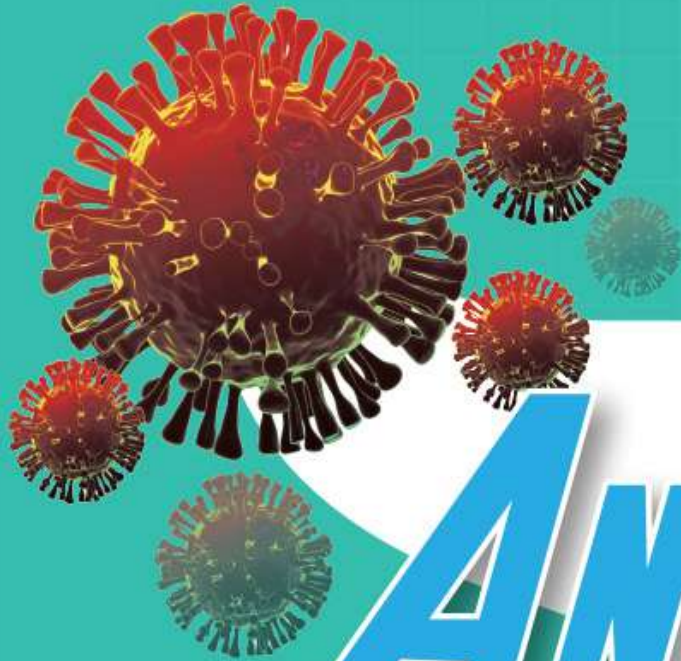




MINISTRY OF HEALTH MALAYSIA



ANNUAL REPORT

MINISTRY OF
HEALTH
MALAYSIA

2020



ANNUAL ***REPORT***

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MALAYSIA

2020

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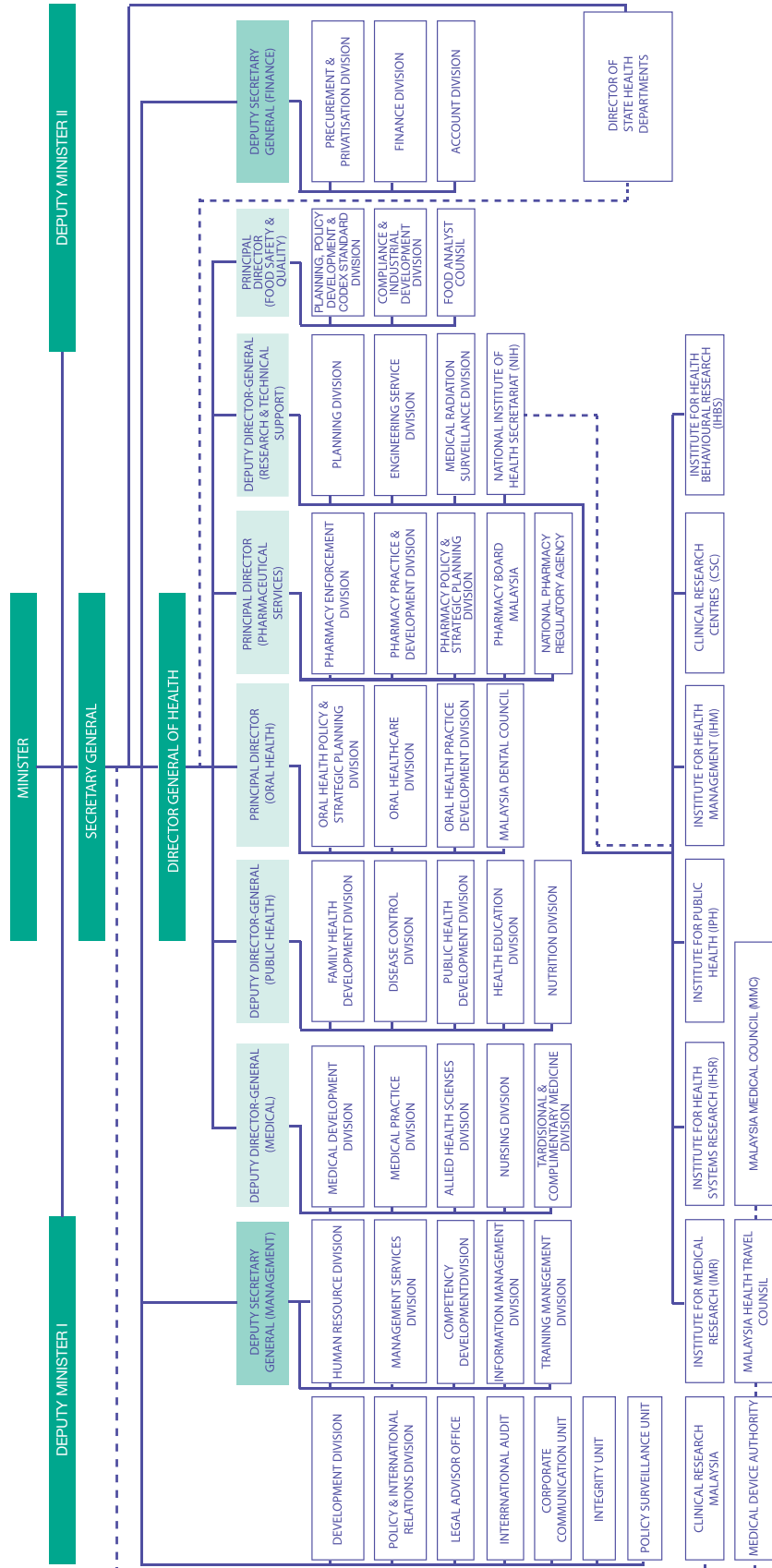
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ORGANISATION CHART of the Ministry of Health Malaysia



