



# COVID-19 HEALTH EXPENDITURE ESTIMATION

Malaysia National Health Accounts (MNHA)  
Planning Division, MOH  
10/11/2022

# CONTENT



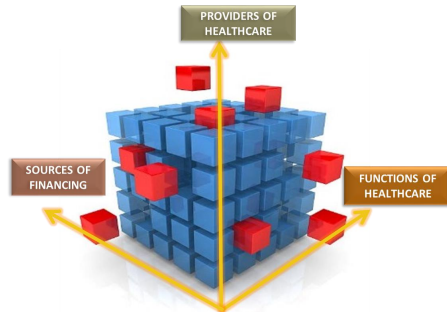
## INTRODUCTION



## APPROACH COVID-19 ESTIMATION



## COVID-19 EXPENDITURE



- By Sources of Financing
- To Providers of Healthcare
- For Functions

# INTRODUCTION

- Globally based on WHO data, (as of 04/11/2022), there have been 628,694,934 confirmed cases of COVID-19, including 6,576,088 deaths.
- Malaysia (as of 06/11/2022) there were **4,927,451** confirmed COVID-19 cases and **36,487** total deaths.
- All governments first and foremost, needed to ensure the ability of its health system:
  - established funds to support their broader response to the COVID-19 crisis, the majority of which were extrabudgetary.
  - to prioritize spending for containing the pandemic and manage the public health response
  - to provide adequate medical care-health system capacity for hospitalization and intensive care, including spending for medical supplies, testing, and surveillance
- In 2020, to contain the epidemic, along with other measures Malaysia implemented Movement Control Order (MCO) beginning on **March 18 in phases**
- In 2021, Malaysia kicked off its nationwide COVID-19 immunization program on **Wednesday, 24/02/2021**

# WHY TRACK COVID-19 EXPENDITURE?

- COVID-19 pandemic has underscored the need for increased investments in health.
- Nearly all countries including Malaysia responded with additional budget allocations
- In addition to this, the deeply affected health sector, now involved new actors, new priorities and interventions.
- Tracking health spending enables transparency and accountability in how COVID-19 health allocations were actually spent. Comprehensive, comparable, and timely data on health spending are essential for policy makers, ministries of health, international organizations and civil society
- Fundamental principles of NHA can be used to track the spending.

# APPROACH COVID-19 ESTIMATION?

## Planning and Launch

- Identify Relevant Questions?
- Identify Objectives
- Identify Boundary for Covid-19 health expenditure

## Data Collection

- Determine data sources
- Discussions With Relevant Stakeholders
- Identify Data Gaps
- Distribute templates, collect and compile data

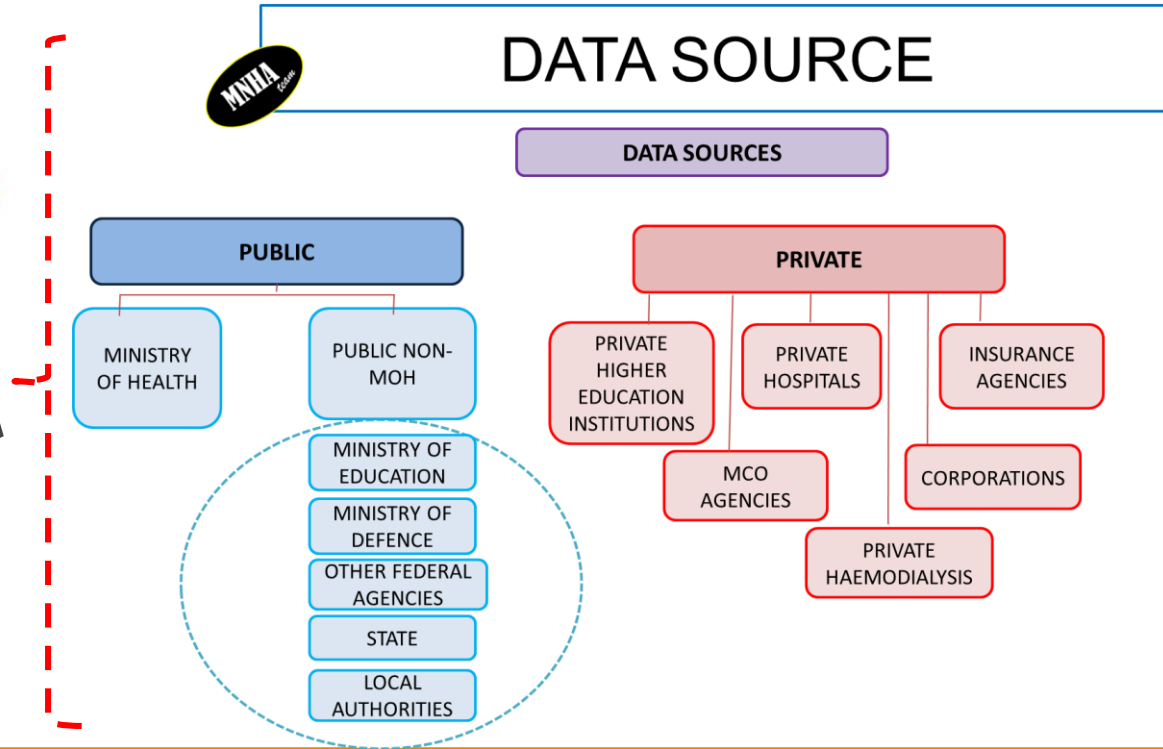
## Data Analysis and Validation

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

# APPROACH COVID-19 ESTIMATION?



## DATA SOURCE NETWORKING



- List of data sources not static
- Clearly identify flow of expenditure as some expenditure by function required data from more than 1 data source

