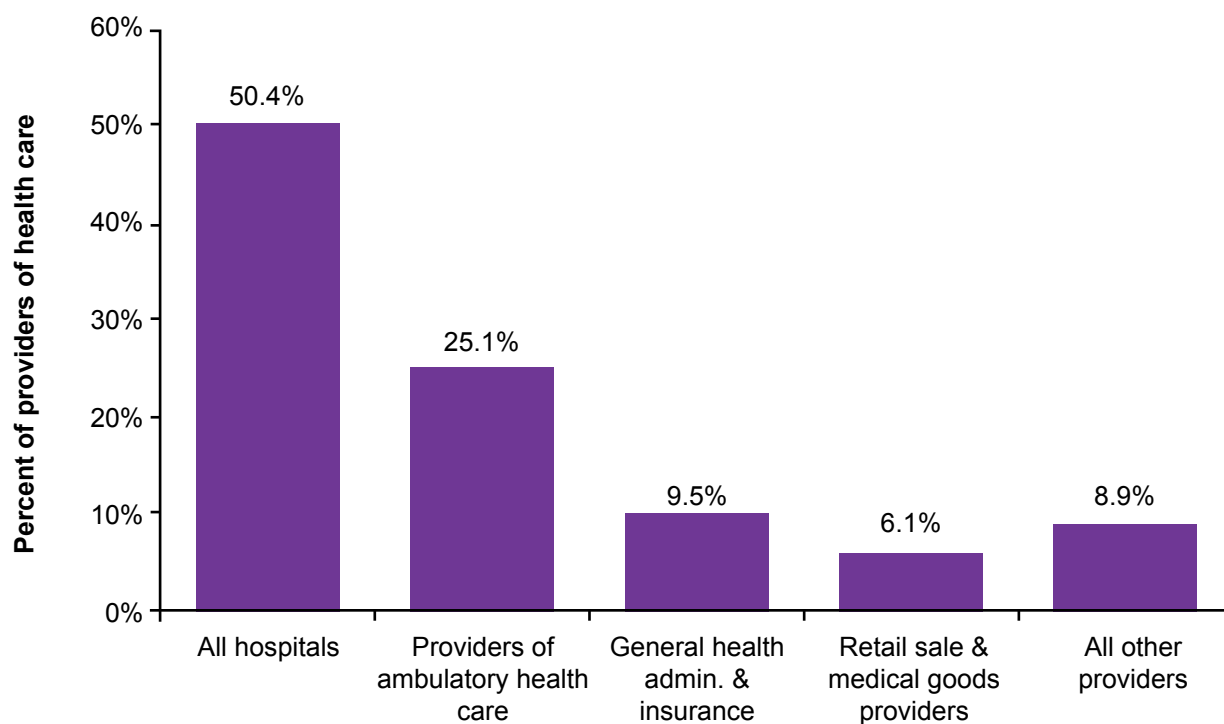
The 2011-2021 time series data also shows a similar pattern with the same top two providers

(all hospitals and providers of ambulatory health care) contributing to an average of 74.6% share of TEH throughout the same period. The third-highest expenditure from 2011 to 2021 was contributed by expenditure to general health administration and insurance providers, followed by expenditure to retail sale and other providers of medical goods. Retail sale and other providers of medical goods took over institutions providing health-related services from 2014 onwards as shown in Table 6.1b and Table 6.1c. The expenditures of providers of ambulatory health care increased by 3-fold while all hospitals increased in absolute RM value by 2-fold over the same period. Spending at retail sale and other providers of medical goods and at other industries (rest of the Malaysian economy) showed almost 3-fold increase in absolute RM value.

**TABLE 6.1a: Total Expenditure on Health to Providers of Health Care, 2021**

MNHA Code	Providers of Health Care	RM Million	Percent
MP1	All hospitals	39,405	50.38
MP3	Providers of ambulatory health care	19,632	25.10
MP6	General health administration and insurance	7,399	9.46
MP4	Retail sale and other providers of medical goods	4,805	6.14
MP8	Institutions providing health-related services	3,319	4.24
MP5	Provision and administration of public health programmes	2,659	3.40
MP7	Other industries (rest of the Malaysian economy)	984	1.26
MP9	Rest of the world (ROW)	12	0.02
MP2	Nursing and residential care facilities	5	0.01
<b>Total</b>		<b>78,220</b>	<b>100.00</b>

**FIGURE 6.1: Total Expenditure on Health to Providers of Health Care, 2021**



**TABLE 6.1b: Total Expenditure on Health to Providers of Health Care, 2011 - 2021 (RM Million)**

MNHA Code	Providers of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MP1	All hospitals	18,635	21,047	21,962	24,793	26,814	28,010	30,413	32,703	35,618	35,801	39,405
MP2	Nursing and residential care facilities	16	20	2	2	2	5	2	5	1	54	5
MP3	Providers of ambulatory health care	6,650	7,773	8,756	10,311	10,735	11,181	12,127	12,968	13,843	13,880	19,632
MP4	Retail sale and other providers of medical goods	1,909	2,129	2,374	2,921	3,393	3,625	3,851	4,559	4,127	4,266	4,805
MP5	Provision and administration of public health programmes	1,136	1,467	1,166	1,429	1,435	1,628	1,553	1,335	1,683	2,891	2,659
MP6	General health administration and insurance	4,674	3,961	4,096	4,003	4,461	3,689	4,969	5,181	5,570	6,273	7,399
MP7	Other industries (rest of the Malaysian economy)	388	430	609	556	547	601	615	603	337	361	984
MP8	Institutions providing health-related services	2,442	2,536	2,676	2,754	2,804	2,936	2,813	3,067	3,062	3,488	3,319
MP9	Rest of the world (ROW)	102	86	7	11	19	16	22	18	11	9	12
	<b>Total</b>	<b>35,953</b>	<b>39,448</b>	<b>41,647</b>	<b>46,780</b>	<b>50,208</b>	<b>51,691</b>	<b>56,364</b>	<b>60,438</b>	<b>64,252</b>	<b>67,022</b>	<b>78,220</b>

**TABLE 6.1c: Total Expenditure on Health to Providers of Health Care, 2011 - 2021 (Percent, %)**

MNHA Code	Providers of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MP1	All hospitals	51.83	53.35	52.73	53.00	53.41	54.19	53.96	54.11	55.43	53.42	50.38
MP2	Nursing and residential care facilities	0.04	0.05	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.08	0.01
MP3	Providers of ambulatory health care	18.50	19.70	21.02	22.04	21.38	21.63	21.52	21.46	21.54	20.71	25.10
MP4	Retail sale and other providers of medical goods	5.31	5.40	5.70	6.24	6.76	7.01	6.83	7.54	6.42	6.37	6.14
MP5	Provision and administration of public health programmes	3.16	3.72	2.80	3.06	2.86	3.15	2.76	2.21	2.62	4.31	3.40
MP6	General health administration and insurance	13.00	10.04	9.84	8.56	8.88	7.14	8.82	8.57	8.67	9.36	9.46
MP7	Other industries (rest of the Malaysian economy)	1.08	1.09	1.46	1.19	1.09	1.16	1.09	1.00	0.52	0.54	1.26
MP8	Institutions providing health-related services	6.79	6.43	6.42	5.89	5.58	5.68	4.99	5.07	4.77	5.20	4.24
MP9	Rest of the world (ROW)	0.28	0.22	0.02	0.02	0.04	0.03	0.04	0.03	0.02	0.01	0.02
	<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## 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 2021, RM39,405 million or 50.4% of TEH was spent at all hospitals. MOH as the highest source of financing was RM20,081 million (51.0%), followed by private household OOP at RM11,963 million (30.4%), private insurance enterprises

(other than social insurance) at RM3,987 million (10.1%), Ministry of Education (MOE) at RM1,751 million (4.4%) and other federal agencies (including statutory bodies) at RM693 million (1.8%) (Table 6.2a and Figure 6.2). The remaining expenditure from various sources at all hospitals amounted to RM930 million (2.4%).

The 2011-2021 time series expenditure by the top two sources of financing at all hospitals, MOH and private household OOP amounted to an average of 80.4%, as shown in Table 6.2b and Table 6.2c. The remaining sources of financing spent an average of 19.6%.

**TABLE 6.2a: Health Expenditure at All Hospitals by Sources of Financing, 2021**

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1	Ministry of Health (MOH)	20,081	50.96
MS2.4	Private household out-of-pocket expenditures (OOP)	11,963	30.36
MS2.2	Private insurance enterprises (other than social insurance)	3,987	10.12
MS1.1.1.2	Ministry of Education (MOE)	1,751	4.44
MS1.1.1.9	Other federal agencies (including statutory bodies)	693	1.76
MS2.6	All corporations (other than health insurance)	315	0.80
MS1.1.2.2	Other state agencies (including statutory bodies)	156	0.40
MS1.2.2	Social Security Organisation (SOCSO)	125	0.32
MS1.1.1.3	Ministry of Defence (MOD)	93	0.24
MS1.2.1	Employees Provident Fund (EPF)	84	0.21
MS2.5	Non-profit institutions serving households (NPISH)	84	0.21
MS1.1.3	Local authorities (LA)	42	0.11
MS1.1.2.1	(General) State government	29	0.07
MS9	Rest of the world (ROW)	1	< 0.01
MS2.3	Private MCOs and other similar entities	0.02	< 0.01
<b>Total</b>		<b>39,405</b>	<b>100.00</b>

FIGURE 6.2: Health Expenditure at All Hospitals by Sources of Financing, 2021

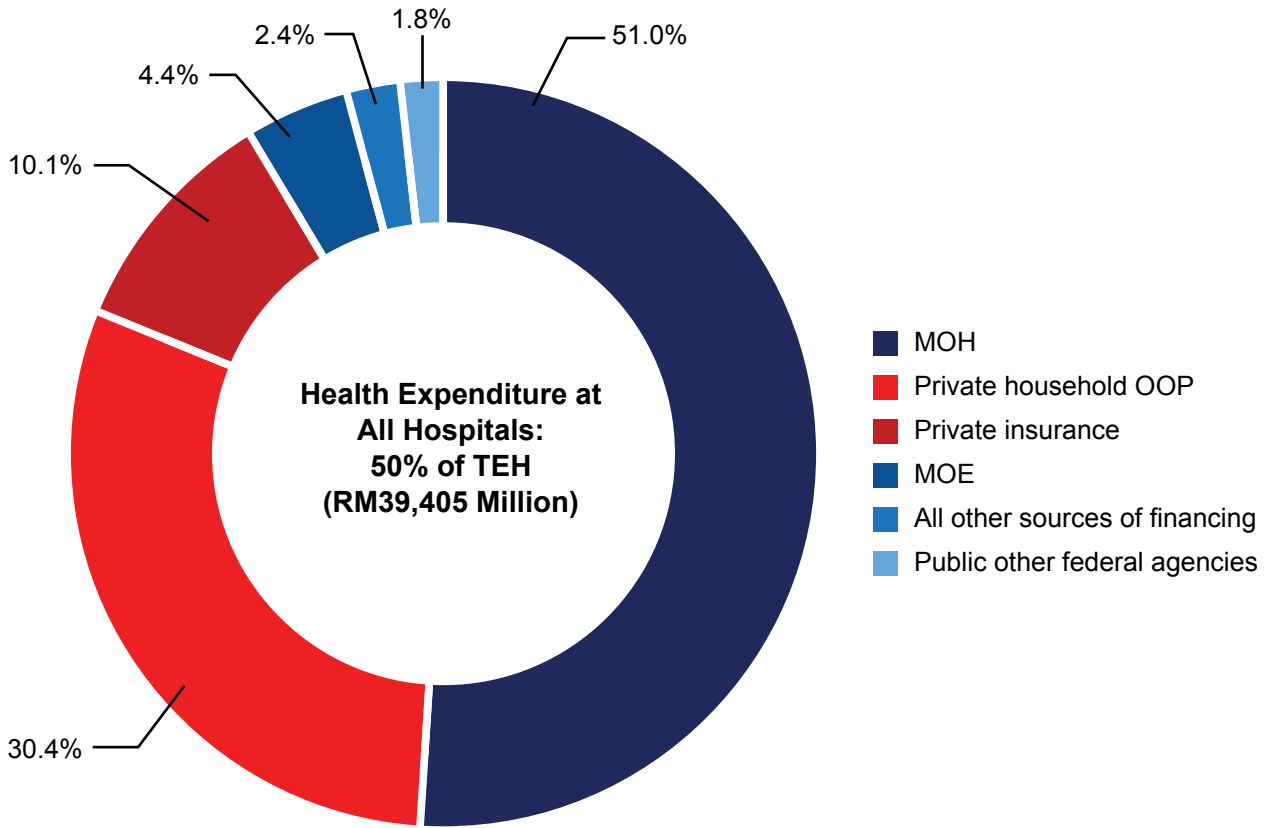


TABLE 6.2b: Health Expenditure at All Hospitals by Sources of Financing, 2011 - 2021 (RM Million)												
MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1.1	Ministry of Health (MOH)	9,462	11,331	11,683	13,610	14,212	14,306	15,384	16,479	17,509	18,021	20,081
MS1.1.2	Ministry of Education (MOE)	1,221	1,285	1,232	1,346	1,274	1,234	1,201	1,260	1,519	1,351	1,751
MS1.1.3	Ministry of Defence (MOD)	83	102	105	110	115	104	84	65	104	95	93
MS1.1.9	Other federal agencies (including statutory bodies)	420	449	489	506	553	593	610	645	690	605	693
MS1.1.2.1	(General) State government	15	19	18	21	17	19	19	28	18	22	29
MS1.1.2.2	Other state agencies (including statutory bodies)	10	13	10	12	36	138	129	142	155	151	156
MS1.1.3	Local authorities (LA)	20	16	13	22	21	23	31	35	37	48	42
MS1.2.1	Employees Provident Fund (EPF)	32	31	35	38	43	47	48	55	68	65	84
MS1.2.2	Social Security Organization (SOCSSO)	93	104	120	98	100	117	125	158	162	301	125
MS2.2	Private insurance enterprises (other than social insurance)	1,474	1,583	1,878	2,373	2,761	3,032	3,311	3,681	4,395	3,974	3,987
MS2.3	Private MCOs and other similar entities	na	na	na	na	na	na	na	na	na	na	0.02
MS2.4	Private household out-of-pocket expenditures (OOP)	5,618	5,866	6,070	6,342	7,209	7,910	9,016	9,715	10,626	10,836	11,963
MS2.5	Non-profit institutions serving households (NGO)	29	31	44	12	13	1	1	2	2	20	84
MS2.6	All corporations (other than health insurance)	158	216	264	303	460	487	452	438	334	307	315
MS9	Rest of the world	na	na	na	na	na	na	na	na	na	5	1
<b>Total</b>		<b>18,635</b>	<b>21,047</b>	<b>21,962</b>	<b>24,793</b>	<b>26,814</b>	<b>28,010</b>	<b>30,413</b>	<b>32,703</b>	<b>35,618</b>	<b>35,801</b>	<b>39,405</b>

TABLE 6.2c: Health Expenditure at All Hospitals by Sources of Financing, 2011 - 2021 (Percent, %)												
MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1.1	Ministry of Health (MOH)	50.78	53.84	53.20	54.90	53.00	51.07	50.59	50.39	49.16	50.34	50.96
MS1.1.1.2	Ministry of Education (MOE)	6.55	6.10	5.61	5.43	4.75	4.40	3.95	3.85	4.26	3.77	4.44
MS1.1.1.3	Ministry of Defence (MOD)	0.45	0.49	0.48	0.44	0.43	0.37	0.28	0.20	0.29	0.27	0.24
MS1.1.1.9	Other federal agencies (including statutory bodies)	2.25	2.13	2.23	2.04	2.06	2.12	2.01	1.97	1.94	1.69	1.76
MS1.1.2.1	(General) State government	0.08	0.09	0.08	0.08	0.06	0.07	0.06	0.09	0.05	0.06	0.07
MS1.1.2.2	Other state agencies (including statutory bodies)	0.05	0.06	0.05	0.05	0.13	0.49	0.42	0.43	0.44	0.42	0.40
MS1.1.3	Local authorities (LA)	0.11	0.08	0.06	0.09	0.08	0.08	0.10	0.11	0.10	0.13	0.11
MS1.2.1	Employees Provident Fund (EPF)	0.17	0.15	0.16	0.15	0.16	0.17	0.16	0.17	0.19	0.18	0.21
MS1.2.2	Social Security Organisation (SOCSSO)	0.50	0.49	0.54	0.40	0.37	0.42	0.41	0.48	0.45	0.84	0.32
MS2.2	Private insurance enterprises (other than social insurance)	7.91	7.52	8.55	9.57	10.30	10.82	10.89	11.25	12.34	11.10	10.12
MS2.3	Private MCOs 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
MS2.4	Private household out-of-pocket expenditures (OOP)	30.15	27.87	27.64	25.58	26.89	28.24	29.64	29.71	29.83	30.27	30.36
MS2.5	Non-profit institutions serving households (NPISH)	0.15	0.15	0.20	0.05	0.05	0.00	0.00	0.01	0.00	0.06	0.21
MS2.6	All corporations (other than health insurance)	0.85	1.03	1.20	1.22	1.71	1.74	1.49	1.34	0.94	0.86	0.80
MS9	Rest of the world (ROW)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	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



### 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 establishments primarily engaged in providing health care services directly to outpatients who do not require inpatient services such as medical practitioner clinics, dental clinics, family planning centres, substance abuse centres, dialysis centres, medical and diagnostic centres, ambulance providers and many other outpatient providers. Both MNHA and SHA 2011 Frameworks include providers of Traditional and Complementary Medicine under this category.

In 2021, providers of ambulatory health care consumed RM19,632 million (25.1%) of TEH. Of

this amount, RM11,896 million (60.6%) was funded by the public sector source of financing, which consists of the public sector excluding social security funds. The remaining RM7,736 million (39.4%) by private sector source of financing that consists of private insurance enterprises (other than social insurance), private MCO and other similar entities, private household out-of-pocket expenditures, non-profit organizations serving households, all Corporations (other than health insurance) and rest of the world (ROW) (Table 6.3a and Figure 6.3). For 2021, the majority of the expenditure that was spent at all other ambulatory health care providers were mostly of vaccines related expenditure.