VISION

A nation working together for better health.

MISSION

The mission of the Ministry of Health is to lead and work in partnership:

- to facilitate and support the people to:
 - fully attain their potential in health
 - appreciate health as a valuable asset
 - take individual responsibility and positive action for their health
- to ensure a high quality health system that is:
 - customer centre
 - equitable
 - affordable
 - efficient
 - technologically appropriate
 - environmentally adaptable
 - innovative
- with emphasis on:
 - professionalism, caring and teamwork value
 - respect for human dignity
 - community participation



01

HEALTH STATUS

INTRODUCTION

Malaysians today are generally healthier, live longer, and are better disposed to be more productive. The overall level of health attained is one of the key measures of the success of our country. Good health enables Malaysians to lead productive and fulfilling lives. In addition, a high level of health contributes to increased prosperity and overall social stability.

POPULATION STRUCTURE

The population of Malaysia in 2020 was 32.66 million with an annual population growth rate 2019 to 2020 of 0.43 per cent. The total population in 2020 increased by 0.14 million as compared to 32.52 million recorded in 2019. The geographical distribution of population showed that Selangor had the highest population of 6.54 million, while Wilayah Persekutuan Labuan recorded the lowest population of 0.10 million. Wilayah Persekutuan Putrajaya recorded the highest annual population growth rate of 6.08 per cent, while Wilayah Persekutuan Kuala Lumpur recorded negative annual growth rate of 0.49 per cent (Table 1.1).

Table 1.1
Total Population and Annual Population Growth Rate by State, Malaysia 2019 and 2020

No.	State	Population ('000)		Annual Population Growth Rate 2019/2020 (%)
		2019	2020 ^e	
1.	Johor	3,761.2	3,781.1	0.53
2.	Kedah	2,173.7	2,185.2	0.53
3.	Kelantan	1,883.8	1,906.7	1.22
4.	Melaka	928.4	932.7	0.46
5.	Negeri Sembilan	1,126.2	1,128.8	0.23
6.	Pahang	1,671.4	1,678.6	0.43
7.	Pulau Pinang	1,768.8	1,773.6	0.27
8.	Perak	2,508.8	2,510.3	0.06
9.	Perlis	254.0	254.9	0.35
10.	Selangor	6,506.1	6,538.1	0.49
11.	Terengganu	1,244.5	1,259.2	1.18
12.	Sabah	3,904.4	3,908.5	0.11
13.	Sarawak	2,806.0	2,816.5	0.37
14.	W.P. Kuala Lumpur	1,782.5	1,773.7	-0.49
15.	W.P. Labuan	99.3	99.6	0.30
16.	W.P. Putrajaya	103.7	110.0	6.08
	MALAYSIA	32,523.0	32,657.3	0.41

Notes:

1. Current population estimates 2019 and 2020

2. The added total may differ due to rounding.

3. ^e - estimated

Source: Department of Statistics, Malaysia ([www.dosm.gov.my/Population Quick Info](http://www.dosm.gov.my/PopulationQuickInfo))

Overall, Malaysia is predominantly urban, with 76.7 per cent of the total population living in urban areas, and 23.3 per cent of the population living in the rural areas (Table 1.2). In 2020, the economically-active (working age) population which consists of population aged 15 to 64 years was 22.8 million or 69.7 per cent of the total population. Meanwhile, young age and old age population were 7.6 million (23.3%) and 2.3 million (7.0%) respectively.