## Data Analysis and Validation

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

Bil	Aktiviti	Fasiliti	COV	ldp	idf	MP	MF
1	Pembelajaran kesihatan berkaitan rawatan Covid-19	Hospital kerajaan bukan KKM (cth: PPUKM, HUSM, PPUM, PPUATM dll)	HC.COV.1	1102100	1120000	MP1.1.1b	MF1.1
		Klinik Kesihatan Kerajaan bukan KKM seperti PPUKM, HUSM, PPUM, PPUATM dll	HC.COV.1	3112100	1310000	MP3.1.1b	MF1.3.1
		PKRC Kerajaan (MAEPS Serdang, ILKKM Tawau dll)	HC.COV.1	8402000	1120000	MP8b	MF1.1
		Hospital swasta (pesakit dalam)	HC.COV.1	1103000	1120000	MP1.1c	MF1.1
		Hospital swasta (pesakit luar)	HC.COV.1	1103000	1330000	MP1.1c	MF1.3.3
		Klinik swasta (pesakit luar)	HC.COV.1	3113000	1310000	MP3.1c	MF1.3.1
		PKRC swasta (pesakit dalam)	HC.COV.1	8403000	1120000	MP8c	MF1.1
		CAC swasta (pesakit luar)	HC.COV.1	3113000	1310000	MP3.1c	MF1.3.1
2	Pembelajaran bagi ujian saringan COVID-19 (contoh swab test RT-PCR/ RTK Antigen/ ujian darah TK Antibodi) & contact tracing	Hospital kerajaan bukan KKM (cth: PPUKM, HUSM, PPUM, PPUATM dll)	HC.COV.2	1102100	6389000	MP1.1.1b	MF8.3.9
		Klinik Kesihatan Kerajaan bukan KKM seperti PPUKM, HUSM, PPUM, PPUATM dll	HC.COV.2	3112100	6389000	MP3.1.1b	MF8.3.9
		Institut Jantung Negara (IJN)	HC.COV.2	1302100	6389000	MP1.3.1b	MF8.3.9
		Hospital swasta	HC.COV.2	1103000	6389000	MP1.1c	MF8.3.9
		Klinik swasta	HC.COV.2	3113000	6389000	MP3.1c	MF8.3.9
		CAC swasta	HC.COV.2	3113000	6389000	MP3.1c	MF8.3.9

13	2020		1112000	8300000	6395000	HC.COV.5.1				
14	2020		1112000	5900000	6395000	HC.COV.4				
15	2020		1112000	5900000	6393000	HC.COV.4				
16	2020		1112000	5900000	6395000	HC.COV.4				
17	2020		1112000	3112200	6396000	HC.COV.5.2				
18	2020		1112000	8403000	6395000	HC.COV.5.3				
19	2020		1112000	3112200	6396000	HC.COV.5.4				
20	2020		1112000	8401000	9999991	HC.COV.5.5				
21	2020		1112000	8402000	9999991	HC.COV.5.5				
22	2020		1112000	8403000	9999991	HC.COV.5.5				
23	2020		1112000	8400000	9999991	HC.COV.5.5				
3 APPROPRIATE SOURCE CODE (IDS) FOR THE AGENCY WAS APPLIED. IN THIS CASE WAS 1112000-MOHE										
4 SAME SOURCE CODE FOR ALL 23 ROWS OF QUESTIONS AND ANSWERS										
5 COPY PASTE THE ABOVE TABLE TO ALL SHEETS IN THIS AGENCY ANALYSES										
6 COUNT NUMBER OF SHEETS-F TO MANY SHEETS BEST INSERT LABEL 1,2,3, AND SO ON IN FRONT OF THE AGENCY NAME (EXAMPLE Putting a number in each sheet will ease re-checking when necessary)										
7 NOW STARTING AT THE FIRST SHEET-CHECK AND INSERT AGENCY CODE/STATE CODE-DOUBLE CLICK TO COPY DOWN TO 23 ROWS										
8 GO TO COLUMN EXP-CLICK =COLUMN WITH RM VALUE IN QUESTION SHEET (FOR PKU -COLUMN E) DOUBLE CLICK TO COPY FORMULAR DOWN TO 23 ROWS										
	year	state	agency	ids	idp	idf	COV CODES	WHO	exp	idr
1	2020	1	1112020102	1112000	1101000	6393000	HC.COV.2	#REF!		
2	2020	1	1112020102	1112000	1102100	6393000	HC.COV.2	#REF!		
3	2020	1	1112020102	1112000	1103000	6393000	HC.COV.2	#REF!		
4	2020	1	1112020102	1112000	1302100	6393000	HC.COV.2	#REF!		
5	2020	1	1112020102	1112000	1103000	6393000	HC.COV.2	#REF!		
6	2020	1	1112020102	1112000	3111000	6393000	HC.COV.2	#REF!		
7	2020	1	1112020102	1112000	3112100	6393000	HC.COV.2	#REF!		
8	2020	1	1112020102	1112000	3113000	6393000	HC.COV.2	#REF!		
9	2020	1	1112020102	1112000	4203000	6393000	HC.COV.2	#REF!		
10	2020	1	1112020102	1112000	8401000	6395000	HC.COV.5.1	#REF!		
11	2020	1	1112020102	1112000	8403000	6395000	HC.COV.5.1	#REF!		
12	2020	1	1112020102	1112000	4103000	6395000	HC.COV.5.1	#REF!		
13	2020	1	1112020102	1112000	8300000	6395000	HC.COV.5.1	#REF!		
14	2020	1	1112020102	1112000	5900000	6395000	HC.COV.4	#REF!		
15	2020	1	1112020102	1112000	5900000	6393000	HC.COV.4	#REF!		