The 2011-2021 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, 2021**

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1	Public sector excluding social security funds	11,700	59.60
MS2.4	Private household out-of-pocket expenditures (OOP)	6,733	34.29
MS2.6	All Corporations (other than health insurance)	745	3.79
MS2.2	Private insurance enterprises (other than social insurance)	197	1.01
MS1.2	Social security funds	196	1.00
MS2.5	Non-profit institutions serving households (NPISH)	53	0.27
MS2.3	Private MCO and other similar entities	8	0.04
MS9	Rest of the world (ROW)	0	< 0.01
<b>Total</b>		<b>19,632</b>	<b>100.00</b>

**FIGURE 6.3: Health Expenditure to Providers of Ambulatory Health Care (Non-Hospital Setting) by Sources of Financing, 2021**

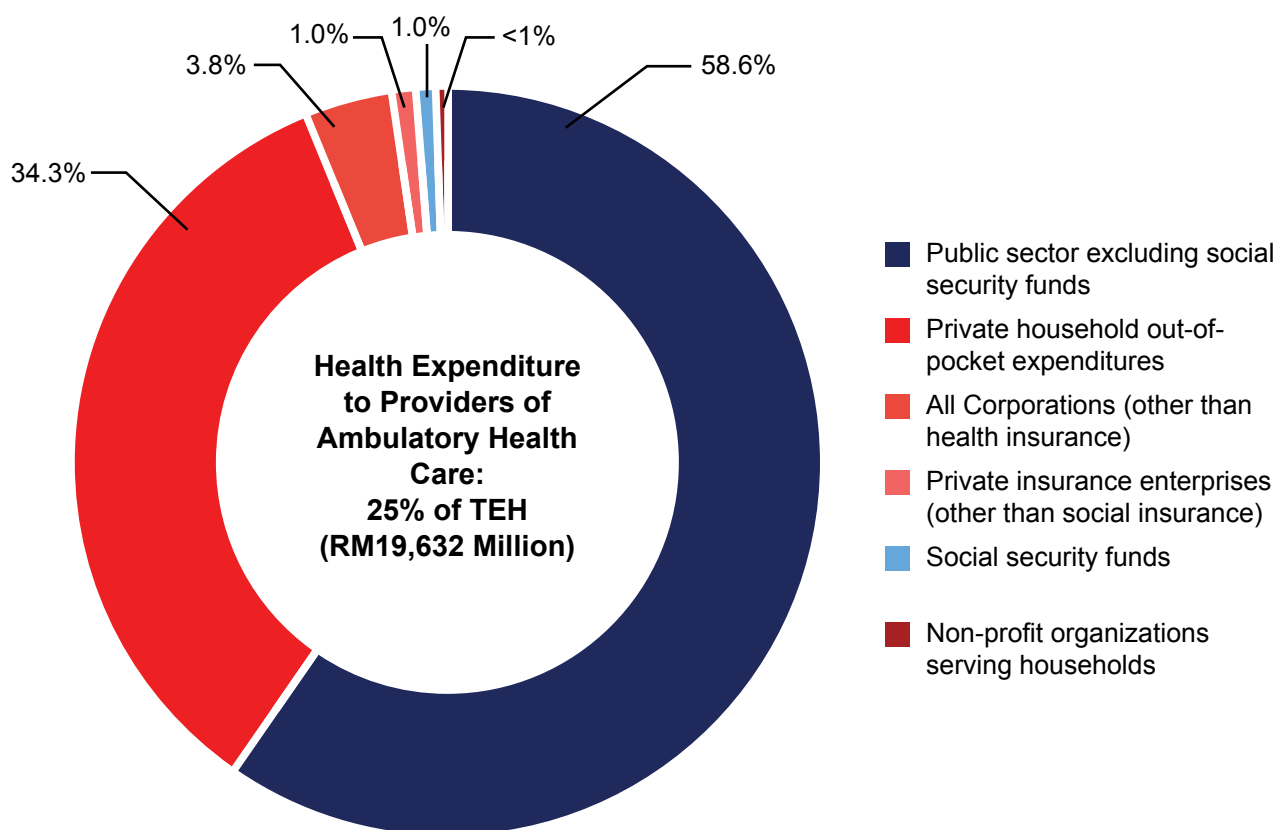


TABLE 6.3b: Health Expenditure to Providers of Ambulatory Health Care by Sources of Financing, 2011 - 2021 (RM Million)												
MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1	Public sector excluding social security funds	2,732	3,180	3,544	4,118	4,299	4,445	4,851	5,370	6,006	6,602	11,700
MS1.2	Social security funds	13	11	11	68	74	93	99	138	144	43	196
	<b>Subtotal Public Sector</b>	<b>2,745</b>	<b>3,191</b>	<b>3,554</b>	<b>4,186</b>	<b>4,374</b>	<b>4,538</b>	<b>4,950</b>	<b>5,509</b>	<b>6,150</b>	<b>6,645</b>	<b>11,896</b>
MS2.2	Private insurance enterprises (other than social insurance)	60	75	85	67	97	125	136	154	150	170	197
MS2.3	Private MCO and other similar entities	na	na	na	na	na	na	na	na	na	1	8
MS2.4	Private household out-of-pocket expenditures (OOP)	3,339	3,815	4,276	5,101	4,818	4,995	5,609	5,903	6,448	6,326	6,733
MS2.5	Non-profit institutions serving households (NPISH)	19	21	21	18	20	22	45	41	66	70	53
MS2.6	All Corporations (other than health insurance)	488	672	819	939	1,426	1,501	1,386	1,361	1,028	668	745
MS9	Rest of the world (ROW)	na	na	na	na	na	na	na	na	na	na	0.08
	<b>Subtotal Private Sector</b>	<b>3,906</b>	<b>4,582</b>	<b>5,201</b>	<b>6,125</b>	<b>6,361</b>	<b>6,643</b>	<b>7,177</b>	<b>7,459</b>	<b>7,693</b>	<b>7,235</b>	<b>7,736</b>
	<b>Total</b>	<b>6,650</b>	<b>7,773</b>	<b>8,756</b>	<b>10,311</b>	<b>10,735</b>	<b>11,181</b>	<b>12,127</b>	<b>12,968</b>	<b>13,843</b>	<b>13,880</b>	<b>19,632</b>

**TABLE 6.3c: Health Expenditure to Providers of Ambulatory Health Care by Sources of Financing, 2011 - 2021 (Percent, %)**

MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1	Public sector excluding social security funds	41.07	40.91	40.47	39.94	40.05	39.75	40.00	41.41	43.39	47.57	59.60
MS1.2	Social security funds	0.19	0.14	0.12	0.66	0.69	0.83	0.82	1.07	1.04	0.31	1.00
	<b>Subtotal Public sector</b>	<b>41.27</b>	<b>41.05</b>	<b>40.59</b>	<b>40.60</b>	<b>40.74</b>	<b>40.59</b>	<b>40.82</b>	<b>42.48</b>	<b>44.43</b>	<b>47.87</b>	<b>60.60</b>
MS2.2	Private insurance enterprises (other than social insurance)	0.90	0.96	0.97	0.65	0.91	1.12	1.13	1.19	1.09	1.22	1.01
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	0.01	0.04
MS2.4	Private household out-of-pocket expenditures	50.21	49.08	48.83	49.47	44.88	44.68	46.26	45.52	46.58	45.58	34.29
MS2.5	Non-profit organizations serving households	0.28	0.26	0.24	0.17	0.19	0.19	0.37	0.32	0.47	0.50	0.27
MS2.6	All Corporations (other than health insurance)	7.34	8.64	9.36	9.11	13.28	13.42	11.43	10.50	7.43	4.82	3.79
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
	<b>Subtotal Private sector</b>	<b>58.73</b>	<b>58.95</b>	<b>59.41</b>	<b>59.40</b>	<b>59.26</b>	<b>59.41</b>	<b>59.18</b>	<b>57.52</b>	<b>55.57</b>	<b>52.13</b>	<b>39.40</b>
	<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## 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 the Planning Division, the Family Health Development Division of the 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 6.4).

**TABLE 6.4: PC and PHC based on MNHA Codes**

Providers		Functions			
MNHA Code	Description	MNHA Code	Description		
MP1.1a	Hospitals (MOH)	MF1.3.1	Basic medical and diagnostic services	Primary Health Care (PHC)	Primary Care (PC)
MP1.1b	Hospitals (public non-MOH)	MF1.3.1	Basic medical and diagnostic services		
MP3.1	Medical practitioner clinics	MF1.3.1	Basic medical and diagnostic services		
		MF1.4	Services of curative home care		
		MF6.1	Maternal and child health, family planning and counselling		
		MF6.2.1	Medical school health services		
MP3.2	Dentist practitioners clinics	MF6.2.2	Dental school health services		
MP1 & MP3	Hospitals & ambulatory care	MF1.3.2	Dental outpatient curative care		
MP	All providers	MF6	Prevention and public health services		

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

In 2021, the PC expenditure was RM12,297 million (15.7%) of the TEH (Figure 6.4a), while

PHC expenditure which encompasses a broader boundary, was RM20,263 million (25.9%) of the TEH (Figure 6.4b). MOH spent RM11,839 million, or 30.7% of the MOH expenditure (Figure 6.4c), on PHC.

**FIGURE 6.4a: Primary Care Expenditure as Percentage of Total Expenditure on Health, 2021**

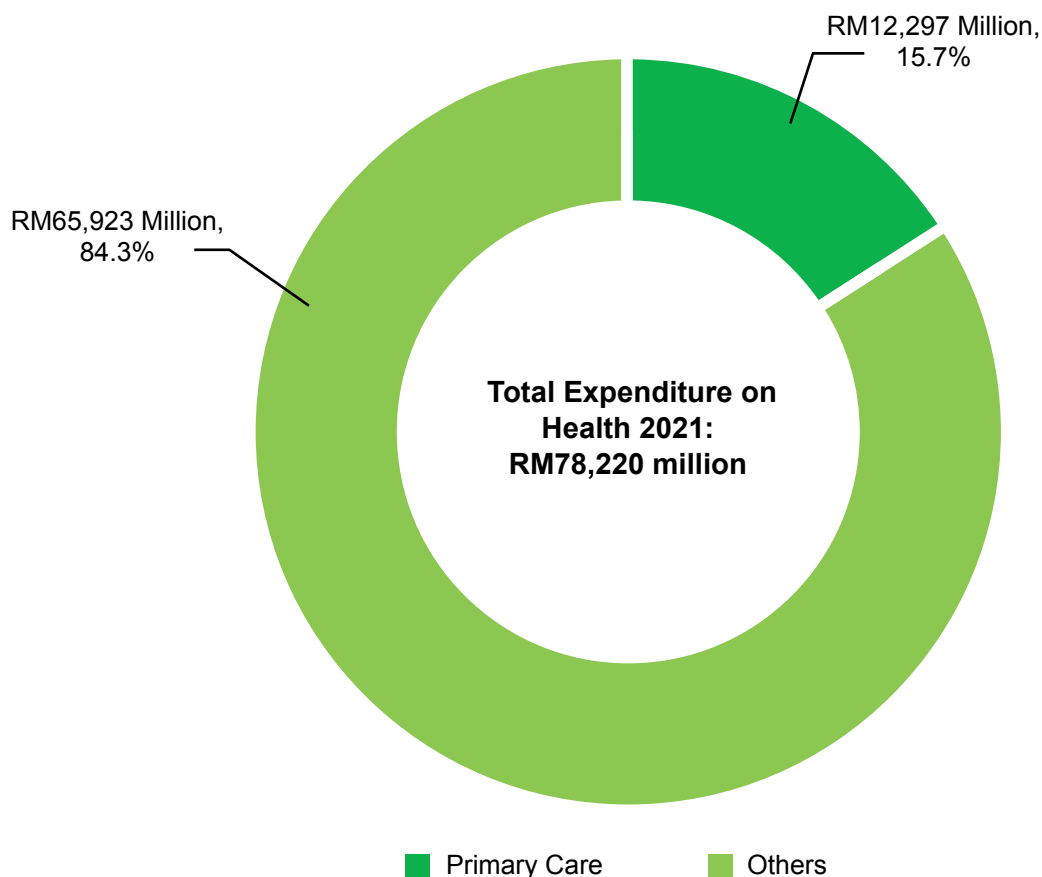


FIGURE 6.4b: Primary Health Care Expenditure as Percentage of Total Expenditure on Health, 2021

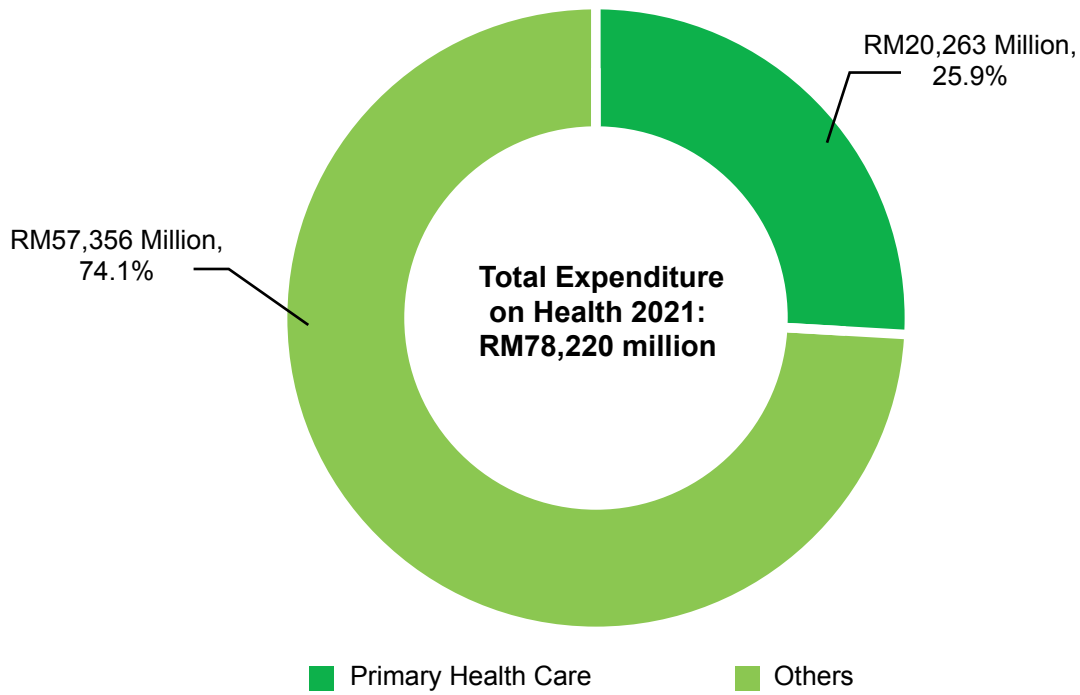
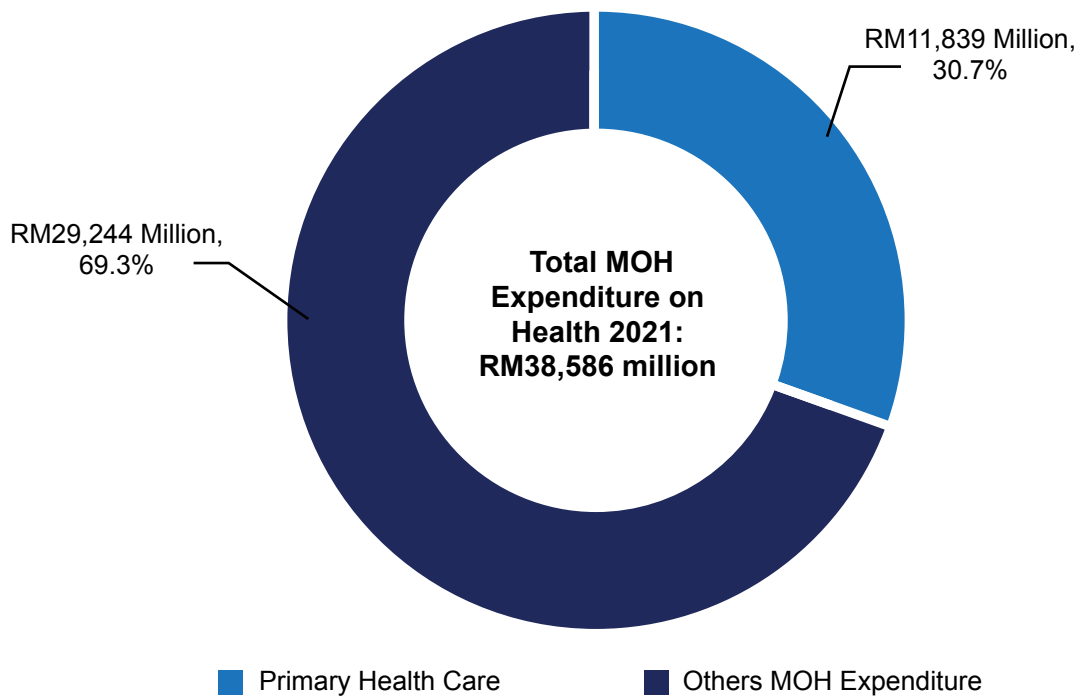


FIGURE 6.4c: Primary Health Care Expenditure as Percentage of MOH Expenditure, 2021





# CHAPTER 7

## HEALTH EXPENDITURE FOR FUNCTIONS OF HEALTH CARE

This chapter describes the types of health goods and 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 2021, followed by time series data for 2011-2021 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 2021, the expenditure for services of curative care amounted to RM45,204 million (57.8%) of TEH (Table 7.1a and Figure 7.1). This was followed by public health services (including health promotion and prevention) at RM10,463 million (13.4%), capital formation of health care provider institutions at RM7,046 million (9.0%), health programme

administration and health insurance at RM6,644 million (8.5%), and medical goods dispensed to out-patients at RM5,510 million (7.0%). A total of RM2,773 million (3.5%) was spent for education and training of health personnel, and the remaining RM580 million (0.8%) was spent on all the other functions.

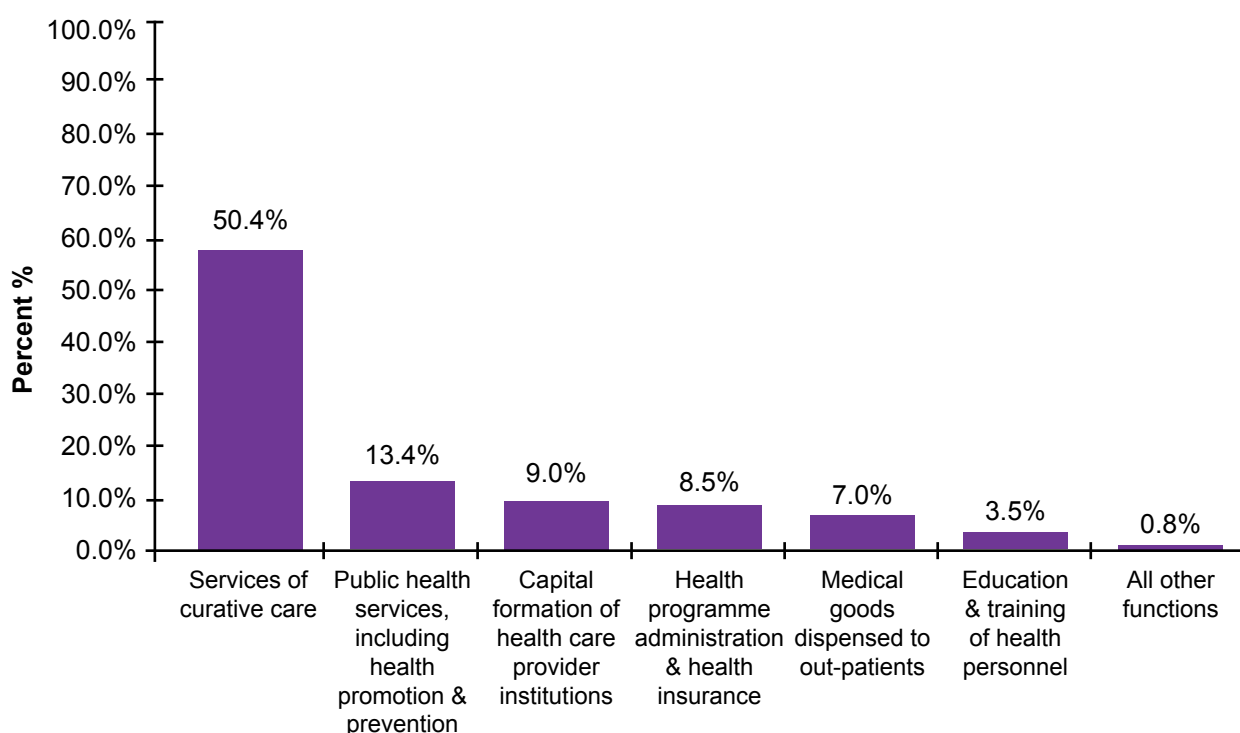
Despite a decrease in the curative care expenditure share for the year 2021 as compared to pre pandemic year at 2019, there were significant increases seen in expenditure for public health services (including health promotion and prevention) share from the total health expenditure.

The 2011-2021 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 5 functions for those 11 years was spending for health programme administration & health insurance. Other expenditures that were also included in the top 5 functions were for medical goods dispensed to outpatients (2011-2021), public health services (2013-2021), education & training of health personnel (2011-2018), and capital formation (2011-2012 and 2019-2021).