Table 1.2
Statistics Related to Population, 2020

No.	Population	2020 ^e	
		Number ('000)	% of Total Population
1.	Male	16,805.6	51.5
2.	Female	15,851.7	48.5
3.	Urban	25,048.2	76.7
4.	Rural	7,609.1	23.3
5.	Working age group (15-64 years)	22,763.7	69.7
6.	Young age group (below 15 years)	7,600.3	23.3
7.	Old age group (65 years & above)	2,293.2	7.0

Notes:

1. Current population estimates 2019 and 2020

2. The added total may differ due to rounding.

3. ^e - estimated

Source: Department of Statistics, Malaysia ([www.dosm.gov.my/Population Quick Info](http://www.dosm.gov.my/Population%20Quick%20Info))

The dependency ratio is the number of people in the young and old age groups that must be borne for every 100 people in the working age group. This ratio can be disaggregated into the total dependency ratio, young age dependency ratio and the old age dependency ratio. The total dependency ratio shows an increasing trend from 43.4 in 2019 to 43.5 in 2020. The old age dependency ratio also shows an increasing trend in 2020 to 10.1 as compared to 9.7 in 2019. While the young dependency ratio shows a decreasing trend from 33.7 in 2019 to 33.4 in 2020.

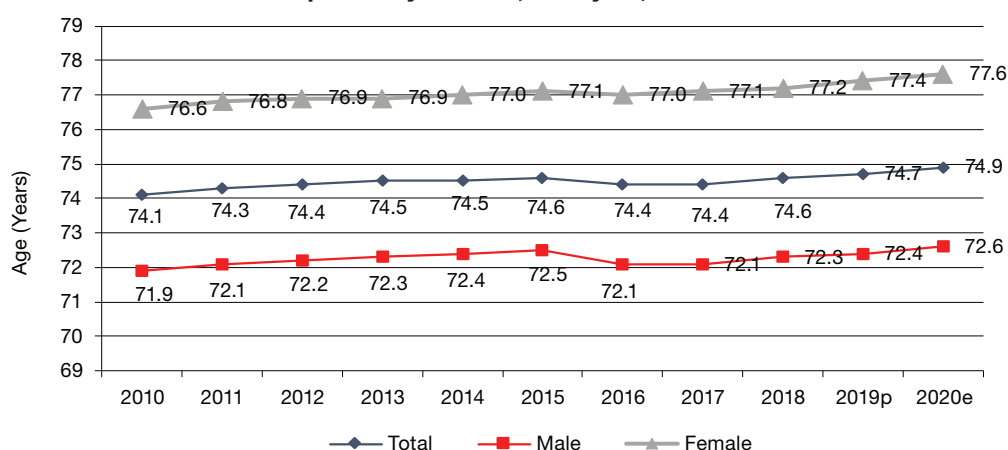
HEALTH STATUS

Health status is measured by the health condition of the individual and the population as a whole. It can be measured through some health status indicators such as life expectancy at birth, mortality and morbidity.

LIFE EXPECTANCY AT BIRTH

Life expectancy is the average remaining age (years) for a person is expected to live at the beginning of the certain age. Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth are to stay the same throughout its life. In 2020, the life expectancy at birth for Malaysia population increased by 0.8 years to 74.9 years as compared to 74.1 years in 2010. The life expectancy for male has increased by 0.7 years to 72.6 years in 2020 from 71.9 years in 2010, while the life expectancy for female increased by 1.0 years to 77.6 years in 2020 from 76.6 years in 2010 (Figure 1.1).

Figure 1.1
Life Expectancy at Birth, Malaysia, 2010 to 2020



Notes:

P - preliminary figure

e - estimated figure

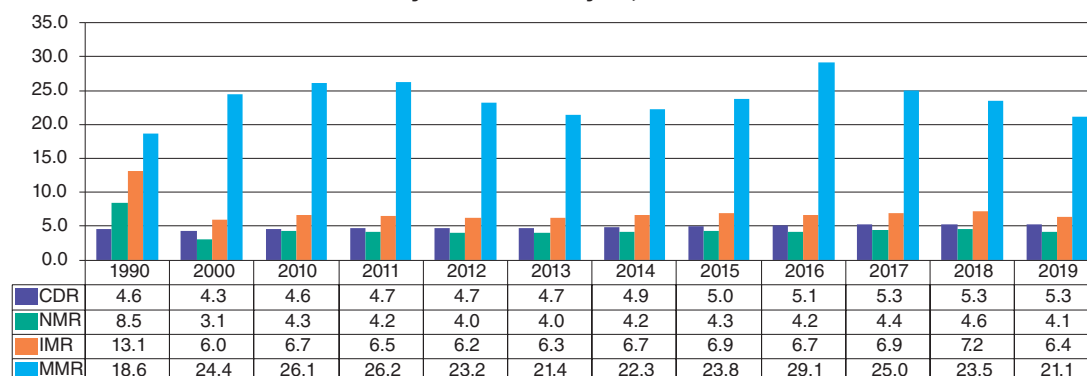
Source: Department of Statistics Malaysia

MORTALITY

Mortality data provides a useful endpoint for measuring health. These data provide a comprehensive picture of the health of the community, for each individual.