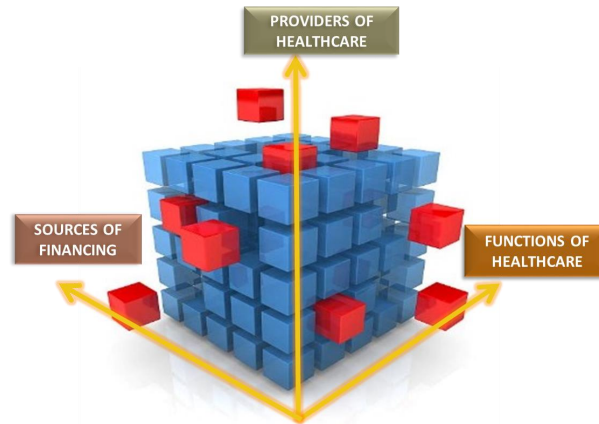
LOG ANALYSES

Uni. Tun Hussein Onn Malaysia

Uni. Teknikal Malaysia Melaka

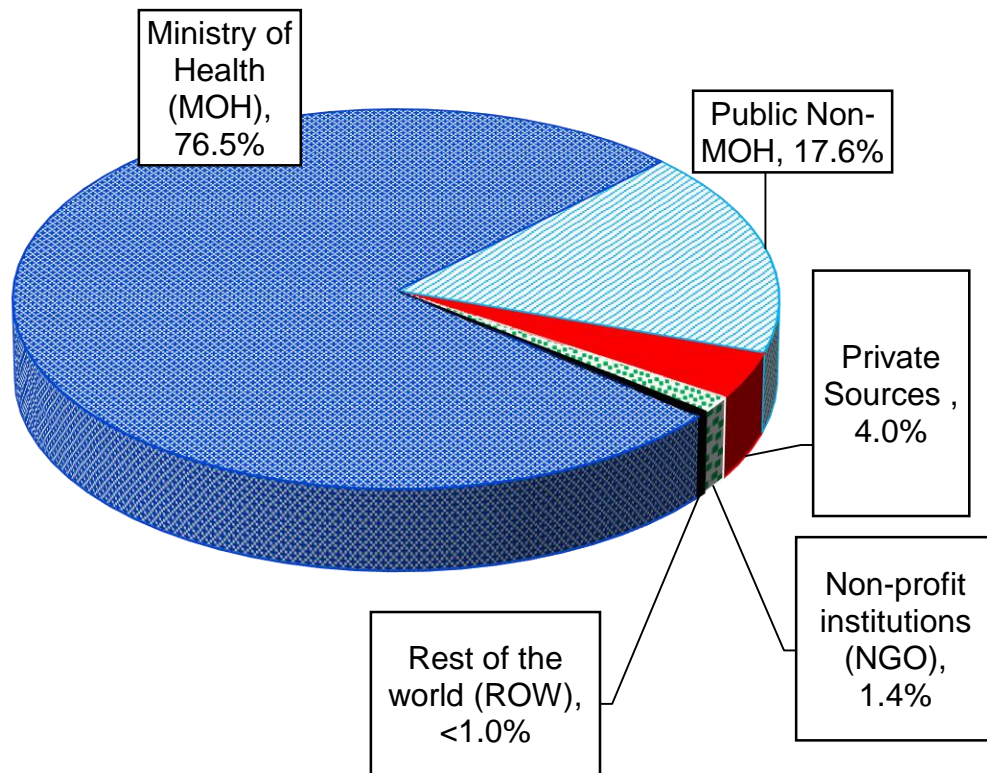
Uni. Malaysia Terengganu

# COVID-19 HEALTH EXPENDITURE DATA



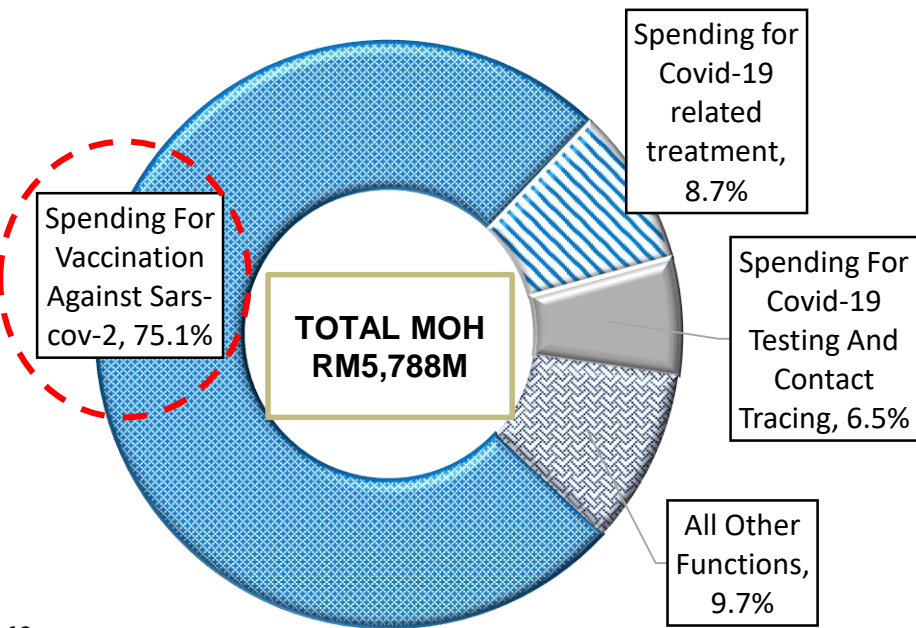


# COVID-19 EXPENDITURE ON HEALTH BY SOURCES OF FINANCING, 2021



Sources of Financing	2020	2021
	RM Million	RM Million
Ministry of Health (MOH)	886	5,788
Public Non-MOH	694	1,333
Private Sources	489	304