**TABLE 7.1a: Total Expenditure on Health for Functions of Health Care, 2021**

MNHA Code	Functions of Health Care	RM Million	Percent
MF1	Services of curative care	45,204	57.79
MF6	Public health services, including health promotion & prevention	10,463	13.38
MR1	Capital formation of health care provider institutions	7,046	9.01
MF7	Health programme administration & health insurance	6,644	8.49
MF5	Medical goods dispensed to out-patients	5,510	7.04
MR2	Education & training of health personnel	2,773	3.54
MF4	Ancillary services to health care	219	0.28
MR3	Research & development in health	357	0.46
MF3	Services of long-term nursing care	4	0.01
<b>Total</b>		<b>78,220</b>	<b>100.00</b>

**FIGURE 7.1: Total Expenditure on Health for Functions of Health Care, 2021**



**TABLE 7.1b: Total Expenditure on Health for Functions of Health Care, 2011-2021 (RM Million)**

MNHA Code	Functions of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MF1	Services of curative care	23,238	26,172	27,191	31,405	33,446	34,904	38,347	41,012	43,347	41,904	45,204
MF2	Services of rehabilitative care	1	0.02	na	na	na	na	na	na	na	na	na
MF3	Services of long-term nursing care	15	19	1	2	1	4	1	4	1	53	4
MF4	Ancillary services to health care	296	314	407	380	354	300	328	331	351	302	219
MF5	Medical goods dispensed to out-patients	2,242	2,477	2,730	3,298	3,933	4,250	4,523	5,245	4,818	4,752	5,510
MF6	Public health services (including health promotion and prevention)	1,577	1,925	2,804	2,771	3,223	3,406	3,482	3,659	4,099	5,357	10,463
MF7	Health programme administration and health insurance	3,632	3,545	3,586	4,248	4,462	3,832	4,773	4,431	5,227	5,846	6,644
MR1	Capital formation of health care provider institutions	2,430	2,355	2,089	1,831	1,887	1,972	2,010	2,537	3,164	5,552	7,046
MR2	Education and training of health personnel	2,463	2,560	2,749	2,758	2,813	2,950	2,831	3,128	3,099	2,985	2,773
MR3	Research and development in health	58	81	90	87	88	73	68	91	146	270	357
MR9	All other health-related expenditures	na	na	na	na	na	na	na	na	na	na	na
<b>Total</b>		<b>35,953</b>	<b>39,448</b>	<b>41,647</b>	<b>46,780</b>	<b>50,208</b>	<b>51,691</b>	<b>56,364</b>	<b>60,438</b>	<b>64,252</b>	<b>67,022</b>	<b>78,220</b>

**TABLE 7.1c: Total Expenditure on Health for Functions of Health Care, 2011 - 2021 (Percent, %)**

MINHA Code	Functions of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MF1	Services of curative care	64.63	66.35	65.29	67.13	66.61	67.52	68.03	67.86	67.46	62.52	57.79
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
MF3	Services of long-term nursing care	0.04	0.05	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.08	0.01
MF4	Ancillary services to health care	0.82	0.80	0.98	0.81	0.71	0.58	0.58	0.55	0.55	0.45	0.28
MF5	Medical goods dispensed to out-patients	6.24	6.28	6.56	7.05	7.83	8.22	8.02	8.68	7.50	7.09	7.04
MF6	Public health services (including health promotion and prevention)	4.39	4.88	6.73	5.92	6.42	6.59	6.18	6.05	6.38	7.99	13.38
MF7	Health programme administration and health insurance	10.10	8.99	8.61	9.08	8.89	7.41	8.47	7.33	8.14	8.72	8.49
MR1	Capital formation of health care provider institutions	6.76	5.97	5.02	3.92	3.76	3.82	3.57	4.20	4.92	8.28	9.01
MR2	Education and training of health personnel	6.85	6.49	6.60	5.90	5.60	5.71	5.02	5.18	4.82	4.45	3.54
MR3	Research and development in health	0.16	0.21	0.22	0.19	0.17	0.14	0.12	0.15	0.23	0.40	0.46
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
	<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## 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 settings. The non-hospital setting includes medical or dental clinics.

In 2021, a total of RM45,204 million (58%) of TEH was for services of curative care, as shown in Table 7.2a and Figure 7.2. The source of financing for

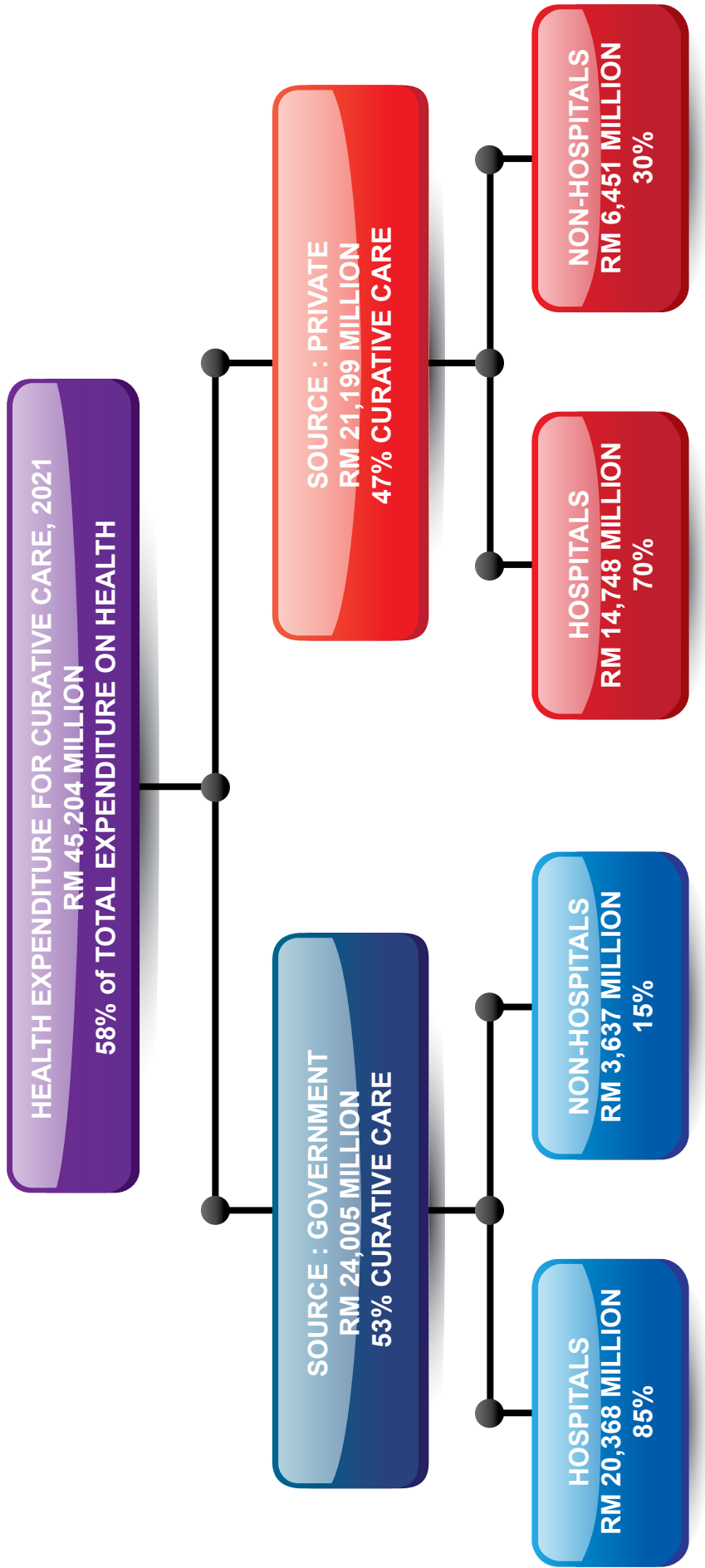
services of curative care was RM24,005 million (53.1%) from the public sector and the remaining RM21,199 million (46.9%) from the private sector. For the services of curative care expenditure in hospitals, the public sector spent 45.1%, and the private sector spent 32.6%. The remaining expenditure was spent at non-hospital settings. For 2021, there was an increase in spending at both hospitals and non-hospital settings.

The 2011-2021 time series data shows that the public sector share remains higher than the private sector share as a source of financing throughout the 11 years. (Table 7.2b and 7.2c).

**TABLE 7.2a: Health Expenditure for Curative Care by Sources of Financing, 2021**

Source	Provider	RM Million	Percent
Public Sector	Hospital	20,368	45.06
	Non-Hospital	3,637	8.05
	<b>Sub-Total</b>	<b>24,005</b>	<b>53.10</b>
Private Sector	Hospital	14,748	32.62
	Non-Hospital	6,451	14.27
	<b>Sub-Total</b>	<b>21,199</b>	<b>46.90</b>
	<b>Total</b>	<b>45,204</b>	<b>100.00</b>

FIGURE 7.2: Health Expenditure for Curative Care by Sources of Financing, 2021



**TABLE 7.2b: Health Expenditure for Curative Care by Sources of Financing, 2011 - 2021 (RM Million)**

Source	Provider	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Public Source	Hospital	10,873	12,651	13,011	15,240	15,800	15,996	17,286	18,545	19,584	18,484	20,368
	Non-Hospital	2,077	2,370	2,001	2,479	2,823	3,017	3,352	3,740	3,434	3,593	3,637
	<b>Sub-Total</b>	<b>12,950</b>	<b>15,021</b>	<b>15,013</b>	<b>17,719</b>	<b>18,623</b>	<b>19,013</b>	<b>20,638</b>	<b>22,285</b>	<b>23,018</b>	<b>22,077</b>	<b>24,005</b>
Private Source	Hospital	7,018	7,363	7,961	8,652	9,973	10,859	12,112	12,861	14,101	13,762	14,748
	Non-Hospital	3,271	3,788	4,218	5,034	4,849	5,033	5,597	5,866	6,228	6,065	6,451
	<b>Sub-Total</b>	<b>10,288</b>	<b>11,151</b>	<b>12,179</b>	<b>13,686</b>	<b>14,823</b>	<b>15,891</b>	<b>17,709</b>	<b>18,728</b>	<b>20,329</b>	<b>19,827</b>	<b>21,199</b>
	<b>Total</b>	<b>23,238</b>	<b>26,172</b>	<b>27,191</b>	<b>31,405</b>	<b>33,446</b>	<b>34,904</b>	<b>38,347</b>	<b>41,012</b>	<b>43,347</b>	<b>41,904</b>	<b>45,204</b>

**TABLE 7.2c: Health Expenditure for Curative Care by Sources of Financing, 2011 - 2021 (Percent, %)**

Source	Provider	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Public Source	Hospital	46.79	48.34	47.85	48.53	47.24	45.83	45.08	45.22	45.18	44.11	45.06
	Non-Hospital	8.94	9.06	7.36	7.89	8.44	8.64	8.74	9.12	7.92	8.57	8.05
	<b>Sub-Total</b>	<b>55.73</b>	<b>57.39</b>	<b>55.21</b>	<b>56.42</b>	<b>55.68</b>	<b>54.47</b>	<b>53.82</b>	<b>54.34</b>	<b>53.10</b>	<b>52.68</b>	<b>53.10</b>
Private Source	Hospital	30.20	28.13	29.28	27.55	29.82	31.11	31.59	31.36	32.53	32.84	32.62
	Non-Hospital	14.07	14.47	15.51	16.03	14.50	14.42	14.60	14.30	14.37	14.47	14.27
	<b>Sub-Total</b>	<b>44.27</b>	<b>42.61</b>	<b>44.79</b>	<b>43.58</b>	<b>44.32</b>	<b>45.53</b>	<b>46.18</b>	<b>45.66</b>	<b>46.90</b>	<b>47.32</b>	<b>46.90</b>
	<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

### 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 improve 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 curative care services.

In 2021, a total of RM10,463 million (13.4%) of TEH was spent for public health programmes. Of this, RM9,664 million (92.4%) was by the public sector sources of financing. MOH was the highest

financier of public health services, spending RM8,535 million or 81.6% of the total expenditure on public health services (Table 7.3a). About 88.3% 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 RM 918 million (8.8%), followed by all corporations (other than health insurance), amounting to RM 732 million (7.0%).

The 2011-2021 time series data shows MOH as the largest source of financing for this function, with a 11-fold increase in absolute RM value over the past 11 years. The second highest increase as a source of financing was seen from other federal agencies (including statutory bodies), with a 10-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, 2021**

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1.1	Ministry of Health (MOH)	8,535	81.57
MS1.1.1.9	Other federal agencies (including statutory bodies)	918	8.78
MS2.6	All corporations (other than health insurance)	732	7.00
MS1.1.2.1	(General) State government	102	0.98
MS1.1.2.2	Other state agencies (including statutory bodies)	51	0.49
MS1.1.3	Local authorities (LA)	50	0.48
MS2.4	Private household out-of-pocket expenditures (OOP)	39	0.37
MS2.5	Non-profit institutions serving households (NGO)	17	0.16
MS2.3	Private MCOs and other similar entities	10	0.10
MS1.2.2	Social Security Organization (SOCSO)	5	0.04
MS1.1.1.2	Ministry of Education (MOE)	2	0.02
MS9	Rest of the world (ROW)	2	0.02
<b>Total</b>		<b>10,463</b>	<b>100.00</b>



**FIGURE 7.3: Health Expenditure for Public Health Services (Including Health Promotion and Prevention) by Sources of Financing, 2021**

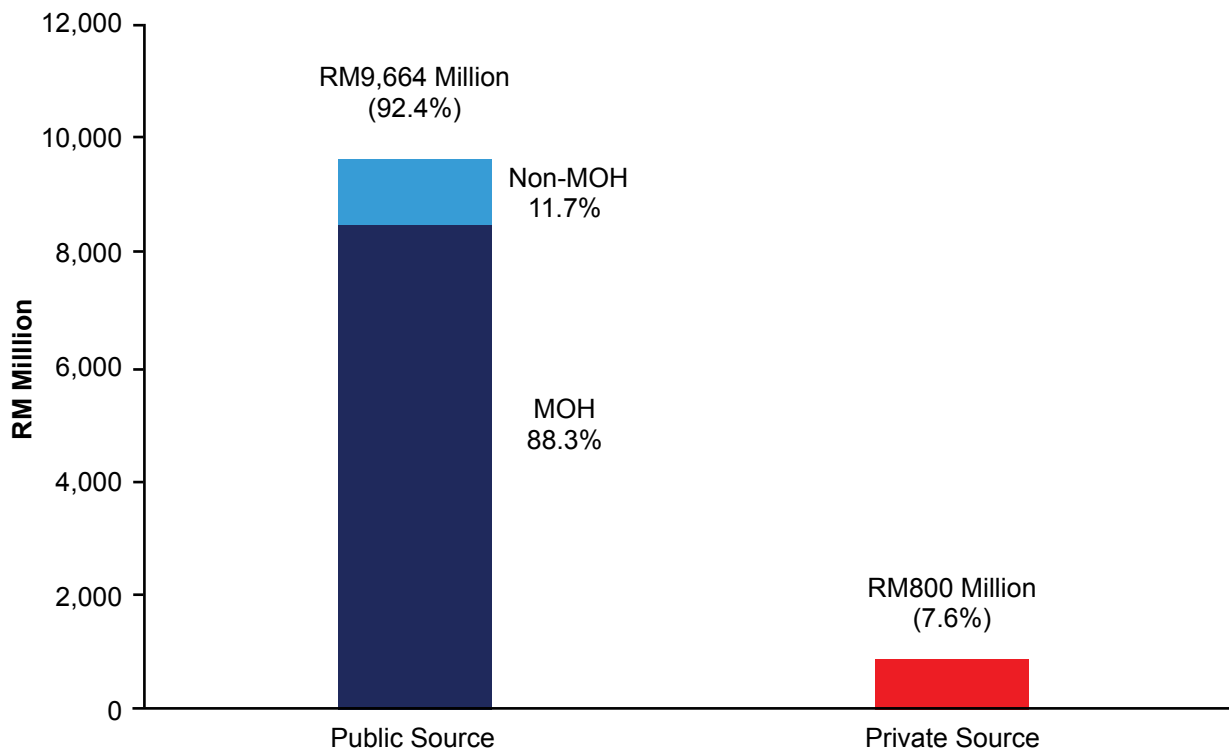


TABLE 7.3b: Health Expenditure for Public Health Services (including Health Promotion and Prevention) by Sources of Financing, 2011 - 2021 (RM Million)												
MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1.1	Ministry of Health (MOH)	752	898	1,634	1,541	1,653	1,777	1,902	2,118	3,010	3,672	8,535
MS1.1.2	Ministry of Education (MOE)	na	na	na	na	na	na	na	na	na	75	2
MS1.1.9	Other federal agencies (including statutory bodies)	94	118	128	121	140	128	141	129	146	575	918
MS1.1.2.1	(General) State government	54	64	25	31	31	35	27	30	22	89	102
MS1.1.2.2	Other state agencies (including statutory bodies)	30	34	66	78	43	52	50	50	55	65	51
MS1.1.3	Local authorities (LA)	62	83	72	44	52	26	36	30	47	50	50
MS1.2.2	Social Security Organisation (SOCSSO)	4	5	35	23	9	11	8	na	na	8	5
MS2.2	Private insurance enterprises (other than social insurance)	na	na	na	na	na	na	na	na	na	11	na
MS2.3	Private MCOs and other similar entities	na	na	na	na	na	na	na	na	na	3	10
MS2.4	Private household out-of-pocket expenditures (OOP)	8	10	10	8	6	6	6	8	7	8	39
MS2.5	Non-profit institutions serving households (NPISH)	10	16	1	1	21	28	17	18	2	16	17
MS2.6	All corporations (other than health insurance)	563	698	832	924	1,267	1,344	1,296	1,275	810	781	732
MS9	Rest of the world (ROW)	0	na	na	na	na	na	na	na	na	5	2
Total		1,577	1,925	2,804	2,771	3,223	3,406	3,482	3,659	4,099	5,357	10,463

MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS11.1.1	Ministry of Health (MOH)	47.71	46.66	58.27	55.59	51.29	52.16	54.62	57.89	73.43	68.54	81.57
MS11.1.2	Ministry of Education (MOE)	na	na	na	na	na	na	na	na	na	1.41	0.02
MS11.1.9	Other federal agencies (including statutory bodies)	5.95	6.11	4.57	4.38	4.35	3.75	4.04	3.53	3.56	10.73	8.78
MS11.2.1	(General) State government	3.41	3.30	0.90	1.13	0.96	1.02	0.76	0.83	0.53	1.66	0.98
MS11.2.2	Other state agencies (including statutory bodies)	1.89	1.75	2.35	2.81	1.33	1.51	1.43	1.37	1.35	1.22	0.49
MS11.3	Local authorities (LA)	3.90	4.29	2.58	1.59	1.62	0.76	1.03	0.82	1.15	0.93	0.48
MS12.2	Social Security Organisation (SOCSSO)	0.26	0.27	1.26	0.83	0.27	0.33	0.23	na	na	0.15	0.04
MS2.2	Private insurance enterprises (other than social insurance)	na	na	na	na	na	na	na	na	na	0.20	na
MS2.3	Private MCOs and other similar entities	na	na	na	na	na	na	na	na	na	0.05	0.10
MS2.4	Private household out-of-pocket expenditures (OOP)	0.50	0.52	0.35	0.27	0.20	0.17	0.16	0.22	0.18	0.14	0.37
MS2.5	Non-profit institutions serving households (NPISH)	0.65	0.81	0.04	0.04	0.67	0.84	0.49	0.49	0.05	0.29	0.16
MS2.6	All corporations (other than health insurance)	35.71	36.28	29.67	33.35	39.32	39.46	37.22	34.84	19.75	14.57	7.00
MS9	Rest of the world (ROW)	0.00	na	na	na	na	na	na	na	na	0.10	0.02
<b>Total</b>		<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## 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 2021, a total of RM2,773 million or about 4% of TEH was spent on health education and training of health personnel. A total of RM1,234 million (44.5%) of this amount was funded by public sector sources of financing (Table 7.4a). The MOH spent about 21.4% of public sector health expenditure on health education and training, as shown in Figure 7.4.