The trends for crude mortality rate (CDR), neonatal mortality rate (NMR), infant mortality rate (IMR) and maternal mortality ratio (MMR) in Malaysia for the period 1990 to 2019 are shown in [Figure 1.2](#). From 1990 to 2019, the CDR in Malaysia has increased from 4.6 per 1,000 population in 1990 to 5.3 per 1,000 population in 2019. The increase is also reflected in the ratio of maternal mortality from 18.6 per 100,000 live births in 1990 to 21.1 per 100,000 live births in 2019. However, neonatal and infant mortality rates showed a decline from 8.5 to 4.1 per 1,000 live births and 13.1 to 6.4 per 1,000 live births respectively. The trends for other mortality rates are shown in [Table 1.3](#).

Figure 1.2
Mortality Rates in Malaysia, 1990 to 2019



Source: Department of Statistics Malaysia

Table 1.3
Mortality Rates in Malaysia, 2012 to 2019

No.	Indicator	2012	2013	2014	2015	2016	2017	2018	2019
1.	Crude death rate (per 1,000 population)	4.7	4.7	4.9	5.0	5.1	5.3	5.3	5.3
2.	Stillbirth rate (per 1,000 births)	4.3	4.3	4.3	4.4	5.2	5.4	5.5	5.4
3.	Perinatal mortality rate (per 1,000 births)	7.3	7.3	7.4	7.7	8.3	8.7	8.9	8.4
4.	Neonatal mortality rate (per 1,000 live births)	4.0	4.0	4.2	4.3	4.2	4.4	4.6	4.1
5.	Infant mortality rate (per 1,000 live births)	6.2	6.3	6.7	6.9	6.7	6.9	7.2	6.4
6.	Toddler mortality rate (per 1,000 population aged 1-4 years)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
7.	Under-5 mortality rate (per 1,000 live births)	7.6	7.9	8.3	8.4	8.1	8.4	8.8	7.7
8.	Maternal mortality ratio (per 100,000 live births)	23.2	21.4	22.3	23.8	29.1	25.0	23.5	21.1

Source: Vital Statistics Malaysia, 2020, Department of Statistics Malaysia

MORBIDITY

The health status of a community is usually measured in terms of morbidity, which focuses on the incidence or prevalence of disease.

Hospitalisation indicates the severity of disease that needs further treatment, stabilisation of patients or the need of isolation in order to prevent the spreading of the diseases to others. The number of admissions in MOH Hospitals in 2020 shows a decreasing trend of 13.5 per cent to 2,386,818 from that of 2,759,533 in 2019. The 10 principal causes of hospitalization in the MOH Hospitals for 2020 are shown in [Table 1.4](#). The diseases were classified based on the International Statistical Classification of Disease 10th Revision (ICD-10). In 2020 “Pregnancy, childbirth and the puerperium” (22.14%) remained as the top cause of admissions in MOH hospitals followed by “Certain conditions originating in the perinatal period” (10.61%) and “Diseases of the respiratory system” (8.97%).

Table 1.4
10 Principal Causes of Hospitalisation in MOH Hospitals, 2020^p

No.	Principal Causes	ICD-10	Percentage of Total Discharges (%)
1.	Chapter XV: Pregnancy, childbirth and the puerperium	O00-O99	22.14
2.	Chapter XVI: Certain conditions originating in the perinatal period	P00-P96	10.61
3.	Chapter X: Diseases of the respiratory system	J00-J99	8.97
4.	Chapter IX: Diseases of the circulatory system	I00-I99	8.82
5.	Chapter XIX: Injury, poisoning and certain other consequences of external causes	S00-T98	6.88
6.	Chapter I: Certain infectious and parasitic diseases	A00-B99	6.76
7.	Chapter II: Neoplasms	C00-D48	5.15
8.	Chapter XI: Diseases of the digestive system	K00-K93	4.65
9.	Chapter XIV: Diseases of the genitourinary system	N00-N99	4.20
10.	Chapter XXII : Codes for special purposes	U00-U89	3.36

Note:

Based on ICD-10 3-digit code grouping

p - preliminary

Source: MyHDW Fixed Format Report, 2020 (as of 31 May 2021)

The number of deaths (for all causes) in MOH Hospitals decreased 9.7 per cent from 64,395 in 2019 to 58,144 in 2020. Starting in 2014, tabulations for causes of death in MOH Hospitals are based on the underlying cause of death as recommended by the World Health Organisation (WHO). “Diseases of the circulatory system” was the top cause of death in MOH hospitals recorded in 2020 (23.22%), followed by “Diseases of the respiratory system” (19.69%) and “Certain infectious and parasitic diseases” (13.02%). The 10 principal causes of deaths in the MOH Hospitals for 2020 are as shown in [Table 1.5](#).