Non-profit institutions (NGO)	108	106
Rest of the world (ROW)	76	36
<b>TOTAL</b>	<b>2,253</b>	<b>7,567</b>

# MOH COVID-19 EXPENDITURE ON HEALTH BY FUNCTIONS OF HEALTHCARE, 2021

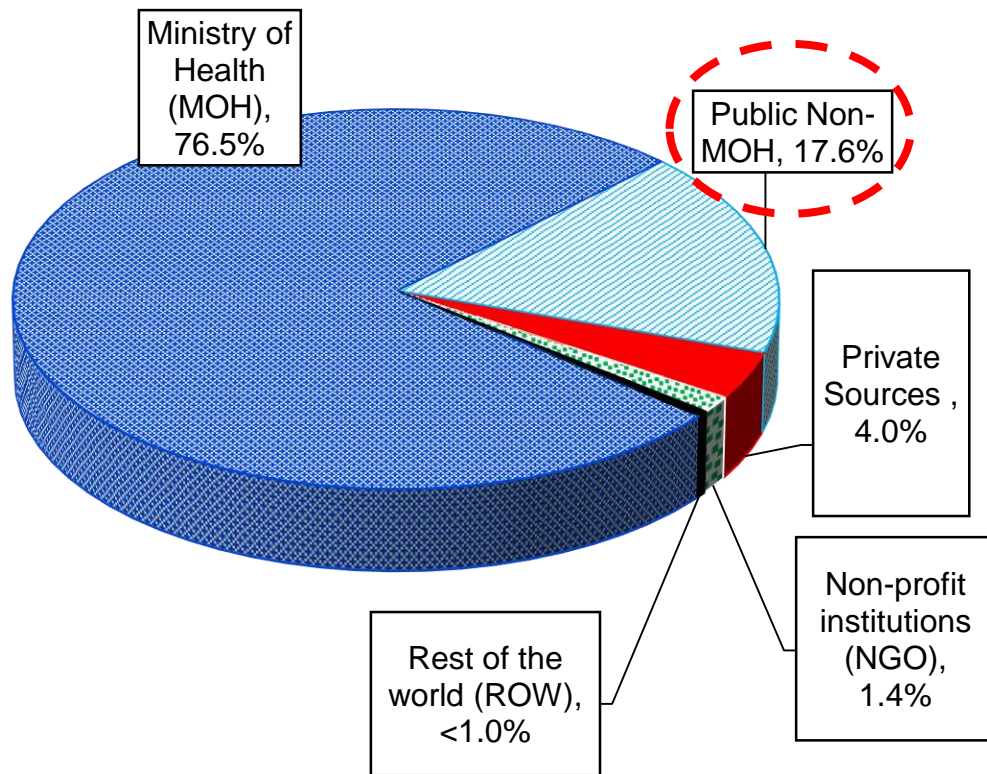


MOH Source of Financing	2021 RM Million
*Spending For Vaccination Against Sars-cov-2	4,347
Spending for Covid-19 related treatment	505
Spending For Covid-19 Testing And Contact Tracing	374
All Other Functions	562
<b>TOTAL</b>	<b>5,788</b>