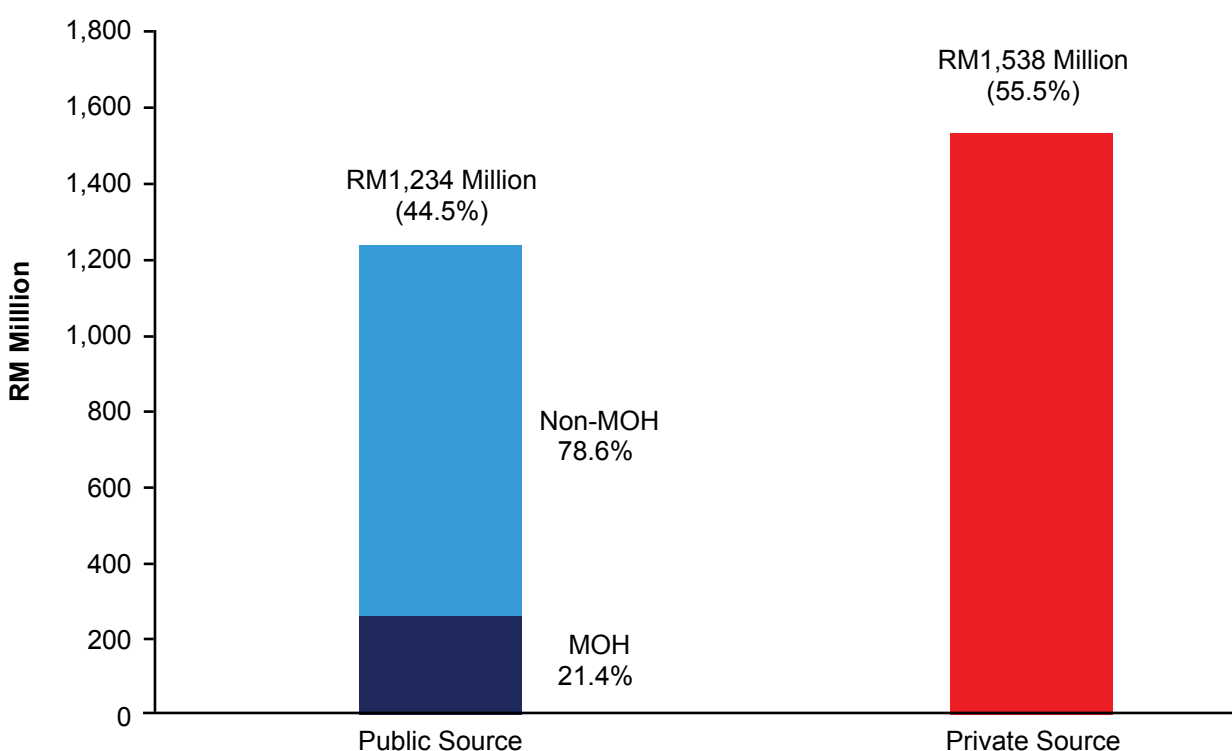
The 2011-2021 time series data shows that both public sector and private sector sources of financing range between 45% to 64% and 36% to 55% respectively (Table 7.4b and Table 7.4c). Private sources of financing show a 2-fold increase in spending for health education and training throughout the 11 years.

**TABLE 7.4a: Health Expenditure for Health Education and Training by Sources of Financing, 2021**

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1.1	Public source (MOH)	264	9.51
MS1 (others)	Public source (Non-MOH)	971	35.01
MS2 + MS9	Private source*	1,538	55.48
<b>Total</b>		<b>2,773</b>	<b>100.00</b>

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

**FIGURE 7.4: Health Expenditure for Health Education and Training by Sources of Financing, 2021**



**TABLE 7.4b: Health Expenditure for Health Education and Training by Sources of Financing, 2011 - 2021 (RM Million)**

MNHA Code	Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1.1	Public source (MOH)	380	377	407	438	446	428	244	380	370	356	264
MS1 (others)	Public source (non-MOH)	1,204	1,030	881	992	969	1,039	1,064	1,227	1,178	1,001	971
MS2 + MS9	Private source*	879	1,153	1,461	1,328	1,398	1,483	1,524	1,521	1,551	1,628	1,538
	Total	2,463	2,560	2,749	2,758	2,813	2,950	2,831	3,128	3,099	2,985	2,773

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

**TABLE 7.4c: Health Expenditure for Health Education and Training by Sources of Financing, 2011 - 2021 (Percent, %)**

MNHA Code	Source of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MS1.1.1	Public source (MOH)	15.44	14.74	14.81	15.89	15.86	14.50	8.63	12.14	11.94	11.93	9.51
MS1 (others)	Public source (non-MOH)	48.87	40.23	32.04	35.95	34.45	35.21	37.57	39.23	38.02	33.52	35.01
MS2 + MS9	Private source*	35.69	45.03	53.15	48.16	49.69	50.28	53.81	48.64	50.03	54.54	55.48
	Total	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 slight 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

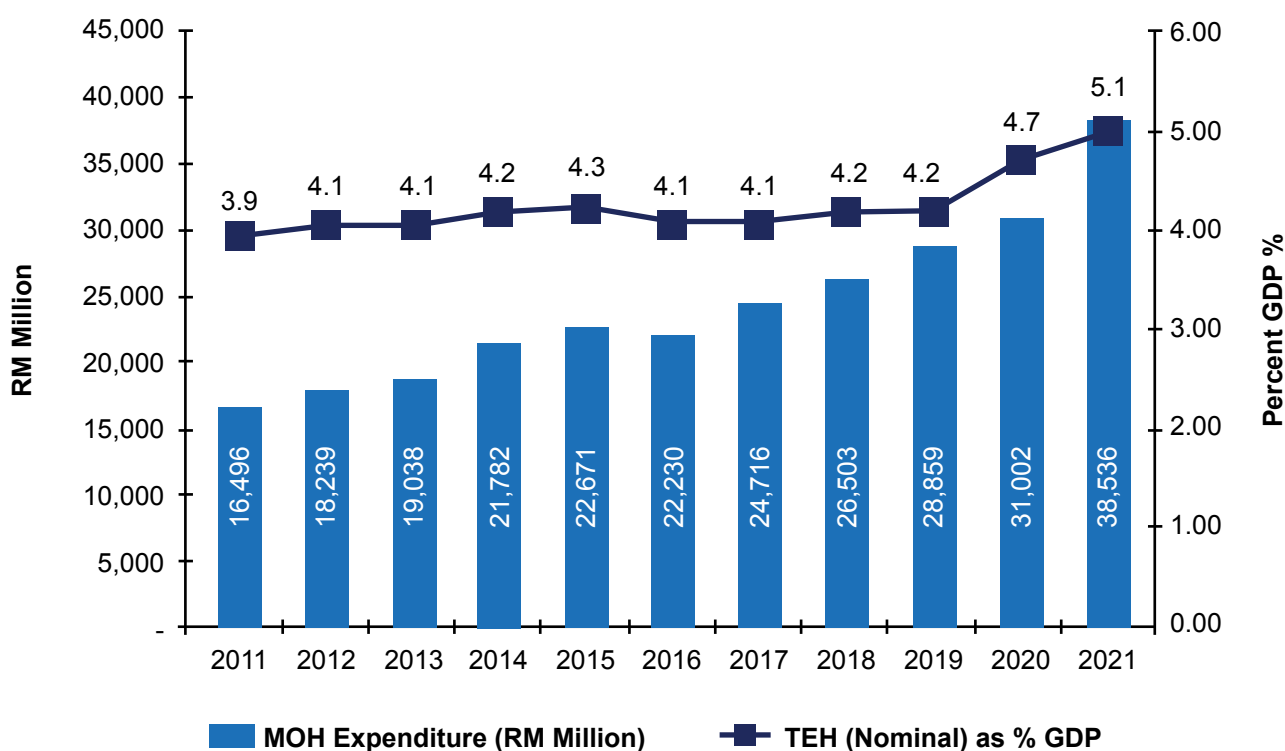
the government treasury accounting system based on AG data as total MOH expenditure (inclusive of operating and development expenditures) for a particular year. The MNHA Framework allows tracking of reimbursements by various agencies (e.g. EPF, SOCSO, private health insurance, state government including 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 2021, a total amount of RM38,586 million (49.3%) of TEH was spent by MOH. In relation to GDP, MOH health expenditure took up 2.5% of the national GDP in the same year. The 2011-2021 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 43.0% and 49.3% of the TEH. In 2011, MOH spent RM16,496 million (45.9%) of TEH, while in the year 2021, MOH spent RM38,586 million (49.3%) of TEH. In relation to GDP, MOH expenditure in 2011 is equivalent to 1.8% of the national GDP, while in 2021, it is 2.5% of the national GDP (Table 8.1 and Figure 8.1).

**TABLE 8.1: MOH Share of Total Expenditure on Health and Percent GDP, 2011-2021**

Year	TEH, Nominal (RM Million)	MOH Expenditure (RM Million)	MOH Expenditure as % TEH	TEH (Nominal) as % GDP	MOH Expenditure as % of GDP
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	50,208	22,671	45.15	4.27	1.93
2016	51,691	22,230	43.00	4.14	1.78
2017	56,364	24,716	43.85	4.11	1.80
2018	60,438	26,503	43.85	4.17	1.83
2019	64,252	28,859	44.92	4.25	1.91
2020	67,022	31,002	46.26	4.73	2.19
2021	78,220	38,586	49.33	5.06	2.50

**FIGURE 8.1: MOH Expenditure on Health and Percent GDP, 2011-2021**



## 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 2021, both the public and private sector sources of financing at MOH hospitals totalled to RM20,527 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 RM20,527 million spent, RM19,861 million (96.8%) was MOH's source of financing. A small amount of RM666 million (3.2%) was accounted for by other financiers such as private household OOP (RM311 million), corporations (other than health insurance) (RM90 million), other state agencies (including statutory bodies) (RM85 million), non-profit institutions serving households (RM84 million), private insurance enterprises (other than social insurance) (RM43 million), Social Security Organisation or SOCSO (RM38 million), and the remaining non-MOH expenditure at RM16 million (Table 8.2.1a).

The 2011-2021 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 2-fold in absolute RM value, with an average of 97.3% of the total health expenditure at MOH hospitals (Table 8.2.1c).

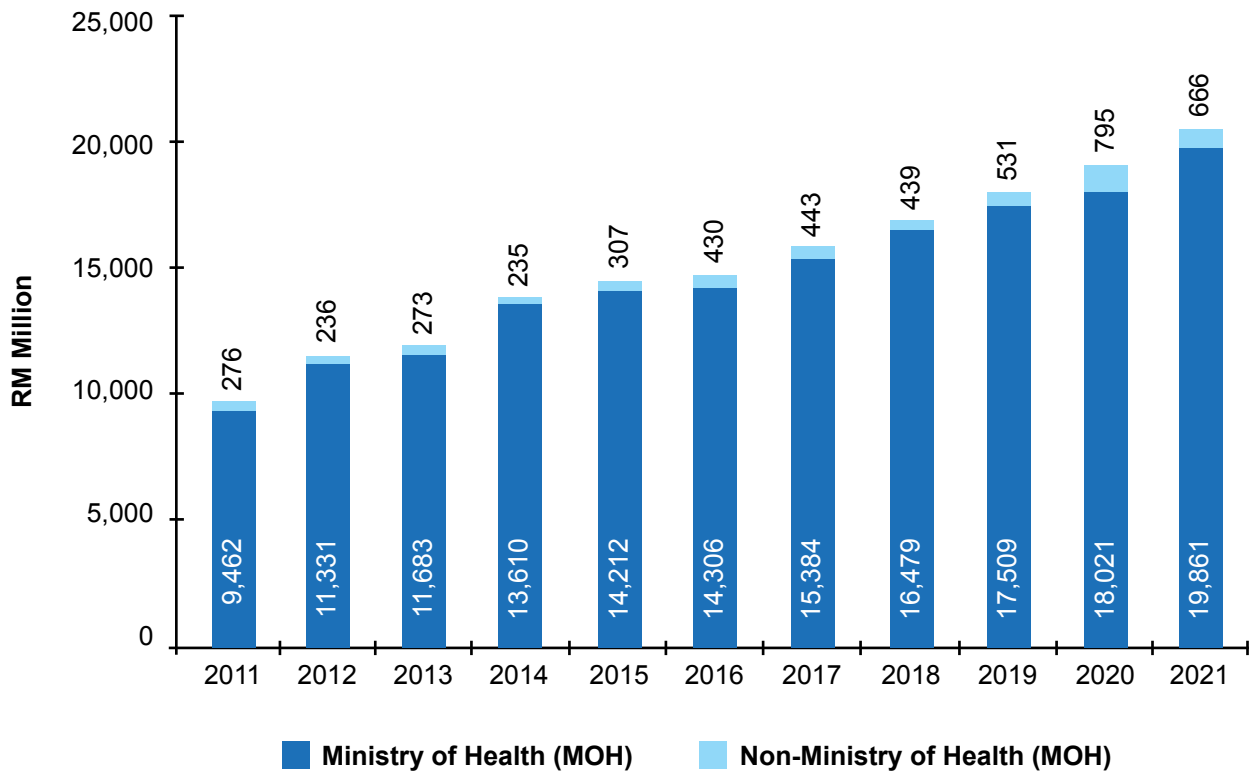


**TABLE 8.2.1a: Health Expenditure at MOH Hospitals by Sources of Financing, 2021\***

	MNHA Code	Sources of Financing	RM Million	Percent
<b>Ministry of Health (MOH)</b>	<b>MS1.1.1.1</b>	<b>Ministry of Health (MOH)</b>	<b>19,861</b>	<b>96.76</b>
<b>Non-MOH</b>	MS2.4	Private household out-of-pocket expenditures (OOP)	311	1.51
	MS2.6	All corporations (other than health insurance)	90	0.44
	MS1.1.2.2	Other state agencies (including statutory bodies)	85	0.41
	MS2.5	Non-profit institutions serving households (NPISH)	84	0.41
	MS2.2	Private insurance enterprises (other than social insurance)	43	0.21
	MS1.2.2	Social Security Organisation (SOCSO)	38	0.19
	MS1.1.1.9	Other federal agencies (including statutory bodies)	9	0.04
	MS1.1.2.1	(General) State government	2	0.01
	MS1.1.3	Local authorities (LA)	2	0.01
	MS1.2.1	Employees Provident Fund (EPF)	2	0.01
	MS9	Rest of the world (ROW)	1	0.01
	MS1.1.1.2	Ministry of Education	1	0.01
	<b>Non-MOH Sub-total</b>			<b>666</b>
<b>Total</b>			<b>20,527</b>	<b>100.00</b>

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, 2011-2021**



**TABLE 8.2.1b: Health Expenditure at MOH Hospitals by Sources of Financing, 2011-2021 (RM Million)**

Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Ministry of Health (MOH)	9,462	11,331	11,683	13,610	14,212	14,306	15,384	16,479	17,509	18,021	19,861
Non-Ministry of Health (non-MOH)	276	236	273	235	307	430	443	439	531	795	666
<b>Total</b>	<b>9,739</b>	<b>11,567</b>	<b>11,956</b>	<b>13,845</b>	<b>14,519</b>	<b>14,736</b>	<b>15,827</b>	<b>16,918</b>	<b>18,040</b>	<b>18,816</b>	<b>20,527</b>

**TABLE 8.2.1c: Health Expenditure at MOH Hospitals by Sources of Financing, 2011-2021 (Percent, %)**

Sources of Financing	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Ministry of Health (MOH)	97.16	97.96	97.72	98.30	97.88	97.08	97.20	97.41	97.05	95.77	96.76
Non-Ministry of Health (Non-MOH)	2.84	2.04	2.28	1.70	2.12	2.92	2.80	2.59	2.95	4.23	3.24
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## 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 2021, RM20,527 million was spent at MOH hospitals. Of this amount, RM17,889 million (87.1%)

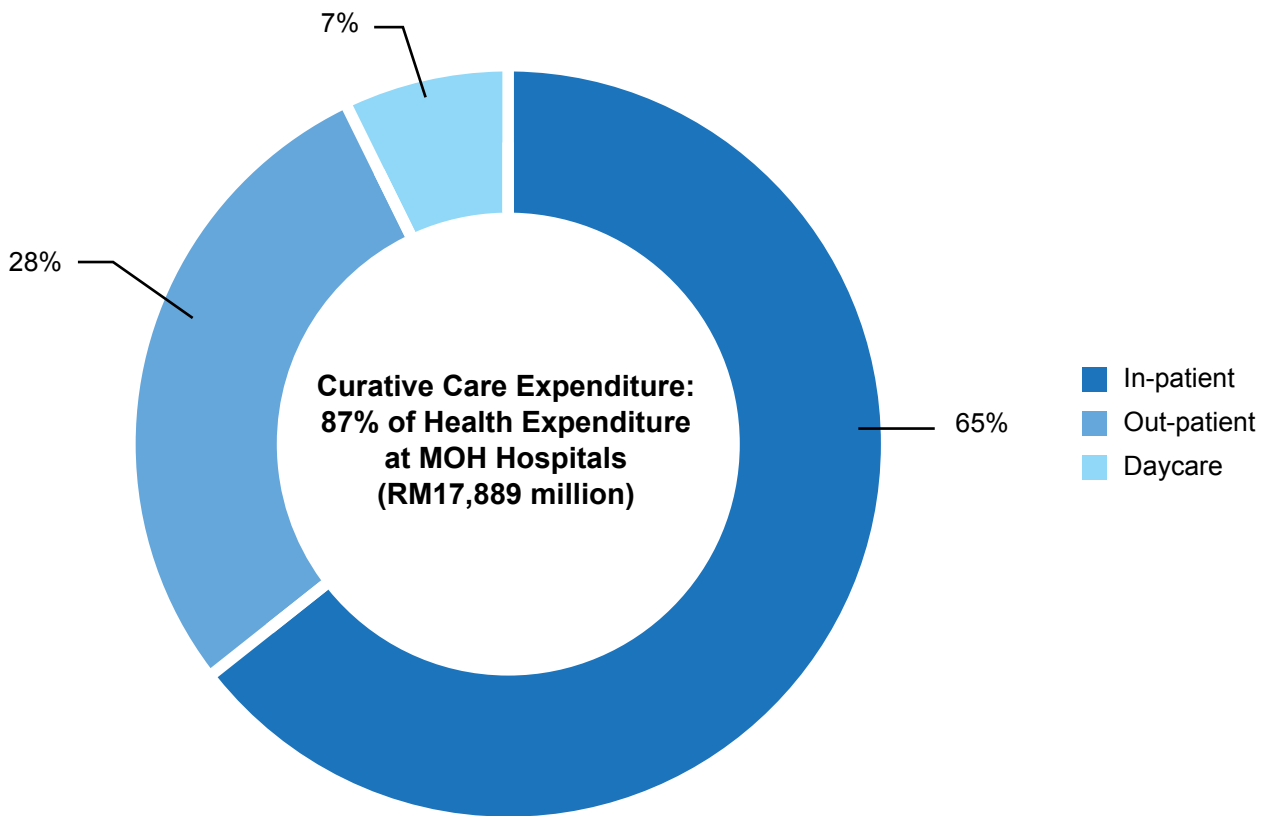
was for curative care services (Table 8.2.2a). In the same year, the expenditure for curative care services at MOH hospitals showed that RM11,551 million (56.3%) was spent for in-patient curative care services. This was followed by RM5,074 million (24.7%) for out-patient curative care services and RM1,264 million (6.2%) for day cases of curative care services (Figure 8.2.2).