Table 1.5
10 Principal Causes of Death* in MOH Hospitals, 2020^p

No.	Principal Causes	ICD-10	Percentage of Total Deaths (%)
1.	Chapter IX: Diseases of the circulatory system	I00-I99	22.64
2.	Chapter X: Diseases of the respiratory system	J00-J99	19.52
3.	Chapter I: Certain infectious and parasitic diseases	A00-B99	11.83
4.	Chapter II: Neoplasms	C00-D48	11.61
5.	Chapter XVIII : Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00-R99	6.58
6.	Chapter XIV: Diseases of the genitourinary system	N00-N99	6.12
7.	Chapter IV: Endocrine, nutritional and metabolic diseases	E00-E90	5.79
8.	Chapter XI: Diseases of the digestive system	K00-K93	4.75
9.	Chapter XVI: Certain conditions originating in the perinatal period	P00-P96	2.21
10.	Chapter VI: Diseases of the nervous system	G00-G99	2.07

Note:

** Based on underlying causes of death*

Based on ICD-10 3-digit code grouping

p - preliminary

Source: MyHDW Fixed Format Report, 2020 (as of 31 May 2021)

HEALTH FACILITIES AND FACILITY UTILISATION

The number of MOH hospitals in 2020 was 146 which consists of 135 hospitals and 11 Special Medical Institutions with total beds of 38,543 and 5,574 beds respectively. Overall Bed Occupancy Rate (BOR) for MOH hospitals and Institutions in 2020 was 64.72 per cent ([Table 1.6](#)).

There were 1,051 Health Clinics, 1,752 Rural Clinics and 87 Maternal and Child Health Clinics in 2020. From 1 January 2019, 1Malaysia Clinic (K1M) was renamed to Community Clinic (KKom) and as of 31 December 2020, there were 257 KKoms nationwide that provide immediate healthcare to population. The services provided by the KKom is similar to K1M which was introduced in 2010 which is to provide basic medical services for illnesses and injuries to the community.

Table 1.6
Health Facilities by Type, Total Bed Complements and BOR in Ministry of Health, 2015 to 2020

Facility	2015	2016	2017	2018	2019	2020
Number of Hospital	143	144	144	144	144	146
- Hospital	134	135	135	135	135	136
- Special Medical Institution	9	9	9	9	9	10
Total Bed (Official) ¹	41,389	41,995	42,302	42,434 ^R	42,936	44,117
- Hospital	36,447	37,293	37,470	37,619	38,131	38,671
- Special Medical Institution	4,942	4,702	4,832	4,815	4,805	5,446
Bed Occupancy Rate (%) ¹	71.06	70.13	60.75	68.75 ^R	70.01	64.72
Number of Health Clinic	958	969	994	1,000	1,027	1,051
Number of Community Clinic	1,808	1,803	1,798	1,791	1,771	1,753
Number of Maternal and Child Health Clinic	103	91	91	90	87	87
Number of 1Malaysia Clinic/Community Clinic	334	357	342	343	286	260

Notes:

¹ refers to beds complement and BOR in MOH Hospitals and Special Medical Institutions

² From 1 January 2019, 1Malaysia Clinic (K1M) was renamed to Community Clinic (KKom)

^R - revised

Source: Health Informatics Centre, MOH



02

MANAGEMENT



MANAGEMENT

INTRODUCTION

The Management Program consists of eight (8) divisions/units that are answerable directly to the Secretary-General, five (5) divisions under Deputy Secretary-General (Management) and three (3) divisions under Deputy Secretary-General (Finance). The main objective of this program is to facilitate and support the achievement of the Ministry of Health's policy and objectives by supporting the other programmes through an efficient and effective service system, human resource management, information technology management, competency and training development and financial management.

The divisions under the Deputy Secretary-General (Management) are listed below:

- i. Human Resource Division (HRD);
- ii. Training Management Division (TMD);
- iii. Competency Development Division (CDD);
- iv. Management Services Division (MSD); and
- v. Information Management Division (IMD).