## Notes:

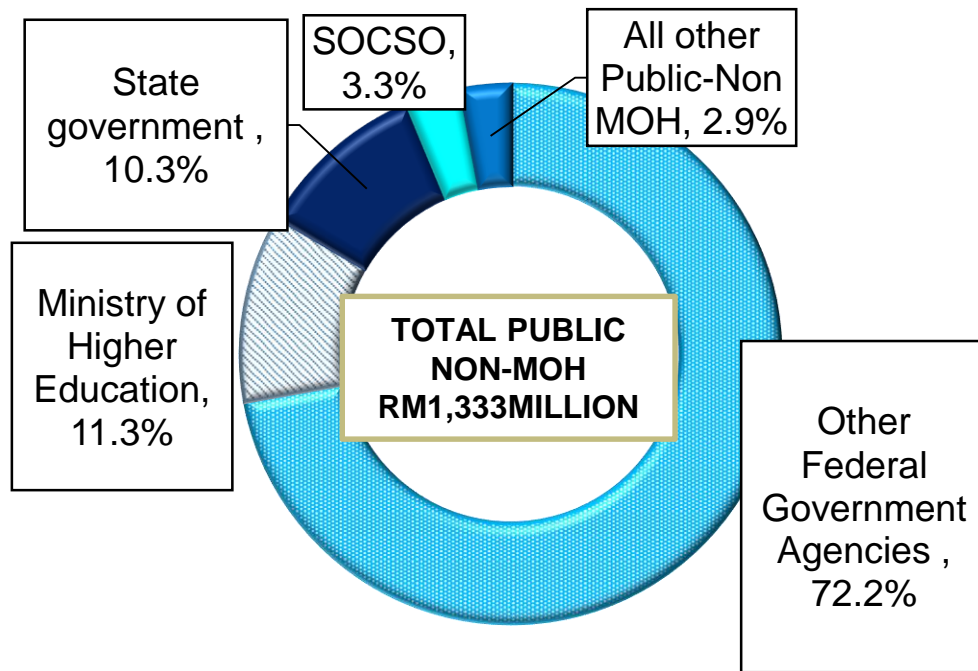
\*Includes the costs of vaccination campaigns, costs of the vaccine, the distribution costs and service charge by doctors, nurses or other health professional administering the vaccination and organisational costs are included

# COVID-19 EXPENDITURE ON HEALTH BY SOURCES OF FINANCING, 2021

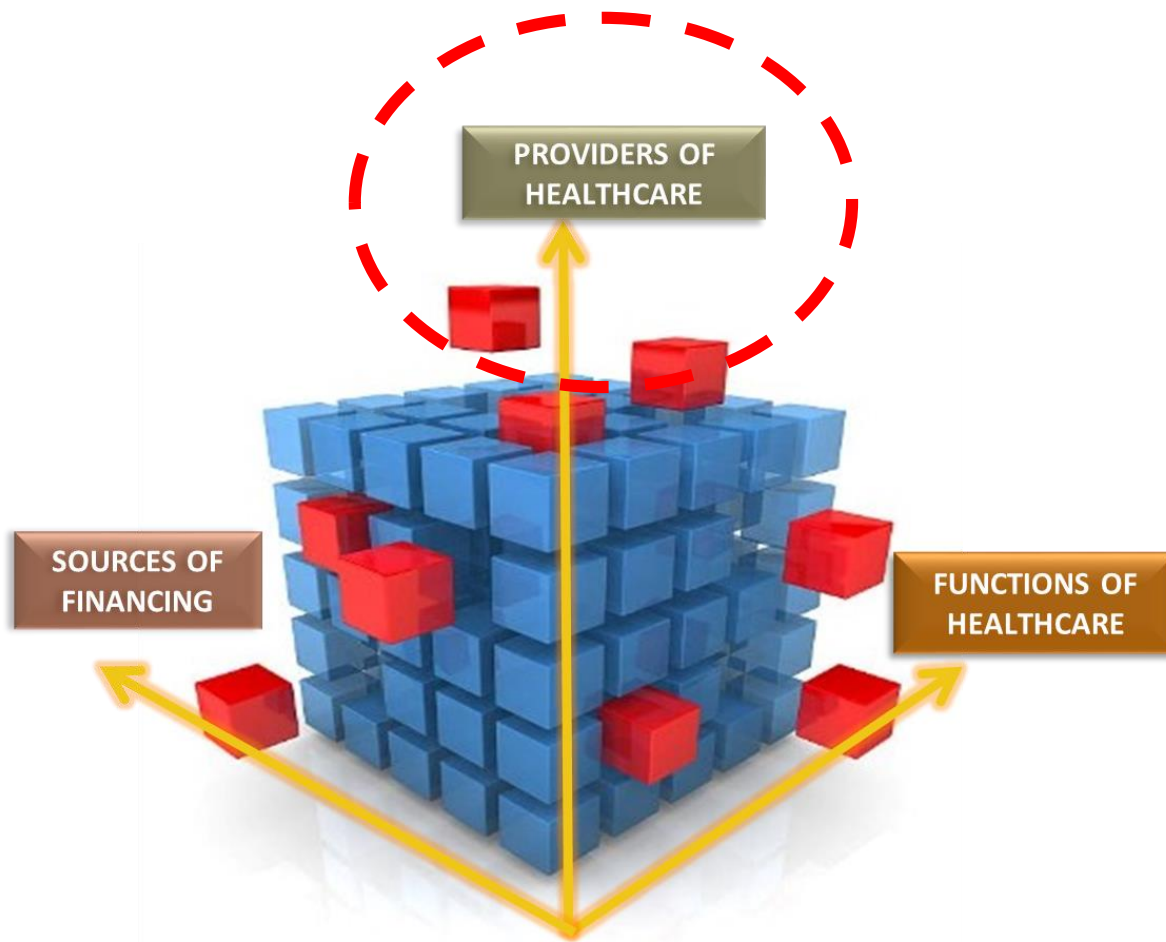


2021	
Sources of Financing	RM Million
Ministry of Health (MOH)	5,788
Public Non-MOH	1,333
Private Sources	304
Non-profit institutions (NGO)	106
Rest of the world (ROW)	36
<b>TOTAL</b>	<b>7,567</b>