The 2011-2021 time series data shows that in absolute RM value, the curative care services expenditure increased by 2-fold (Table 8.2.2b). The curative care services expenditure in time series shows an average of 96.4% spending at the MOH hospitals (Table 8.2.2c).

**TABLE 8.2.2a: Health Expenditure at MOH Hospitals for Functions of Health Care, 2021**

	MNHA Code	Functions of Health Care	RM Million	Percent
<b>Curative Care</b>	MF1.1	In-patient curative care	11,551	56.27
	MF1.3	Out-patient curative care	5,074	24.72
	MF1.2	Day cases of curative care	1,264	6.16
	<b>Sub-total (curative care)</b>		<b>17,889</b>	<b>87.15</b>
<b>Non-Curative Care</b>	MR1	Capital formation of health care provider institutions	2,634	0.13
	MF6.4	Prevention of non-communicable disease	5	<0.01
	MR3	Research and development in health	0.02	<0.01
	<b>Sub-total (non curative care)</b>		<b>2,638</b>	<b>12.85</b>
<b>Total</b>			<b>20,527</b>	<b>100.00</b>

FIGURE 8.2.2: Health Expenditure at MOH Hospitals for Curative Care Functions of Health Care, 2021



**TABLE 8.2.2b: Health Expenditure at MOH Hospitals for Functions of Health Care, 2011-2021 (RM Million)**

Functions of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Curative Care	9,643	11,302	11,590	13,576	14,228	14,417	15,716	16,842	17,749	16,700	17,889
Non-Curative Care	96	265	366	269	292	319	112	76	291	2,116	2,638
<b>Total</b>	<b>9,739</b>	<b>11,567</b>	<b>11,956</b>	<b>13,845</b>	<b>14,519</b>	<b>14,736</b>	<b>15,827</b>	<b>16,918</b>	<b>18,040</b>	<b>18,816</b>	<b>20,527</b>

**TABLE 8.2.2c: Health Expenditure at MOH Hospitals for Functions of Health Care, 2011-2021 (Percent, %)**

Functions of Health Care	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Curative Care	99.02	97.71	96.94	98.06	97.99	97.84	99.29	99.55	98.39	88.75	87.15
Non-Curative Care	0.98	2.29	3.06	1.94	2.01	2.16	0.71	0.45	1.61	11.25	12.85
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## 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:

$$\text{OOP Health Expenditure} = (\text{Gross OOP Health Expenditure} - \text{Third Party Payer Reimbursement}) + \text{OOP Expenditure for Health Education \& Training}$$

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

In 2021, the OOP health expenditure amounted to RM24,643 million, equivalent to 31.5% of the TEH and 74.8% share of the private sector health expenditure (Table 9.1a). The 2011-2021 time series data shows that the household OOP

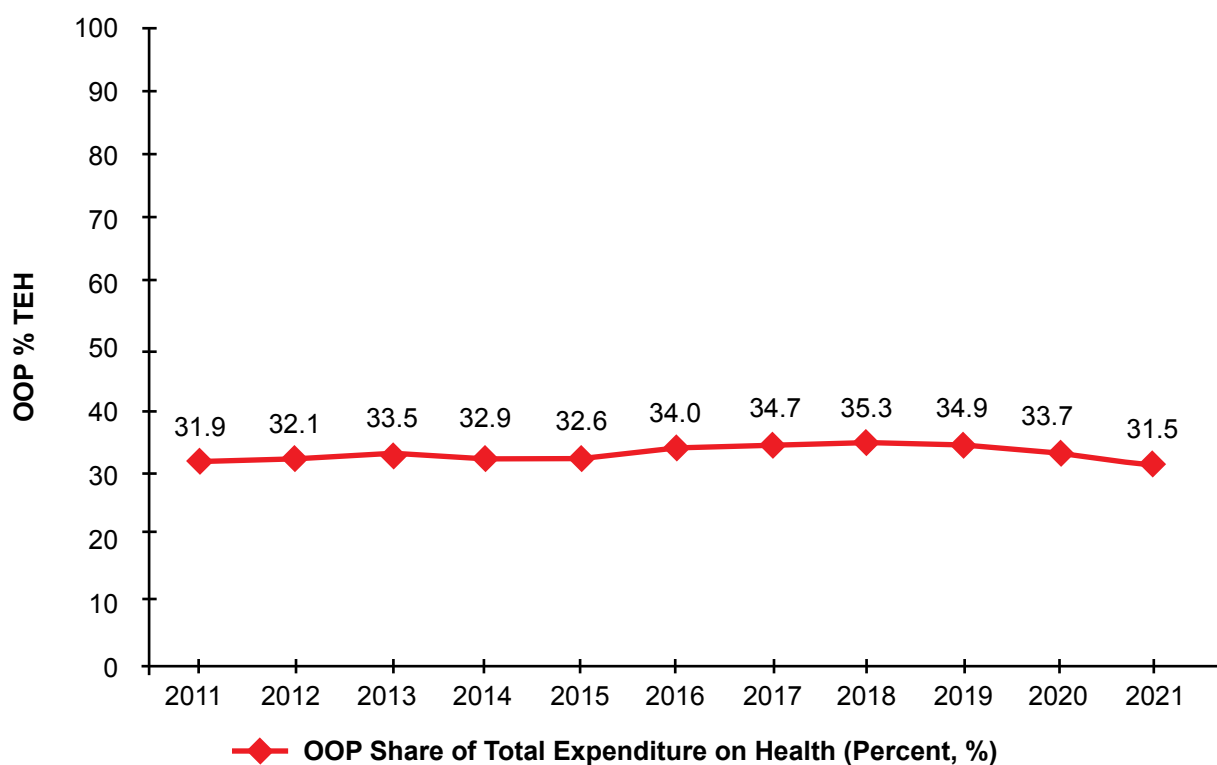
health expenditure was between 31.5% and 35.3% of TEH (Figure 9.1a). It has remained the largest single source of financing in the private sector throughout the years, with an average of 73% (Table 9.1a, Figure 9.1b). The OOP health expenditure from 2011 to 2021 increased from RM11,466 million to RM24,643 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, 2011-2021**

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, %)
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	23,259	50,208	16,391	32.65	70.47
2016	25,045	51,691	17,593	34.03	70.25
2017	27,168	56,364	19,541	34.67	71.93
2018	29,136	60,438	21,319	35.27	73.17
2019	30,100	64,252	22,392	34.85	74.39
2020	30,466	67,022	22,617	33.75	74.24
2021	32,969	78,220	24,643	31.51	74.75



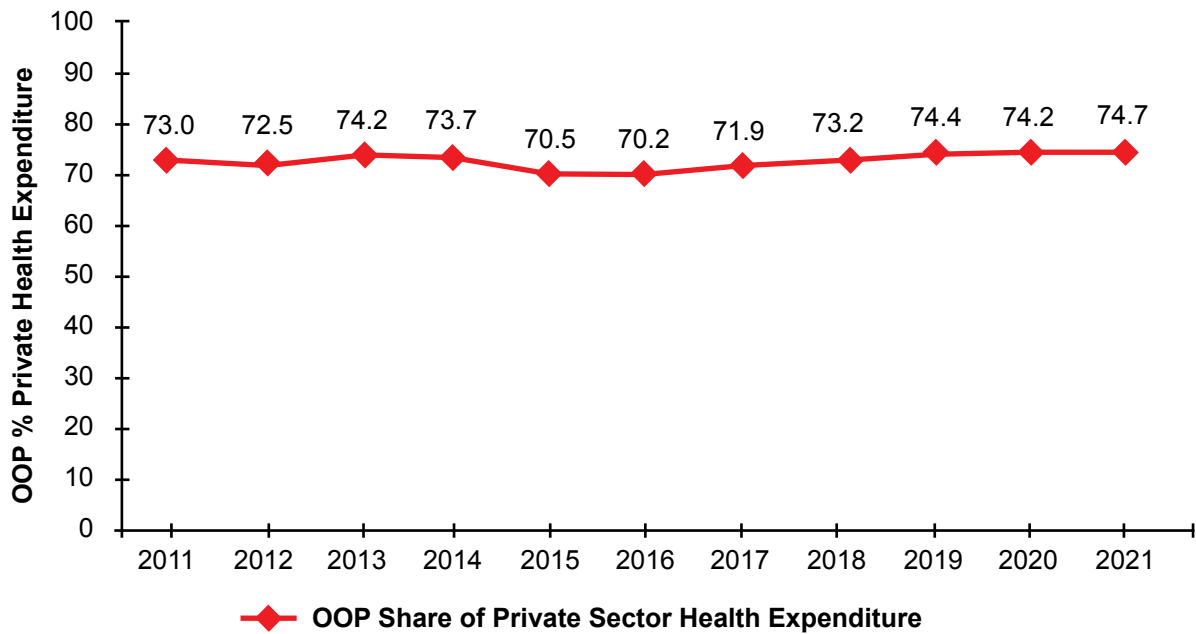
**FIGURE 9.1a: OOP Share of Total Expenditure on Health, 2011-2021 (Percent, %)**



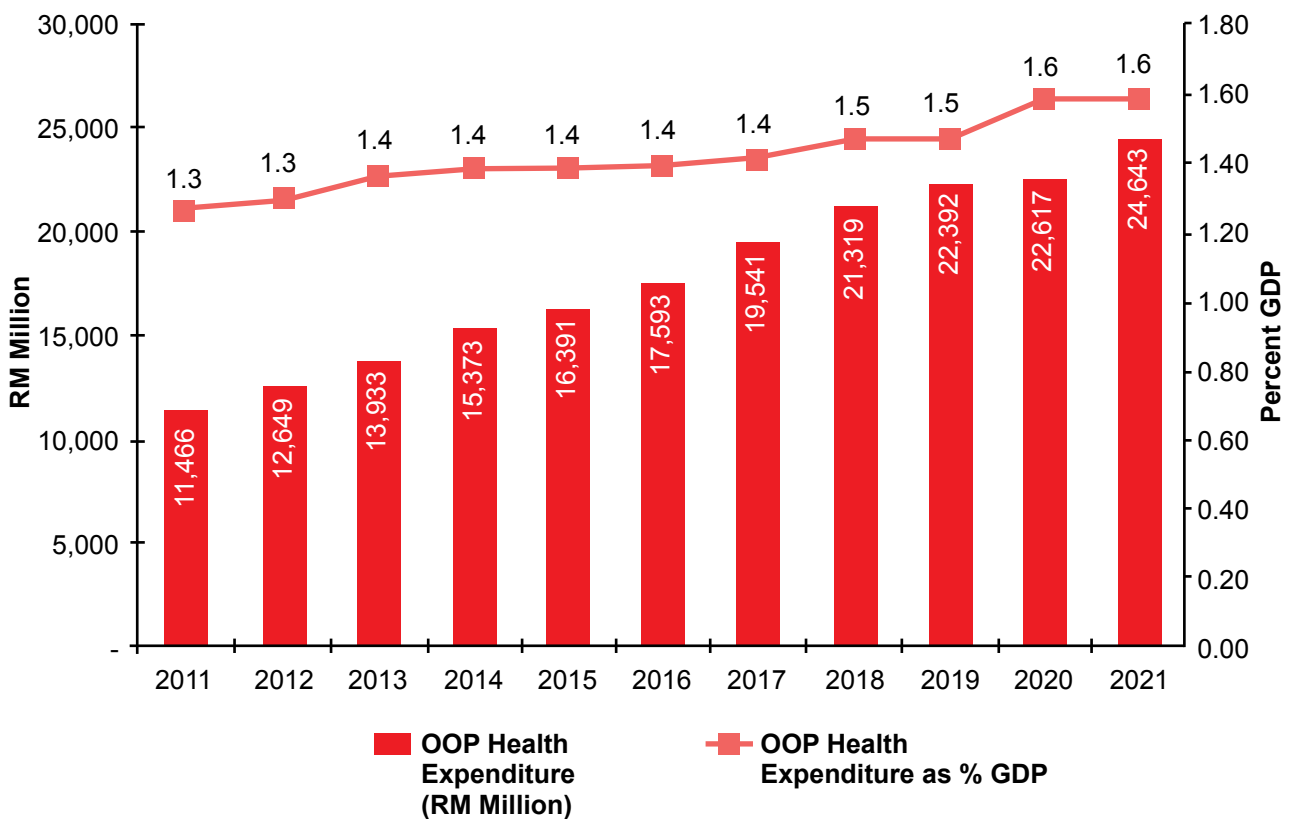
**TABLE 9.1b: OOP Health Expenditure and as GDP Percentage, 2011-2021**

Year	OOP Health Expenditure (RM Million)	OOP Health Expenditure as % GDP
2011	11,466	1.26
2012	12,649	1.30
2013	13,933	1.37
2014	15,373	1.39
2015	16,391	1.39
2016	17,593	1.41
2017	19,541	1.42
2018	21,319	1.47
2019	22,392	1.48
2020	22,617	1.60
2021	24,643	1.59

**FIGURE 9.1b: OOP Share of Private Sector Health Expenditure, 2011-2021 (Percent, %)**



**FIGURE 9.1c: OOP Health Expenditure and as GDP Percentage, 2011-2021 (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 healthcare. 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, community 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 2011-2021 time series, OOP health expenditure to providers of health care generally

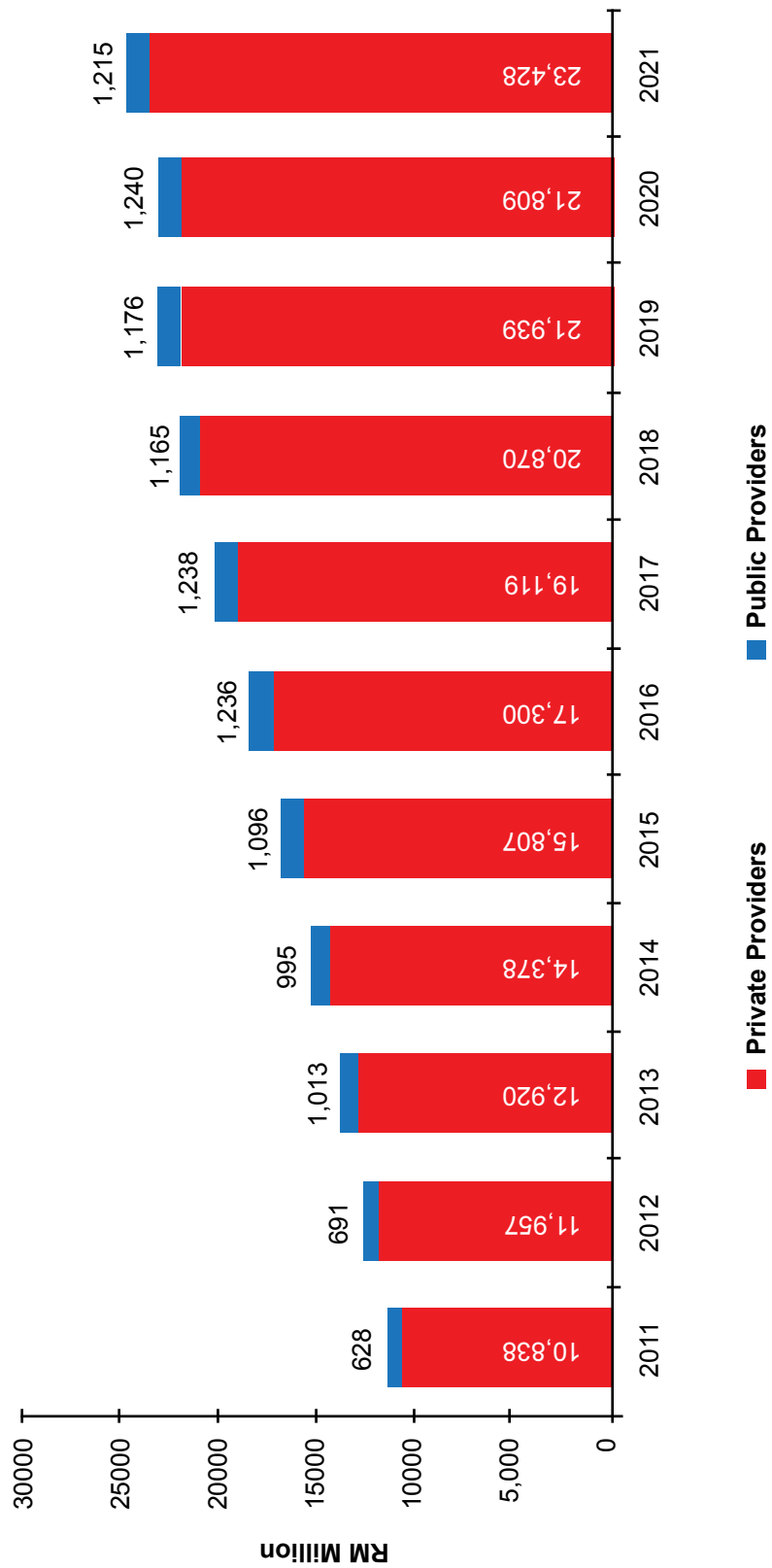
shows an increasing pattern (Table 9.2a and Figure 9.2a). In 2021, of the total RM23,428 million of OOP health expenditure to private providers of healthcare, private hospitals consumed the largest share at RM11,423 million (48.8%), followed by private medical clinics at RM4,632 million (19.8%), community pharmacies at RM3,911 million (16.7%), private dental clinics at RM1,203 million (5.1%), TCM providers at RM684 million (2.9%), retail sale and other suppliers of medical goods and appliances at RM603 million (2.6%), private medical and diagnostic laboratories at RM39 million (0.2%) and the balance, RM934 million (4.0%) 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 2011-2021 time series data shows an average of 95.1% 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 RM5,359 million in 2011 to RM11,423 million in 2021, a difference of RM6,064 million. Similarly, there is an increase in spending at community pharmacies from RM1,407 million in 2011 to RM3,911 million in 2021. The OOP health expenditure at private medical clinics showed a fluctuating trend, with an expenditure of RM4,632 million in 2021. The time series data also shows a fluctuating pattern of OOP health expenditure at public providers with an average of 6.1% throughout the years (Table 9.2c and Table 9.2d).