HUMAN RESOURCE DIVISION (HRD)

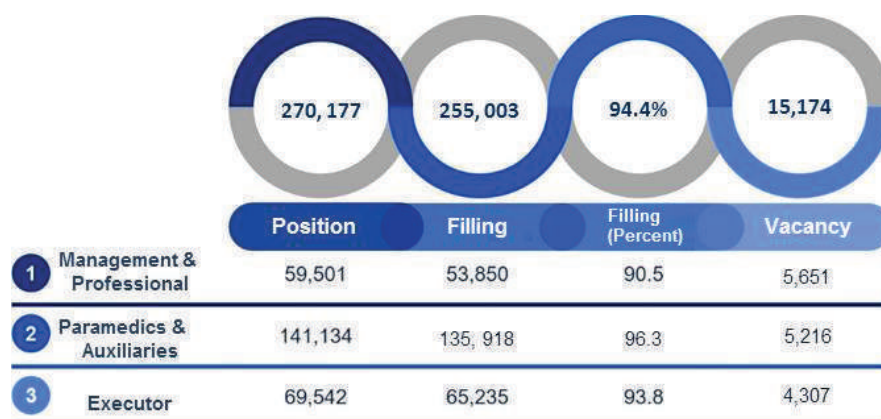
In 2020, Malaysia faced tremendous challenges due to the COVID-19 pandemic which greatly affected human resource management in the healthcare sector. MOH has taken several strategic initiatives and inclusive strategies to guarantee optimum human resource management in dealing with COVID-19 as well as to ensure effective healthcare services for the public during this trying time. Human resource management is an essential element in enhancing the implementation and effectiveness of the healthcare development program. The Human Resource Division (HRD) is responsible for working towards attaining the best possible staffing and organisational structure for MOH.

ESTABLISHMENT OF POSTS AND PERSONNEL IN MOH

As of 31 December 2020, 94.4 per cent (255,003) of 270,177 posts in MOH have been filled. [Figure 2.1](#) indicates the posts and personnel in MOH according to the service group.

The total personnel for five (5) main service schemes in MOH as of 31 December 2020 are 125,085. There were 32,630 permanent Medical Officers in 2020 comprised of 5,664 Medical Specialists, 22,148 Medical Officers (MO) 131 House Officers (HO) and 4,687 Medical Officers in the Training Reserve Post (*Jawatan Simpanan Latihan*) and Group Post (*Jawatan Kumpulan*).

Figure 2.1
Status of Posts in MOH as of 31 December 2020 by Service Group



Note: Management and Professional service group include Top Management, Specialist, JUSA and Integrated Schemes of Service. The totals of filling posts include 2,694 officers out of MOH.

Source: Human Resource Division, MOH

Figure 2.2
Total Staffing of the 5 Main Service Schemes in MOH as of 31 December 2020



Source: Human Resource Division, MOH

CONTRACT APPOINTMENTS FOR THE THREE MAIN SCHEMES AND THE PARAMEDIC AND AUXILIARY SERVICES SCHEMES

As of 31 December 2020, HRD appointed a total of 37,350 contract officers consisting of the three (3) main schemes as well as the Paramedic and Auxiliary Services schemes as described in [Table 2.1](#).

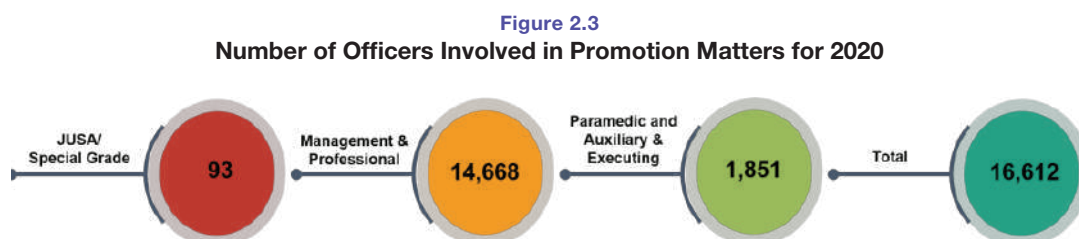
Table 2.1
Contract Appointment For the Three Main Schemes And The Paramedic And Auxiliary Services Schemes

No.	Service Scheme	Total
Appointment Due To Expertise Service Requirements		
1.	Medical Specialist	17
Appointment Due To The Act's Requirements For Graduate Training And Compulsory Service		
2.	Medical Officer Grade UD41	22,334
3.	Dental Officer Grade UD41	4,491
4.	Pharmacy Officer Grade UF41	5,509
Appointment For Assisting Delivery of Health Services		
5.	Nurse Grade U29	1,155
6.	Assistant Medical Officer Grade U29	2,933
7.	Assistant Environmental Health Officer Grade U29	345
8.	Dental Surgery Assistant Grade U19	396
9.	Physiotherapy Medical Therapist Grade U29	84
Total		37,350

Source: Human Resource Division, MOH

MANAGEMENT OF PROMOTION AFFAIRS

Promotion is an important aspect of human resource management which serves to produce officers of caliber as well as being an enticing and motivating factor. MOH promotion statistics for 2020 can be seen in [Figure 2.3](#).