# COVID-19 EXPENDITURE ON HEALTH BY PUBLIC NON-MOH, SOURCES OF FINANCING, 2021

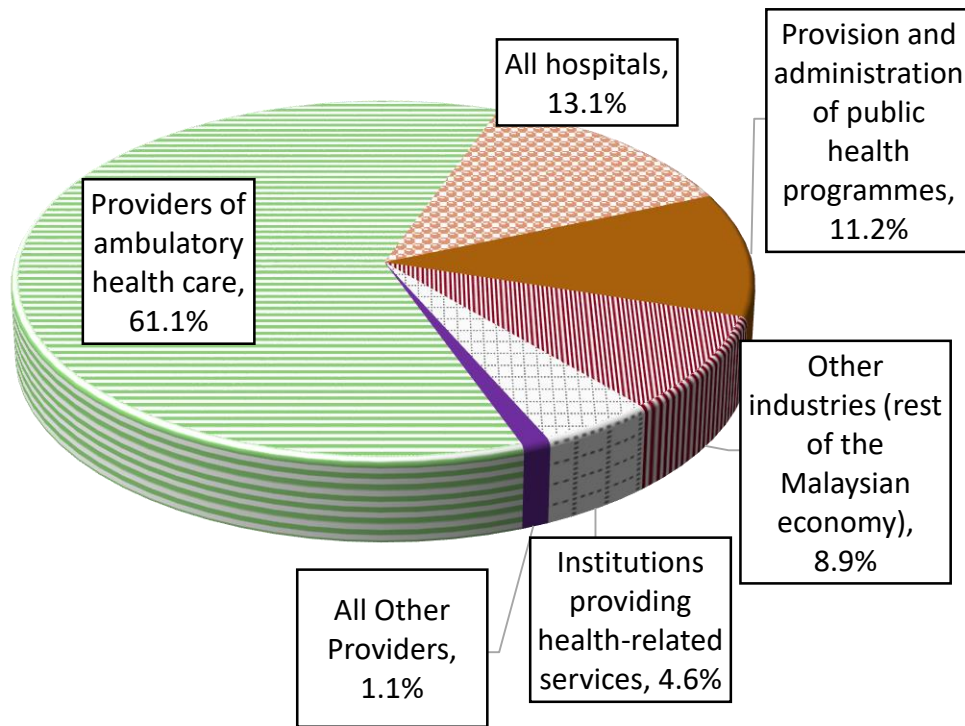


Public Non-MOH Sources of Financing	2021
	RM Million
Other Federal Government Agencies (esp. MOSTI and NADMA)	962
Ministry of Higher Education	150
State government	138
SOCSO	44
All other Public-Non MOH	39
<b>TOTAL</b>	<b>1,333</b>