TABLE 9.2a: OOP Health Expenditure to Public and Private Providers of Health Care, 2011-2021 (RM Million)

Provider name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Public Providers	628	691	1,013	995	1,096	1,236	1,238	1,165	1,176	1,340	1,215
Private Providers	10,838	11,957	12,920	14,378	15,807	17,300	19,119	20,870	21,939	21,809	23,428
Total	11,466	12,649	13,933	15,373	16,903	18,536	20,357	22,035	23,115	23,150	24,643

FIGURE 9.2a: OOP Health Expenditure to Public and Private Providers of Health Care, 2011-2021 (RM Million)



**TABLE 9.2b: OOP Health Expenditure to Private Providers of Health Care, 2021 (RM Million, Percent %)**

Provider Name	RM (Million)	Percent
Private hospitals	11,423	48.76
Private medical clinics	4,632	19.77
Private pharmacies	3,911	16.69
Private dental clinics	1,203	5.14
All other private sector providers of health care	934	3.99
Traditional and Complementary Medicine (TCM) providers	684	2.92
Retail sale and other suppliers of medical goods & appliances	603	2.57
Private medical and diagnostic laboratories	39	0.16
<b>Total</b>	<b>23,428</b>	<b>100.00</b>

**FIGURE 9.2b: OOP Health Expenditure to Private Providers of Health Care, 2021**

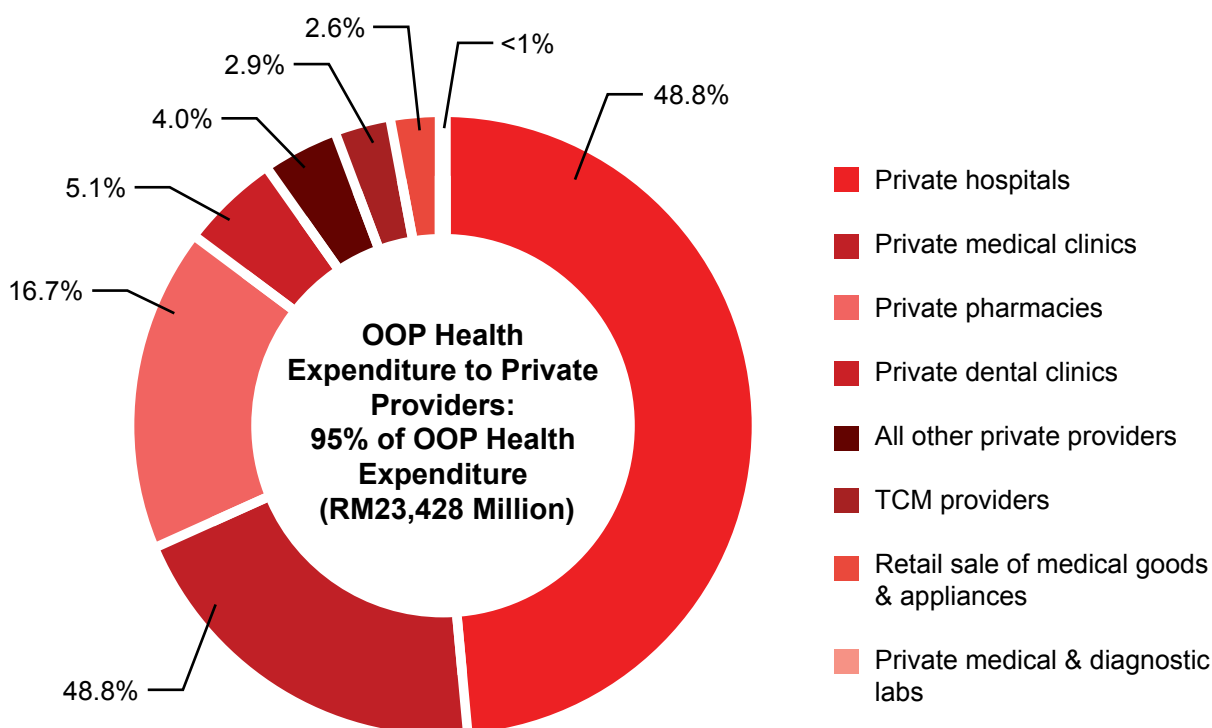


TABLE 9.2c: OOP Health Expenditure to Providers of Health Care, 2011-2021 (RM Million)

Provider Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Private hospitals	5,359	5,613	5,736	6,034	6,809	7,419	8,522	9,220	10,100	10,268	11,423
Private medical clinics	2,272	2,654	3,055	3,767	3,237	3,307	3,780	3,974	4,444	4,403	4,632
Private pharmacies	1,407	1,580	1,842	2,360	2,625	2,749	2,922	3,733	3,292	3,392	3,911
Private dental clinics	509	560	592	646	851	914	1,017	1,086	1,152	1,095	1,203
Traditional and Complementary Medicine (TCM) providers	394	412	424	452	534	624	658	667	667	627	684
Retail sale and other suppliers of medical goods & appliances	321	326	325	334	424	523	562	578	588	552	603
Private medical and diagnostic laboratories	43	59	78	108	72	33	35	35	35	33	39
All other private sector providers of health care	534	754	869	678	711	757	770	813	889	883	934
<b>Sub-Total (Private Providers)</b>	<b>10,838</b>	<b>11,957</b>	<b>12,920</b>	<b>14,378</b>	<b>15,263</b>	<b>16,325</b>	<b>18,265</b>	<b>20,105</b>	<b>21,167</b>	<b>21,252</b>	<b>23,428</b>
Public hospitals	259	253	334	309	400	491	494	496	526	568	541
Public medical clinics	45	50	44	48	47	47	43	43	45	69	39
Public institutions providing health-related services	324	388	634	638	669	716	724	657	635	713	617
Public dental clinics	na	na	na	na	13	14	16	17	20	11	15
Provision and administration of public health programmes (MOH)	0	0	0	0	0	0	0	0	0	4	4
<b>Sub-Total (Public Providers)</b>	<b>628</b>	<b>691</b>	<b>1,013</b>	<b>995</b>	<b>1,128</b>	<b>1,268</b>	<b>1,276</b>	<b>1,213</b>	<b>1,226</b>	<b>1,365</b>	<b>1,215</b>
<b>Total</b>	<b>11,466</b>	<b>12,649</b>	<b>13,933</b>	<b>15,373</b>	<b>16,391</b>	<b>17,593</b>	<b>19,541</b>	<b>21,319</b>	<b>22,392</b>	<b>22,617</b>	<b>24,643</b>

TABLE 9.2d: OOP Health Expenditure to Providers of Health Care, 2011-2021 (Percent, %)												
Provider Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Private hospitals	46.74	44.38	41.17	39.25	41.54	42.17	43.61	43.25	45.10	45.40	46.35	
Private medical clinics	19.82	20.98	21.93	24.50	19.75	18.80	19.34	18.64	19.85	19.47	18.80	
Private pharmacies	12.27	12.49	13.22	15.35	16.02	15.62	14.95	17.51	14.70	15.00	15.87	
Private dental clinics	4.44	4.43	4.25	4.20	5.19	5.19	5.20	5.09	5.14	4.84	4.88	
Traditional and Complementary Medicine (TCM) providers	3.43	3.25	3.04	2.94	3.26	3.55	3.37	3.13	2.98	2.77	2.78	
Retail sale and other suppliers of medical goods & appliances	2.80	2.57	2.34	2.17	2.59	2.97	2.88	2.71	2.63	2.44	2.45	
Private medical and diagnostic laboratories	0.38	0.47	0.56	0.70	0.44	0.19	0.18	0.16	0.16	0.14	0.16	
All other private sector providers of health care	4.65	5.96	6.23	4.41	4.34	4.30	3.94	3.81	3.97	3.91	3.79	
<b>Sub-Total (Private Providers)</b>	<b>94.52</b>	<b>94.53</b>	<b>92.73</b>	<b>93.53</b>	<b>93.12</b>	<b>92.79</b>	<b>93.47</b>	<b>94.31</b>	<b>94.53</b>	<b>93.97</b>	<b>95.07</b>	
Public hospitals	2.26	2.00	2.40	2.01	2.44	2.79	2.53	2.33	2.35	2.51	2.19	
Public medical clinics	0.40	0.40	0.32	0.31	0.29	0.27	0.22	0.20	0.20	0.30	0.16	
Public institutions providing health-related services	2.83	3.07	4.55	4.15	4.08	4.07	3.71	3.08	2.84	3.15	2.50	
Public dental clinics	na	na	na	na	0.08	0.08	0.08	0.08	0.09	0.05	0.06	
Provision and administration of public health programmes (MOH)	na	na	na	na	na	na	na	na	na	0.02	0.01	
<b>Sub-Total (Public Providers)</b>	<b>5.48</b>	<b>5.47</b>	<b>7.27</b>	<b>6.47</b>	<b>6.88</b>	<b>7.21</b>	<b>6.53</b>	<b>5.69</b>	<b>5.47</b>	<b>6.03</b>	<b>4.93</b>	
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	

### 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 2021 the largest proportion of OOP health expenditure was RM9,983 million (40.5%) for out-patient care services (Table 9.3a and Table 9.3b). This includes out-patient care services provided both in standalone medical clinics and hospital facilities. In the same year, in-patient care services were RM6,062 million (24.6%) 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 RM3,911 million (15.9%), health education and training was RM1,473 million (6.1%), medical appliances and non-durable goods was RM848 million (3.4%), daycare services at RM349 million (1.4%), TCM was RM518 million (2.1%), and the remaining RM1,499 million (6.1%) was for other functions.

Although the 2011-2021 time series data shows a general increase in OOP health spending for various functions, the proportions showed some variations. Over these 11 years, the OOP health spending for out-patient services increased from RM5,145 million in 2011 to RM9,983 million in 2021. There is also a rise in in-patient services from RM2,786 million in 2011 to RM6,062 million in 2021, with the proportion of this function fluctuating from 19.9% to 24.6% over the same period (Table 9.3b). There is a 2-fold increase in OOP health spending for health education and training from RM789 million in 2011 to RM1,473 million in 2021 and almost 3-fold increase in OOP health expenditure for pharmaceuticals from RM1,407 million in 2011 to RM3,911 million in 2021 (Table 9.3a and Table 9.3b).



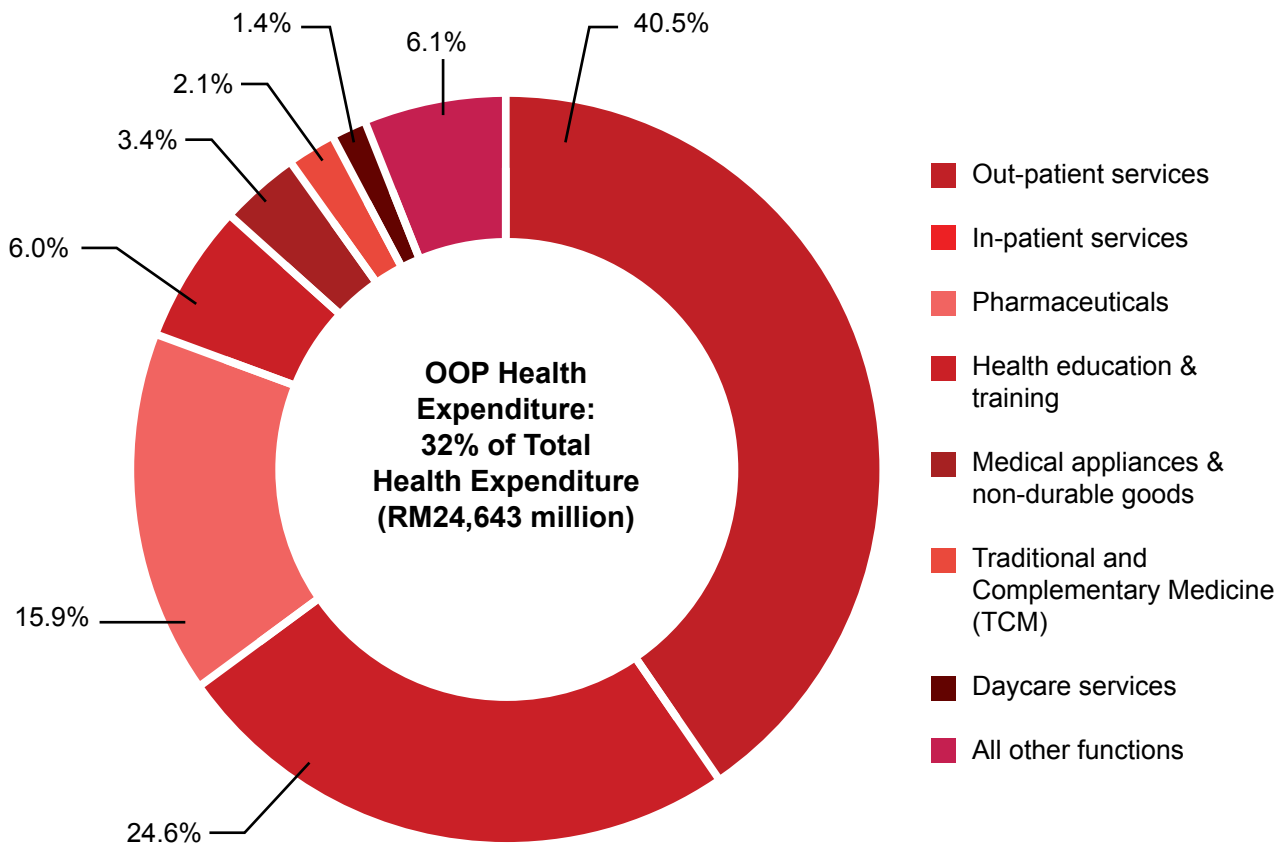
**TABLE 9.3a: OOP Health Expenditure for Functions of Health Care, 2011-2021 (RM Million)**

Function Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Out-patient services	5,145	5,709	6,206	7,067	6,937	7,297	8,113	8,618	9,345	9,221	9,983
In-patient services	2,786	2,831	2,976	3,056	3,500	3,811	4,479	4,586	5,089	5,390	6,062
Pharmaceuticals	1,407	1,580	1,842	2,360	2,625	2,749	2,922	3,733	3,292	3,392	3,911
Health education & training	789	1,066	1,424	1,244	1,325	1,427	1,452	1,452	1,490	1,558	1,473
Medical appliances & non-durable goods	384	394	398	413	599	712	771	801	824	776	848
Daycare services	328	338	374	409	454	504	596	653	594	532	349
Traditional and Complementary Medicine (TCM)	298	310	317	335	407	489	513	513	507	476	518
All other functions	329	421	396	489	543	604	696	962	1,252	1,274	1,499
<b>Total</b>	<b>11,466</b>	<b>12,649</b>	<b>13,933</b>	<b>15,373</b>	<b>16,391</b>	<b>17,593</b>	<b>19,541</b>	<b>21,319</b>	<b>22,392</b>	<b>22,617</b>	<b>24,643</b>

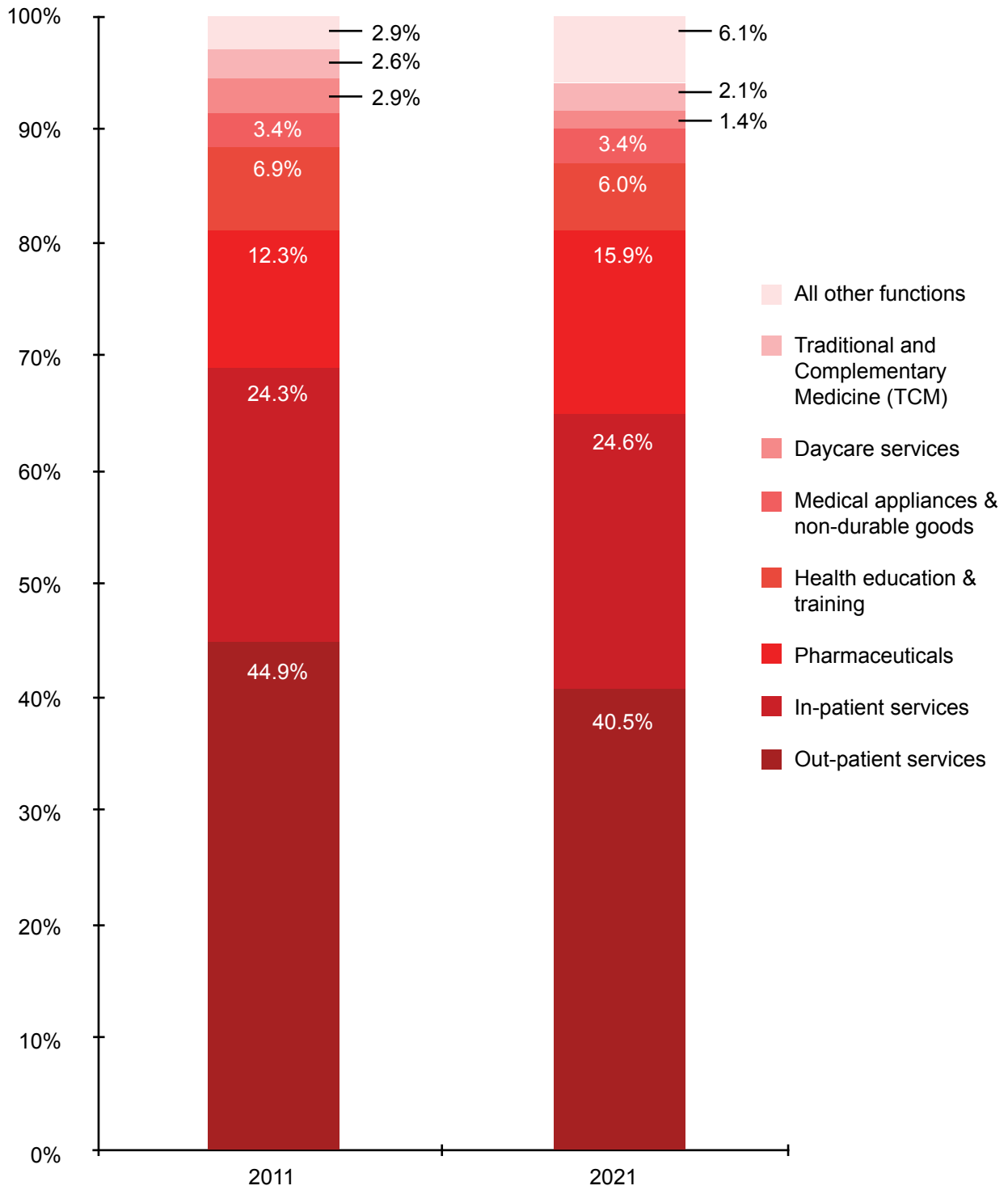
**TABLE 9.3b: OOP Health Expenditure for Functions of Health Care, 2011-2021 (Percent, %)**

Function Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Out-patient services	44.87	45.13	44.54	45.97	42.32	41.48	41.52	40.42	41.73	40.77	40.51
In-patient services	24.29	22.38	21.36	19.88	21.35	21.66	22.92	21.51	22.73	23.83	24.60
Pharmaceuticals	12.27	12.49	13.22	15.35	16.02	15.62	14.95	17.51	14.70	15.00	15.87
Health education & training	6.89	8.43	10.22	8.09	8.08	8.11	7.43	6.81	6.66	6.89	5.98
Medical appliances & non-durable goods	3.35	3.12	2.86	2.69	3.66	4.04	3.95	3.76	3.68	3.43	3.44
Daycare services	2.86	2.68	2.69	2.66	2.77	2.86	3.05	3.06	2.65	2.35	1.42
Traditional and Complementary Medicine (TCM)	2.60	2.45	2.27	2.18	2.48	2.78	2.62	2.41	2.26	2.10	2.10
All other functions	2.87	3.33	2.84	3.18	3.31	3.43	3.56	4.51	5.59	5.63	6.08
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

**FIGURE 9.3a: OOP Health Expenditure for Functions of Health Care, 2021**



**FIGURE 9.3b: OOP Health Expenditure for Functional Proportion, 2011 & 2021**



# CHAPTER 10

## INTERNATIONAL NHA DATA

Global Health Expenditure Database (GHED) is the largest database that provides a global reference for health expenditure data for 190 World Health Organization (WHO) member countries. On an annual basis, every member country submits their two years lag (t-2) national health expenditure data according to WHO request formats. WHO carries out its own country-level analysis and estimations in case of gaps in data 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 relevant 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 the 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 healthcare 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 2020 as the latest available year when this report was produced. The countries included were the United Kingdom, Republic of Korea, Poland, Vietnam, Singapore, Turkey, Thailand and Indonesia.