Source: Human Resource Division, MOH

Image 2.1
Appreciation Program with SME Officers in MOH

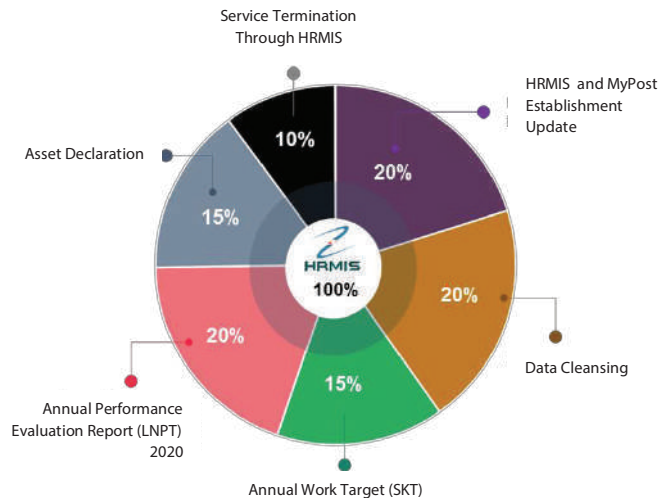


Source: Human Resource Division, MOH

HUMAN RESOURCE MANAGEMENT INFORMATION SYSTEM (HRMIS)

HRMIS is an important instrument in ensuring the integrity and accuracy of human resource management data. This system consists of personnel data information management, service profiles, personal records and the Annual Performance Evaluation Report (LNPT). Full implementation of HRMIS throughout the agency is one element of the KPI for the Secretary-General of MOH. In 2020, MOH successfully achieved 100 percent for the implementation of all 6 HRMIS criteria. Details of MOH HRMIS achievements for the year 2020 are shown in [Figure 2.4](#).

Figure 2.4
Achievement Report of MOH HRMIS in 2020



Source: Human Resource Division, MOH

IMPROVEMENT OF WORK PROCESS THROUGH OFFICE AUTOMATION

Work processes have been improved through office automation involving the following implementation:

- i. Placements and transfers for the paramedic and auxiliary service schemes through the transfer submodule of HRMIS; and
- ii. Rebranding of Sistem Maklumat Pengurusan Profesional 2.0 (MySYMPP) to Human Resource Information System (HRIS) with updated modules for posts and staffing.

IMPROVEMENT OF ALLOWANCES AND BENEFITS/REMUNERATIONS

Improvements are made to allowances and benefits/remunerations to retain healthcare talents in the public service and to improve service delivery. The improved allowances, benefits and revision of schemes as are follows:

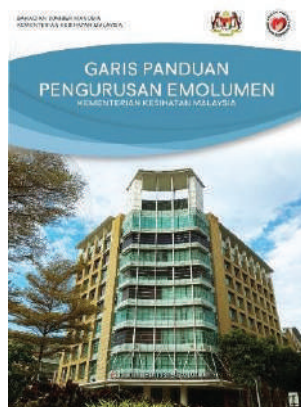
- i. Proposal to retain the critical allowance to the respective critical scheme at MOH;
- ii. A study to strengthen and enhance the implementation of 18 types of allowance specifically under the Medical and Health classification. This study involves retaining 16 current allowances, abolition of two (2) allowances and the rebranding of six (6) allowances; and
- iii. Revision of 48 closed service schemes in MOH involving creating new/schemes, amendment scheme terms and changing of Head of Service and consolidation of service schemes.

STRENGTHENING ADMINISTRATIVE CAPACITY AND IMPROVING GOOD GOVERNANCE

The strengthening of administrative capacity and increased good governance have been achieved through the following strategic implementations:

- i. Development of the Human Resource Management Accountability Index (IASM) as a Management Tool to ensure compliance in human resource management in accordance with current government policies. The implementation of IASM involves Human Resource Management in *Jabatan Kesihatan Negeri* (JKN)/District Health Office (PKD)/hospitals/institutions and health facilities. For the year 2020, the implementation of IASM has involved 50 health facilities throughout JKN in Malaysia. Among 50 health facilities involved, a total of 15 facilities (30%) managed to get a five (5) star rating (score 95%-100%), while 29 facilities (58%) got a four (4) star rating (score 80% -95%) and three (3) facilities got a three (3) star rating. Suggestions for improvement have been given to the relevant facilities to improve human resource management.
- ii. Guidelines for the Management of Emoluments in MOH to strengthen the efficiency in human resource and financial management throughout the *Pusat Tanggungjawab* (PTJ) (Image 2.2).