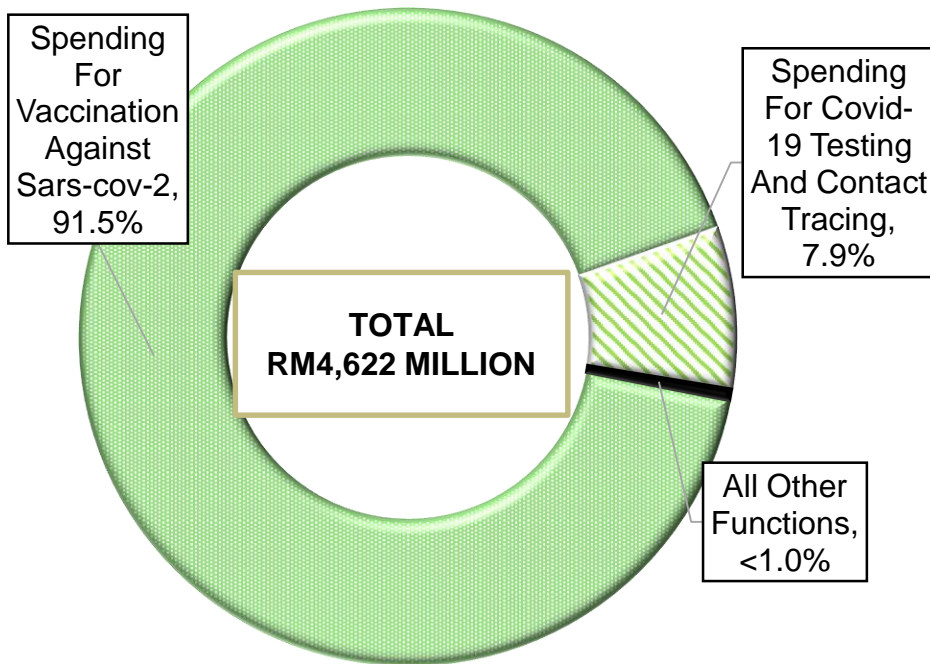


# COVID-19 EXPENDITURE ON HEALTH TO PROVIDERS OF HEALTHCARE, 2021

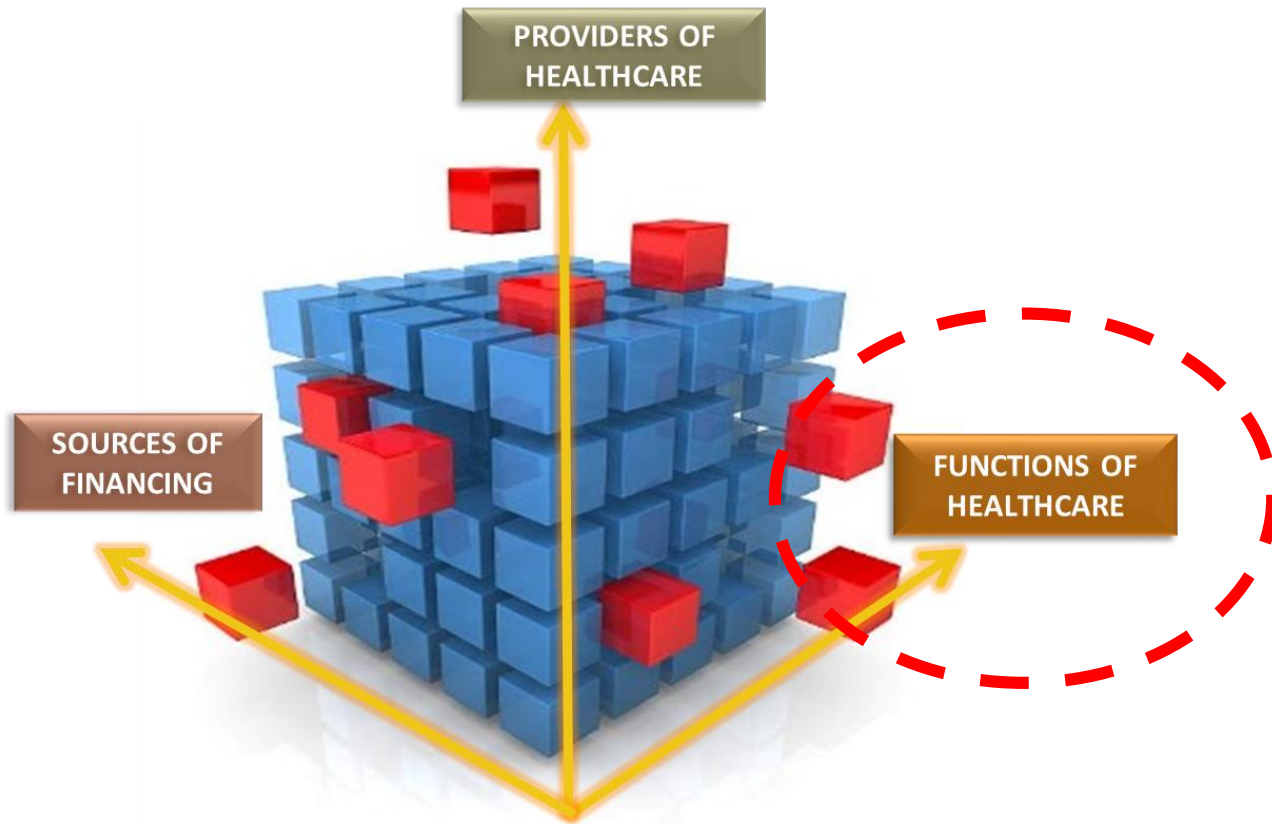


Providers of HC	2020	2021
	RM Million	RM Million
Providers of ambulatory health care	185	4,622
All hospitals	509	995
Provision and administration of public health programmes	980	844
Other industries (rest of the Malaysian economy)	46	671
Institutions providing health-related services	350	350
All Other Providers	183	85
<b>TOTAL</b>	<b>2,253</b>	<b>7,567</b>