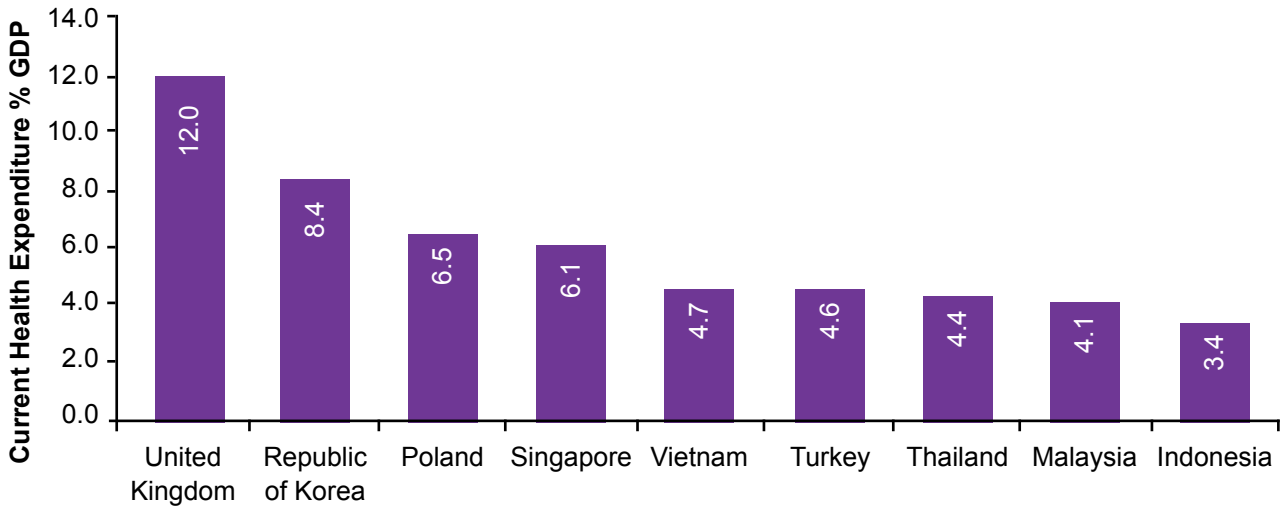
As mentioned in Section 2.3, CHE instead of TEH was used by WHO for international comparison. In 2020, based on the WHO GHED, the CHE of Malaysia was 4.1% of GDP compared to 3.8% in 2019, which was lower than other countries such as Turkey, Singapore, Vietnam, Poland, Republic of Korea, United Kingdom and Thailand but higher than our neighbouring country 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 is listed on 2nd higher rank with 35.9% of CHE after Vietnam (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	Diseases and Conditions
		1.6	Covid-19
		1.7	Macro
2	Health Expenditure Data	2.1	Revenues
		2.2	Financing Schemes
		2.3	Health Care Functions
		2.4	Diseases and Conditions
		2.5	Covid-19 Spending Memorandum Items
		2.6	Age
		2.7	Capital Expenditure
3	Macro Data	3.1	Consumption
		3.2	Exchanges Rates
		3.3	Price Index
		3.4	Population

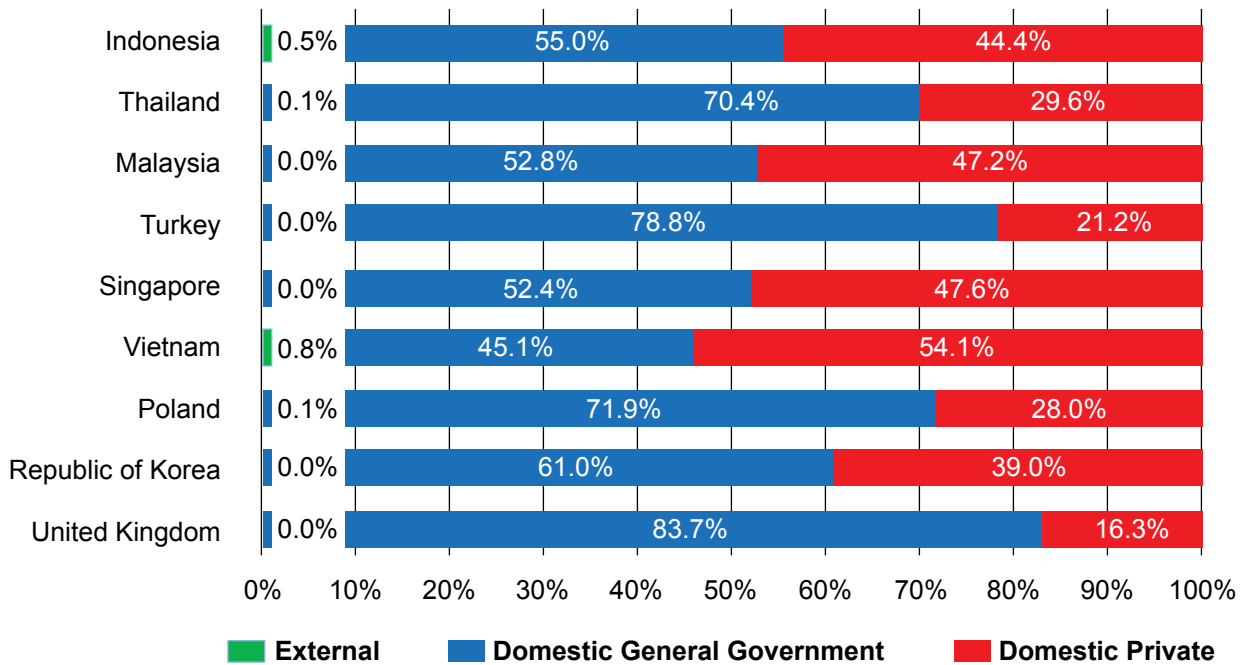
Source: Global Health Expenditure Database (GHED) WHO NHA on 27<sup>th</sup> December 2022

**FIGURE 10.1: International Comparison of Current Health Expenditure as Percent GDP, 2020**



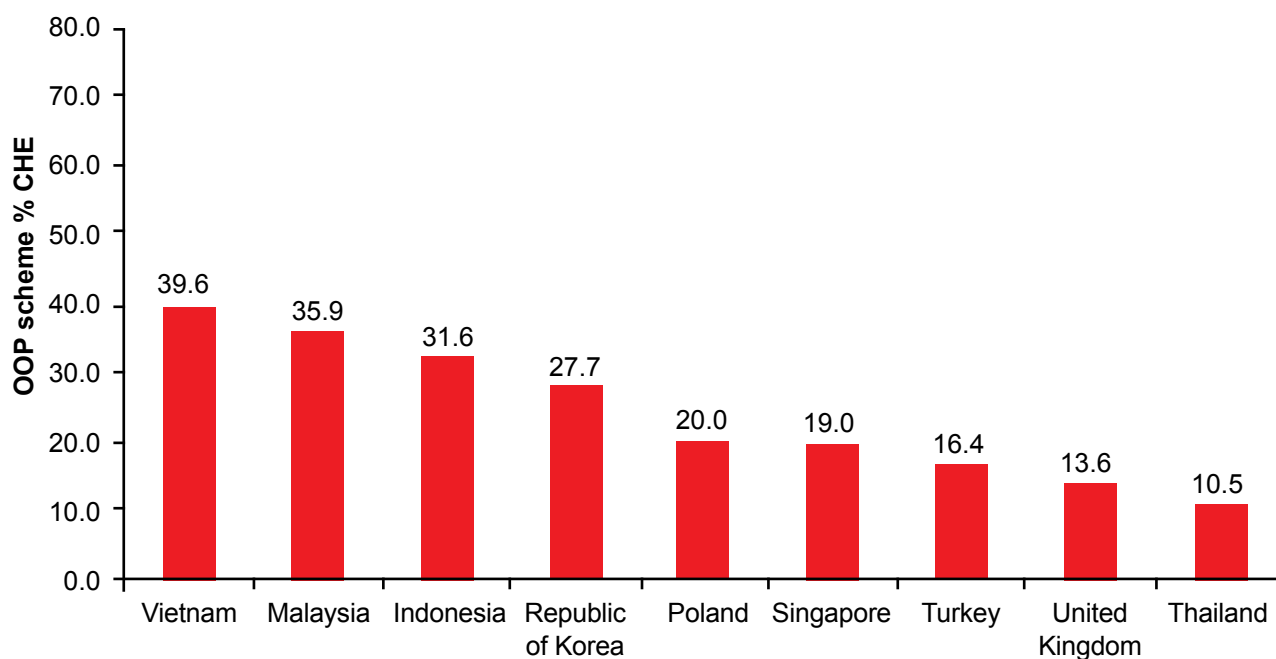
Source: Global Health Expenditure Database (GHED) WHO NHA on 27th December 2022

**FIGURE 10.2: International Comparison of Domestic Government and Private Health Expenditure, 2020**



Source: Global Health Expenditure Database (GHED) WHO NHA on 27th December 2022

**FIGURE 10.3: International Comparison of Out-of-Pocket Health Financing Scheme as Percent of Current Health Expenditure, 2020**



Source: Global Health Expenditure Database (GHED) WHO NHA on 27th December 2022

# CHAPTER 11

## COVID-19 HEALTH EXPENDITURE ESTIMATION

### 11.1 BACKGROUND OF COVID-19 HEALTH EXPENDITURE

The first COVID-19 case in Malaysia was confirmed on January 25, 2020. Similar to many other countries, Malaysia was faced with various challenges in combating the COVID-19 pandemic. In 2020, 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. During the first year of the COVID-19 pandemic, nearly all countries responded with exceptional budget allocations to health, social protection and economic stabilisation. The allocation for 2021 further increased to encompass the need to vaccinate against COVID-19.

A key strategy for ending the COVID-19 pandemic was vaccination. After the authorisation of COVID-19 vaccines and guided by scientific evidence, the government of Malaysia launched Malaysia's National Immunisation Programme in February 2021. Health spending financed by government sources rose substantially in 2020 and 2021. Exploring how much countries spent on COVID-19, through which types of providers and for what type of functions or activities will help in understanding how our health care systems responded to the pandemic. Hence, the Malaysia National Health Accounts (MNHA) section continued to collect, analyse and produce the COVID-19 health expenditure estimates for the year 2021. This allowed for a more comprehensive reporting of health expenditure data. This chapter focuses on health expenditure on COVID-19 based on the codes described in Table 11.1

TABLE 11.1: MNHA COVID-19 Codes and Description

MNHA COVID-19 Code	Description of Activity
HC.CO.V1	Spending for COVID-19 related treatment
HC.CO.V2	Spending for COVID-19 testing and contact tracing
HC.CO.V3	Spending for vaccination against SARS-CoV-2
HC.CO.V4	Spending for COVID-19 medical goods by population or distributed to the population
HC.CO.V5	Other COVID-19 related health spending not elsewhere classified
HC.CO.V5.1	Allowance/Incentives given to personnel involved in COVID-19 related measures
HC.CO.V5.2	Education and training of personnel in relation to COVID-19
HC.CO.V5.3	Research and development related to COVID-19
HC.CO.V5.4	Governance and health system administration related to COVID-19
HC.CO.V5.5	Information, education and counselling programmes related to COVID-19
HC.CO.V5.6	Transportation related to COVID-19
HC.CO.V6	Spending on compliance to COVID-19 public health and safety regulations
HC.CO.V6.1	Quarantine expenditure
HC.CO.V6.2	Spending on medical goods to adhere to COVID-19 public health and safety regulations by entities for staff
HK.CO.V1	Spending on gross capital formation



## 11.2 COVID-19 HEALTH EXPENDITURE

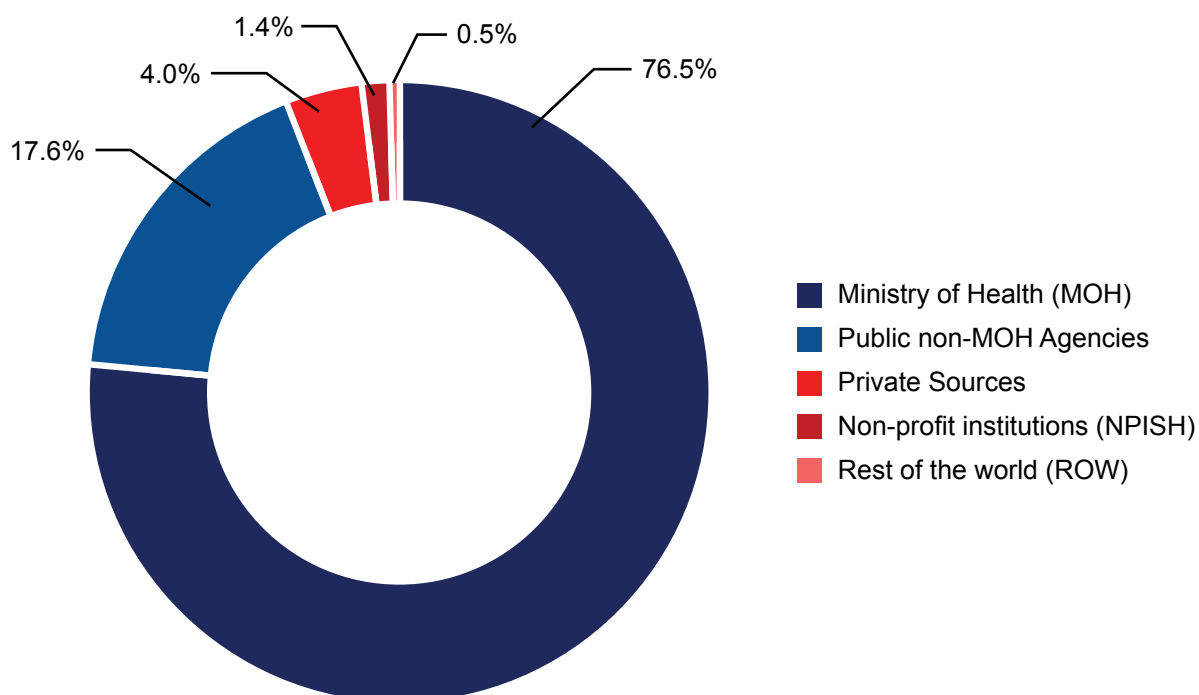
COVID-19 health expenditure estimation for the year 2021 was RM7,567 million. This total includes all cash and in-kind health expenditure for COVID-19. Among the various sources of financing,

the MOH showed the highest expenditure amounting to 76.5% (Table 11.2a and Figure 11.2a). This is followed by public non-MOH agencies with an expenditure of RM1,333 million or 17.6%. Private sources contributed to 4.0% of the health expenditure for COVID-19.

**TABLE 11.2a: COVID-19 Health Expenditure by Sources of Financing, 2021**

Sources of Financing	RM Million	Percent
Ministry of Health (MOH)	5,788	76.49
Public non-MOH Agencies	1,333	17.62
Private Sources	304	4.01
Non-profit institutions (NPISH)	106	1.40
Rest of the world (ROW)	36	0.47
<b>Total</b>	<b>7,567</b>	<b>100.00</b>

**FIGURE 11.2a: COVID-19 Health Expenditure by Sources of Financing, 2021**



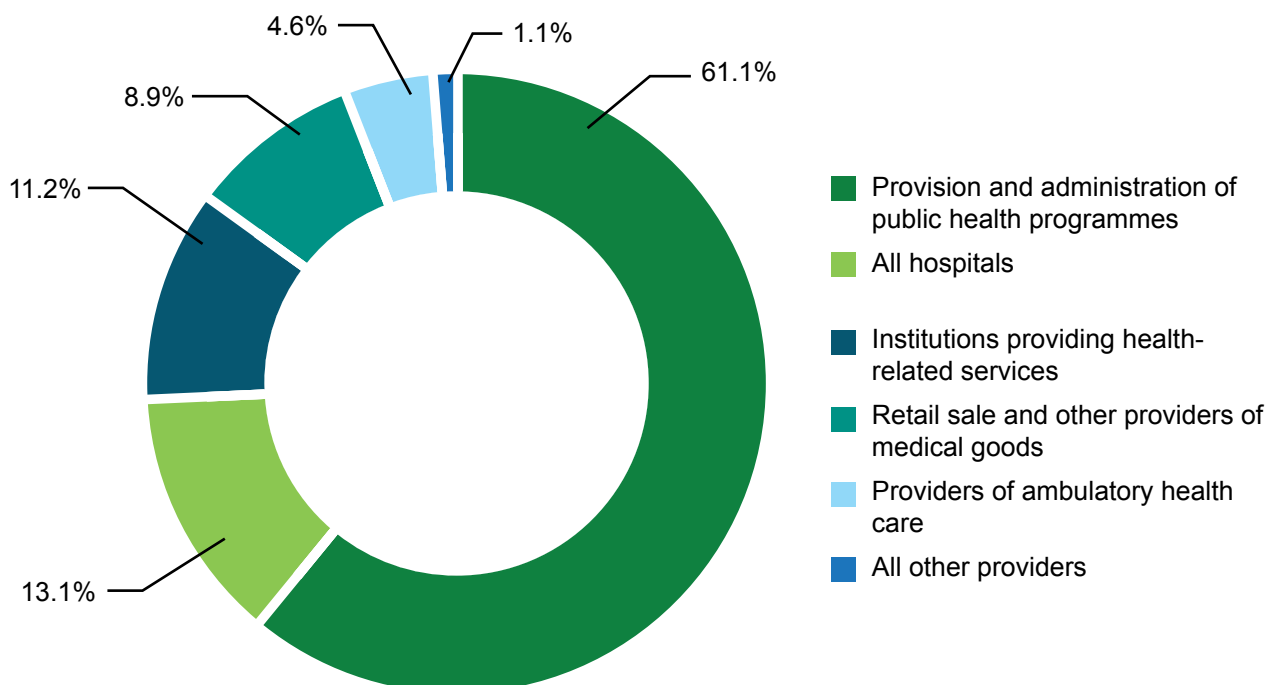
When examining from the provider perspective, COVID-19 health expenditure to providers of public health programmes consumed RM4,622 million or 61.1% (Table 11.2b and Figure 11.2b). Providers of public health programmes include government provision and administration of public health programmes, MOH departments at federal,

state and district levels, and local authorities' public health departments. This is followed by expenditure to all hospitals at RM995 million or 13.1%. Expenditure to provision by retail sale and other providers of medical goods and providers of ambulatory health care was less than 15%.

**TABLE 11.2b: COVID-19 Health Expenditure to Providers of Health Care, 2021**

Providers of Health Care	RM Million	Percent
Provision and administration of public health programmes	4,622	61.08
All hospitals	995	13.15
Institutions providing health-related services	844	11.16
Retail sale and other providers of medical goods	671	8.87
Providers of ambulatory health care	350	4.62
All other providers	85	1.12
<b>Total</b>	<b>7,567</b>	<b>100.00</b>

**FIGURE 11.2b: COVID-19 Health Expenditure to Providers of Health Care, 2021**



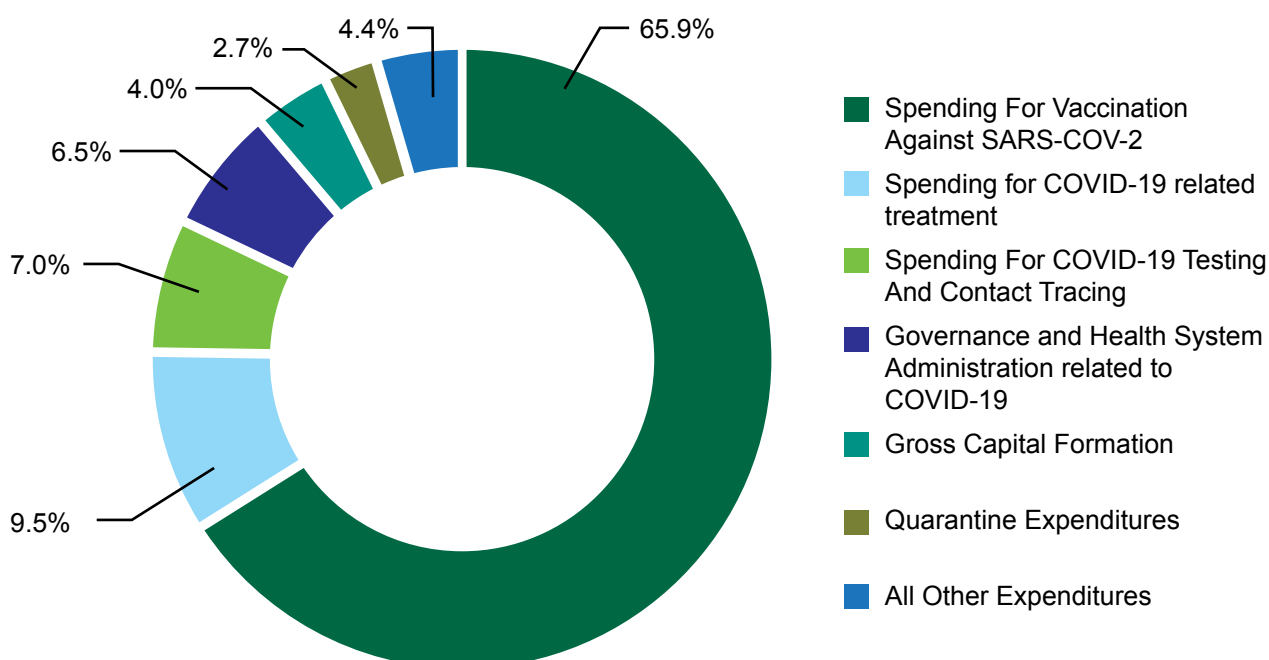
COVID-19 expenditure based on function dimension showed that the highest proportion of expenditure was for spending on vaccination against COVID-19, which took up about RM4,986 million or 65.9%. This was followed by expenditure for COVID-19 related treatment and spending for COVID-19 testing and contact tracing. In

2021, expenditure for gross capital formation that 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 was less than 5.0%.

**TABLE 11.2c: COVID-19 Health Expenditure for Functions of Health Care, 2021**

Functions of Health Care	RM Million	Percent
Spending for vaccination against SARS-COV-2	4,986	65.89
Spending for COVID-19 related treatment	722	9.55
Spending for COVID-19 testing and contact tracing	528	6.98
Governance and health system administration related to COVID-19	490	6.48
Gross capital formation	302	4.00
Quarantine expenditures	207	2.74
All other expenditures	331	4.38
<b>Total</b>	<b>7,567</b>	<b>100.00</b>

**FIGURE 11.2c: COVID-19 Health Expenditure for Functions of Health Care, 2021**



### 11.3 LIMITATIONS OF COVID-19 HEALTH EXPENDITURE

Data analysed and reported are data provided by various agencies during the 2022 data collection process, with some limitations to keep in mind. 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 specific COVID-19 accounts.

Due to lack of data availability, expenditure for development of IT infrastructure, software costs, mobile tracing apps was not captured. The latest available Household Expenditure Survey (HES) Report was for 2019, and there were no surveys on corporations' COVID-19 health expenditure, which led to limited estimations for COVID-19 health expenditure by OOP and corporations as a source. In addition, estimations were used to place value in data gaps among non-cash donations. In conclusion, these limitations could lead to an underestimation of the COVID-19 health expenditure.

# 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 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, Malaysia 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
		MOE 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

PRIVATE SECTOR			
	Main Agencies	Specific Organisation	Source of Data
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	Community 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)											
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
	SHA 2011										
Current Health Expenditure (CHE) as % Gross Domestic Product (GDP)	3.3%	3.5%	3.5%	3.7%	3.8%	3.7%	3.7%	3.8%	3.8%	4.1%	
Health Capital Expenditure (HK) % Gross Domestic Product (GDP)	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%	0.2%	0.4%	
Current Health Expenditure (CHE) per Capita in US\$	349.6	379.4	390.8	426.0	380.5	363.3	381.1	427.8	438.9	429.5	
Current Health Expenditure (CHE) per Capita in PPP	730	806	836	926	948	945	990	1,062	1,137	1,152	
General Government Health Expenditure (GGHE) as % General Government Expenditure (GGE)	6.5%	6.5%	6.8%	7.8%	8.2%	8.3%	8.7%	8.5%	8.5%	8.6%	
General Government Health Expenditure (GGHE) as % Gross Domestic Product (GDP)	1.8%	1.9%	1.9%	2.0%	2.0%	1.9%	1.9%	1.9%	2.0%	2.2%	
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%	
Domestic General Government Health Expenditure (GGHE-D) as % Current Health Expenditure (CHE)	53.2%	53.9%	53.9%	54.7%	53.2%	51.0%	51.7%	51.3%	52.3%	52.8%	
Domestic Private Health Expenditure (PVT-D) as % Current Health Expenditure (CHE)	46.8%	46.1%	46.1%	45.3%	46.8%	49.0%	48.3%	48.7%	47.7%	47.2%	
Voluntary Health Insurance (VHI) as % of Current Health Expenditure (CHE)	8.5%	8.1%	8.0%	7.7%	8.1%	8.3%	8.0%	7.9%	8.4%	8.4%	
Out-of-pocket (OOPS) as % of Current Health Expenditure (CHE)	34.0%	33.0%	33.7%	33.0%	33.7%	35.9%	35.9%	36.6%	36.1%	35.9%	
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%	
Domestic General Government Health Expenditure (GGHE-D) as % General Government Expenditure (GGE)	6.5%	6.5%	6.8%	7.8%	8.2%	8.3%	8.7%	8.5%	8.5%	8.6%	
Domestic General Government Health Expenditure (GGHE-D) as % Gross Domestic Product (GDP)	1.8%	1.9%	1.9%	2.0%	2.0%	1.9%	1.9%	1.9%	2.0%	2.2%	
Domestic General Government Health Expenditure (GGHE-D) per Capita in US\$	186.14	204.60	210.68	233.15	202.44	185.43	197.20	219.29	229.69	226.55	
Domestic General Government Health Expenditure (GGHE-D) per Capita in PPP Int\$	388	435	451	507	504	482	512	544	595	608	
Domestic Private Health Expenditure (PVT-D) per Capita in US\$	163.45	174.77	180.15	192.81	178.05	177.91	183.90	208.54	209.20	202.85	
Domestic Private Health Expenditure (PVT-D) per Capita in PPP Int\$	341	371	386	419	444	463	478	517	542	544	
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	
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	
Out-of-Pocket Expenditure (OOPS) per Capita in US\$	119	125	132	141	128	131	137	157	158	154	
Out-of-Pocket Expenditure (OOPS) per Capita in PPP Int\$	248	266	282	306	308	319	339	370	386	391	
Compulsory Financing Arrangements (CFA) as % of Current Health Expenditure (CHE)	53.4%	54.0%	54.0%	54.8%	53.3%	51.2%	51.9%	51.4%	52.5%	52.9%	
Government Financing Arrangements (GFA) as % of Current Health Expenditure (CHE)	52.7%	53.4%	53.3%	54.1%	52.6%	50.4%	51.1%	50.5%	51.7%	52.1%	
Compulsory Health Insurance (CHI) as % of Current Health Expenditure (CHE)	0.5%	0.5%	0.6%	0.6%	0.6%	0.7%	0.6%	0.8%	0.7%	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%	
Social Health Insurance (SHI) as % of Current Health Expenditure (CHE)	0.5%	0.5%	0.6%	0.6%	0.6%	0.7%	0.6%	0.8%	0.7%	0.7%	
Voluntary Financing Arrangements (VFA) as % of Current Health Expenditure (CHE)	46.6%	46.0%	46.0%	45.2%	46.7%	48.8%	48.1%	48.6%	47.5%	47.1%	
Rest of the World (RoW) as % of Current Health Expenditure (CHE)	0.0%									0.0%	
Primary Health Care (PHC) Expenditure per Capita in US\$	143	154	162	179	160	153	160	180	182	188	
Primary Health Care (PHC) Expenditure as % Current Health Expenditure (CHE)	40.8%	40.7%	41.6%	42.0%	42.0%	42.0%	42.1%	42.2%	41.6%	43.9%	
Expenditure on Immunization Programmes as % Current Health Expenditure (CHE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
Expenditure on Vaccines as % Current Health Expenditure (CHE)											
Expenditure on COVID as % Current Health Expenditure (CHE)										2.7%	

TABLE A3.2: Malaysia Current Health Expenditure by Revenues and Health Care Financing Schemes from Global Health Expenditure Database (GHED)											
SHA 2011	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Current health expenditure by revenues of health care financing schemes	30,649	34,062	36,290	41,636	44,983	46,249	50,978	54,428	58,088	58,427	
Transfers from government domestic revenue (allocated to health purposes)	16,162	18,194	19,343	22,525	23,672	23,293	26,050	27,488	30,006	30,421	
Internal transfers and grants	16,162	18,194	19,343	22,525	23,672	23,293	26,050	27,488	30,006	30,421	
Transfers distributed by government from foreign origin	0										
Social insurance contributions	157	176	219	264	261	310	329	410	394	402	
Social insurance contributions from employees	35	39	48	59	58	69	73	91	87	89	
Social insurance contributions from employers	122	137	170	206	203	242	256	319	306	313	
Compulsory prepayment (Other, and unspecified, than FS.3)	39	38	42	46	52	56	58	67	83	79	
Voluntary prepayment	2,614	2,774	2,916	3,203	3,623	3,846	4,085	4,313	4,875	4,937	
Other domestic revenues n.e.c.	11,677	12,880	13,770	15,598	17,375	18,744	20,455	22,149	22,730	22,582	
Other revenues from households n.e.c.	10,425	11,253	12,218	13,759	15,163	16,626	18,318	19,943	20,948	20,970	
Other revenues from corporations n.e.c.	952	1,278	1,478	1,802	2,146	2,034	2,048	2,119	1,694	1,506	
Other revenues from NPISH n.e.c.	300	348	73	37	67	84	88	88	89	106	
Current health expenditure by financing schemes	30,649	34,062	36,290	41,636	44,983	46,249	50,978	54,428	58,088	58,427	
Government schemes and compulsory contributory health care financing schemes	16,358	18,408	19,604	22,835	23,985	23,659	26,437	27,965	30,483	30,901	
Government schemes	16,162	18,194	19,343	22,525	23,672	23,293	26,050	27,488	30,006	30,414	
Compulsory contributory health insurance schemes	157	176	219	264	261	310	329	410	394	409	
Social health insurance schemes	157	176	219	264	261	310	329	410	394	409	
Compulsory Medical Saving Accounts (CMSA)	39	38	42	46	52	56	58	67	83	79	
Voluntary health care payment schemes	3,867	4,400	4,467	5,042	5,836	5,964	6,222	6,520	6,657	6,562	
Voluntary health insurance schemes	2,857	3,076	3,202	3,640	4,244	4,670	4,957	5,227	5,838	5,923	
NPISH financing schemes (including development agencies)	300	348	73	37	67	84	88	88	89	106	
Enterprise financing schemes	709	976	1,191	1,365	1,524	1,210	1,177	1,205	731	533	
Household out-of-pocket payment	10,425	11,253	12,218	13,759	15,163	16,626	18,318	19,943	20,948	20,957	
Rest of the world financing schemes (non-resident)	0									7	

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

SHA 2011	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Current health expenditure by Health Care Functions	30,648	34,062	36,290	41,636	44,983	46,249	50,978	54,428	58,088	58,427
Curative care	23,238	26,172	27,191	31,405	33,766	35,481	38,847	41,677	44,268	42,760
Inpatient curative care	11,168	12,583	13,177	15,067	16,287	17,022	18,749	20,106	21,843	21,117
Day curative care	1,526	1,598	1,753	2,094	2,309	2,396	2,625	2,893	3,015	2,880
Outpatient curative care	10,544	11,991	12,261	14,244	15,170	16,063	17,474	18,678	19,410	18,763
General outpatient curative care	6,004	6,893	6,827	8,255	8,721	9,527	10,312	11,183	11,292	11,034
Dental outpatient curative care	556	595	826	875	978	1,045	1,172	1,284	1,385	1,371
Specialised outpatient curative care	3,984	4,503	4,608	5,114	5,471	5,492	5,989	6,212	6,732	6,358
Rehabilitative care	1	0	na	na	na	na	na	na	na	na
Long-term care (health)	15	19	1	2	1	4	1	4	1	6
Inpatient long-term care (health)	1	2	1	1	1	0	1	1	1	3
Day long-term care (health)	0	0	0	0	0	0	0	0	0	0
Home-based long-term care (health)	14	17	0	1	0	4	0	3	0	3
Ancillary services (non-specified by function)	296	314	407	380	354	300	328	331	351	301
Medical goods (non-specified by function)	2,242	2,477	2,730	3,298	3,933	4,250	4,523	5,247	4,818	4,760
Preventive care	1,224	1,535	2,375	2,304	2,514	2,463	2,587	2,793	3,509	4,727
Immunization Programmes	3	6	77	36	41	37	44	46	239	503
Governance, and health system and financing administration	3,632	3,545	3,586	4,248	4,414	3,751	4,691	4,376	5,140	5,873
Special reporting items to track COVID-19 spending within CHE	na	na	na	na	na	na	na	na	na	1,560
COVID-19 related treatment	na	na	na	na	na	na	na	na	na	330
COVID-19 testing and contract tracing	na	na	na	na	na	na	na	na	na	268
COVID-19 vaccination	na	na	na	na	na	na	na	na	na	na
COVID-19 medical goods	na	na	na	na	na	na	na	na	na	na
Other COVID-19 health care spending (incl. in CHE)	na	na	na	na	na	na	na	na	na	962
Capital health expenditure	2,430	2,355	2,089	1,831	1,841	1,890	1,943	2,257	2,644	4,980
Capital Health Expenditure (Domestic Public)	2,179	2,038	1,817	1,488	1,454	1,430	1,375	1,653	1,966	3,900
Capital Health Expenditure (Domestic Private)	251	317	272	343	387	460	568	604	678	1,012
Capital Health Expenditure (External)	0	0	0	0	0	0	0	0	0	68

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

SHA 2011	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CONSUMPTION	na	na	na	na	na	na	na	na	na	na
Gross Domestic Product	924,685	985,049	1,033,085	1,122,160	1,176,941	1,249,697	1,372,310	1,447,760	1,513,158	1,416,605
Final consumption expenditure of Households and profit institutions serving households	437,340	482,237	527,749	579,985	635,099	684,681	760,146	831,334	903,720	861,509
General government expenditure	250,477	280,792	286,992	291,279	290,801	285,652	302,499	330,088	356,653	357,927
Exchange Rate (NCU per US\$)	3.06	3.09	3.15	3.27	3.91	4.15	4.30	4.04	4.14	4.20
Purchasing Power Parity (NCU per Int\$)	1.47	1.45	1.47	1.51	1.57	1.59	1.65	1.63	1.60	1.57
PRICE INDEX	na	na	na	na	na	na	na	na	na	na
Gross domestic product - Price index (2018 = 100)	91.6	92.5	92.7	95.0	94.9	96.4	100.1	100.7	100.8	100.0
POPULATION	na	na	na	na	na	na	na	na	na	na
POPULATION (in thousands)	28,651	29,068	29,469	29,867	30,271	30,685	31,105	31,528	31,950	32,366

# LIST OF MNHA COMMITTEES AND MEMBERS

## 1 MNHA STEERING COMMITTEE

### Joint Chairmanship

Secretary-General, Ministry of Health, Malaysia

Director-General of Health Malaysia

### Secretariat

Malaysia National Health Accounts Section, Planning Division, Ministry of Health, Malaysia

### Ministry of Health

Deputy Secretary-General (Management), Ministry of Health, Malaysia

Deputy Secretary-General (Finance), Ministry of Health, Malaysia

Deputy Director-General (Research & Technical Support), Ministry of Health, Malaysia

Deputy Director-General (Medical), Ministry of Health, Malaysia

Deputy Director-General (Public Health), Ministry of Health, Malaysia

Senior Director of Oral Health Division, Ministry of Health, Malaysia

Senior Director of Pharmaceutical Services Division, Ministry of Health, Malaysia

Director of Planning Division, Ministry of Health, Malaysia

Director of Medical Development Division, Ministry of Health, Malaysia

Director of Medical Practice Division, Ministry of Health, Malaysia

Director of Family Health Development Division, Ministry of Health, Malaysia

Director of Disease Control Division, Ministry of Health, Malaysia

Director of Food Safety and Quality Division, Ministry of Health, Malaysia

Chief Executive of Medical Device Authority, Ministry of Health, Malaysia

Undersecretary of Policy and International Relations Division, Ministry of Health, Malaysia

Senior Deputy Director of Planning Division, Ministry of Health, Malaysia

Deputy Director of National Health Financing Section, Planning Division, Ministry of Health, Malaysia

### Other Ministries and Statutory Bodies

Secretary-General, Ministry of Finance, Malaysia

Secretary-General, Ministry of Human Resource, Malaysia

Secretary-General, Ministry of Defence, Malaysia

Secretary-General, Ministry of Education, Malaysia

Director-General, Economic Planning Unit, Prime Minister's Department

Director-General, Public Private Partnership Unit (UKAS), Prime Minister's Department

Governor, Central Bank of Malaysia

Accountant-General of Malaysia, Accountant General's Department of Malaysia (AGD)

Deputy Director-General of the Public Service (Development), Public Service Department Malaysia

Chief Statistician Malaysia, Department of Statistics Malaysia

Undersecretary, Prison, Anti-Drug and Civil Defence Division, Ministry of Home Affairs,

Ministry of Home Affairs, Malaysia

Chief Executive Officer, Employees Provident Fund, Malaysia

Chief Executive Officer, Social Security Organisation, Malaysia

### **Other Professional Associations**

President, Malaysian Employers Federation  
President, Association of Private Hospitals of Malaysia  
President, Malaysian Medical Association  
General Manager, IQVIA  
President, Malaysian Dental Association  
President, Malaysia Medical Device Association  
President, Federation of Malaysian Consumers Associations (FOMCA)

## **2 MNHA TECHNICAL ADVISORY COMMITTEE**

Datuk Dr. Muhammad Radzi bin Abu Hassan  
Advisor: Deputy Director-General of Health (Research & Technical Support)  
Dr. Rozita Halina binti Tun Hussein  
Chairperson: Director, Planning Division  
Dr. Veronica Lughah  
Deputy Chairperson: Senior Deputy Director, Planning Division  
Dr. Premila Devi a/p Jeganathan  
Secretary: Deputy Director, MNHA Section, Planning Division

### **Ordinary Members**

Dr. Mastura binti Ismail  
Family Health Development Division  
Datin Sri Dr. Asmah binti Samat  
Medical Development Division  
Dr. Abdul Hamid bin Jaafar  
Public Health Development Division  
Dr. Najwa binti Misjan  
Planning Division  
Dr. Abdul Hanif bin Mohamad Yahaya  
Pharmaceutical Services Division  
Dr. Muhammed Anis bin Abd Wahab  
Planning Division  
Dr. Rachel Koshy a/p Kallumadijil  
Family Health Development Division  
Dr. Zuhaida binti A. Jalil  
Disease Control Division  
Dr. Nor Zam Azihan bin Mohd Hassan  
Institute for Health Systems Research, NIH  
Dr. Habibah binti Yacob @ Ya'akub  
Oral Health Division  
Dr. Siti Zufina binti Abd Samah  
Medical Practice Division  
Mrs. Rafliza binti Ramli  
Health Informatic Centre  
Mrs. Habsah binti Salleh  
Planning Division



Dr. Syed Syer Al Jaffree bin Syed Sobri  
National Health Financing  
Ms. Azma binti Jusoh  
Accounts Division  
Mrs. Siti Afeefah binti Mohammad Zaki  
Finance Division  
Dr. Mohd Ridzwan bin Shahari  
Medical Development Division  
Dr. Azman bin Johari  
Medical Practice Division  
Mr. Mohd Sofi bin Ali  
Health Informatic Centre

### **3 MNHA SECRETARIAT**

Dr. Premila Devi a/p Jeganathan (Deputy Director MNHA)  
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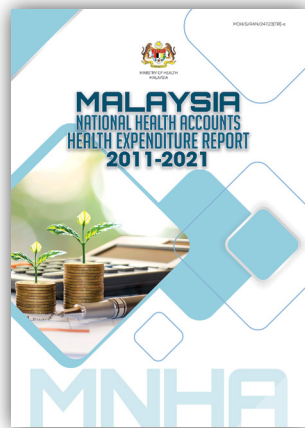
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