# COVID-19 EXPENDITURE ON HEALTH TO PROVIDERS OF HEALTHCARE, 2021

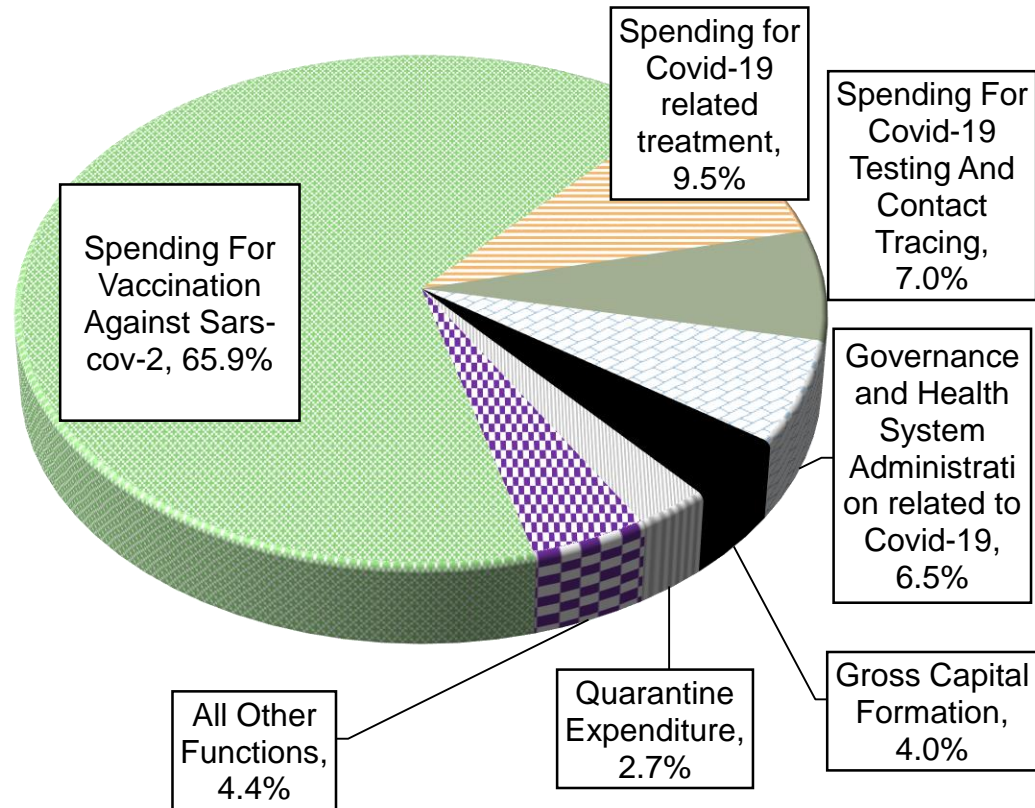


Providers of HC	2021
	RM Million
Providers of ambulatory health care	4,622
Functions of HC	2021
	RM Million
Spending For Vaccination Against Sars-cov-2	4,231
Spending For Covid-19 Testing And Contact Tracing	367
All Other Functions	23



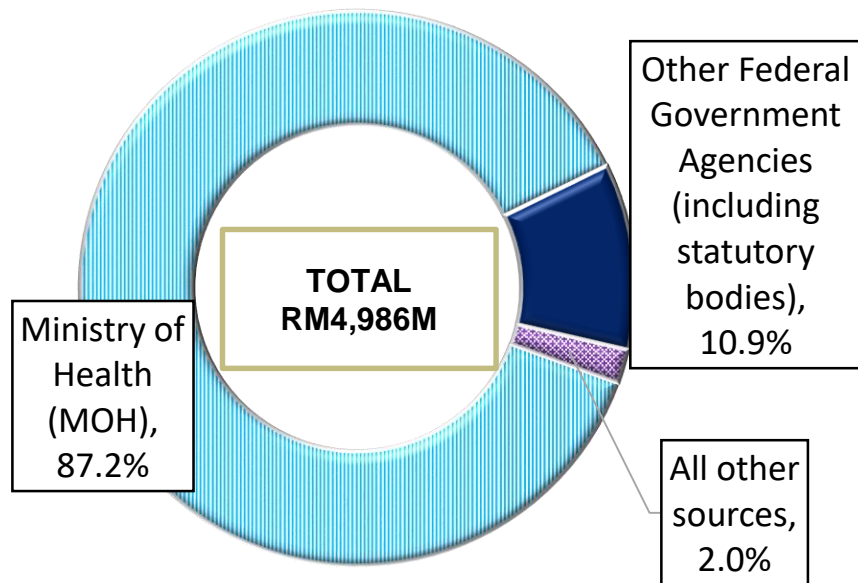


# COVID-19 EXPENDITURE ON HEALTH FOR FUNCTIONS OF HEALTHCARE, 2021



Functions of HC	2020	2021
	RM Million	RM Million
Spending For Vaccination Against Sars-cov-2	95	4,986
Spending for Covid-19 related treatment	330	722
Spending For Covid-19 Testing And Contact Tracing	274	528
Governance and Health System Administration related to Covid-19	317	490
Gross Capital Formation	508	302
Quarantine Expenditure	282	207
All Other Functions	448	331
<b>TOTAL</b>	<b>2,253</b>	<b>7,567</b>

# SOURCES for Spending For Vaccination, 2021



Functions of HC	2021
	RM Million
Ministry of Health (MOH)	4,347
Other Federal Government Agencies	541
All other sources	98
<b>TOTAL</b>	<b>4,986</b>

## Notes:

Includes the costs of vaccination campaigns, costs of the vaccine, the distribution costs and service charge by doctors, nurses or other health professional administering the vaccination and organisational costs are included

- **Underestimations**

- expenditure by OOP and Corporations sources are limited.
- expenditure for development of IT infrastructure, software costs, mobile tracing apps-not captured due to lack of data availability
- estimations were used to place value in gaps among non-cash donations

# ✓ SUMMARY COVID-19 HEALTH EXPENDITURE ESTIMATION

# 2021

## TEH

Total Expenditure of Health

## RM78,220m

Covid-19 Health Expenditure  
Estimation

## RM7,567m

Covid-19 Health Expenditure  
Estimation as % of TEH

## 9.7%

Main Source of Financing



## 76.5%

Ministry of Health

Spending to Providers of  
ambulatory health care  
was highest



## 61.1%

RM4,622m

Spending For  
Vaccination Against  
Sars-cov-2  
was highest



## 65.9 %

RM4,986m

# Thank you