Image 2.2
MOH Management of Emoluments Guidelines



MOH Management of Emoluments Guidelines



MOH Management of Emoluments Guidelines QR Code

Source: Human Resource Division, MOH

HUMAN RESOURCE MANAGEMENT IN DEALING WITH THE COVID-19 PANDEMIC

SPECIAL ALLOWANCE FOR DOCTORS AND HEALTH PROFESSIONALS IN DEALING WITH AND CONTROLLING THE SPREAD OF COVID-19

The government has provided a special COVID-19 allowance to health workers of RM400 per month from March 2020 and the allowance has been increased to RM600 per month from April 2020 onwards. The provision of this allowance serves to appreciate frontline workers who are directly exposed to the risk of infection while performing their duties to address and curb the COVID-19 pandemic. As of 31 December 2020, a total of RM367 million in claims has been paid to 793,716 approved claims. Circulars and procedures are provided to ensure that the management and payment of the allowance are orderly and comply with the financial rules in force.

CONTRACT APPOINTMENT OF HEALTHCARE WORKERS

As of 31 December 2020, a total of 8,330 healthcare workers from various service schemes have been appointed on a contract basis to assist in the management of the COVID-19 pandemic for a period of three (3) to 12 months. This figure includes the purchase of counselor service from 200 registered counselors to give counseling services and psychosocial support to the customer in health clinics nationwide. Details of appointments according to the service scheme are as in [Table 2.2](#). A total of 3,622 contract officers consisting of 585 Medical Officers, 1,071 Dental Officers and 1,966 Pharmacists were re-appointed on a one-off contract for 12 months to help deal with the COVID-19 pandemic.

Table 2.2
Contract Appointment To Assist In The Management Of The COVID-19 Pandemic

No.	Service Scheme	Total
1.	PRIHATIN Economic Stimulus Package (ESP)	2,376 Health Officers a) Nurse b) Retired/ Private Nurse c) Assistant Medical Officer d) Medical Laboratory Technologist e) Science Officer
2.	COVID-19 Fund	44 Contract For Service (CFS) Private Doctor/Private Specialist 200 CFS Purchase of Counselor Services 1,634 Paramedic Members a) Nurse b) Assistant Medical Officer c) Medical Laboratory Technologist d) Assistant Environmental Health Officer 485 Health Officer a) Medical Laboratory Technologist b) Science Officer c) X-Ray Interpreter
3.	MOH existing allocation	3,591 Health Officers a) Medical Laboratory Technologist b) Science Officer c) X-Ray Interpreter d) Assistant Medical Officer e) Nurse
Overall total		8,330

Source: Human Resource Division, MOH

PLACEMENT AND MOBILISATION OF HUMAN RESOURCES FOR HEALTH

To fulfill the service needs in managing the spread of COVID-19, MOH has implemented the mobilisation of health workers to assist in screening procedures and medical treatment. This mobilisation initiative also involves other agencies and Ministries at the Federal and State levels as in [Image 2.3](#).

Image 2.3
Placement And Mobilisation Of Human Resources For Health



Source: Human Resource Division, MOH

WAY FORWARD

MOH is constantly enhancing efforts to strengthen and improve governance of health services and the management of human resources for healthcare. This is to ensure the transparency and efficiency of government health services and public service. Human resource management governance in MOH will also be improved through inclusive strategic approaches, application of new norms and the emphasis on the implementation of digital initiatives.

TRAINING MANAGEMENT DIVISION

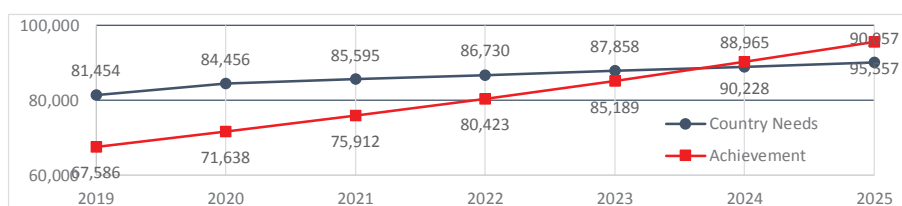
Training Management Division (BPL) is responsible for ensuring learning opportunities of MOH's staff thru a quality learning process. In concurrent with BPL's objective to develop an excellent human capital of MOH via strategic training plan, many activities were implemented through a training program to produce knowledgeable, competent, disciplines and strong work ethics, value and commitment staffs.

ACTIVITIES AND ACHIEVEMENTS

MANPOWER PLANNING

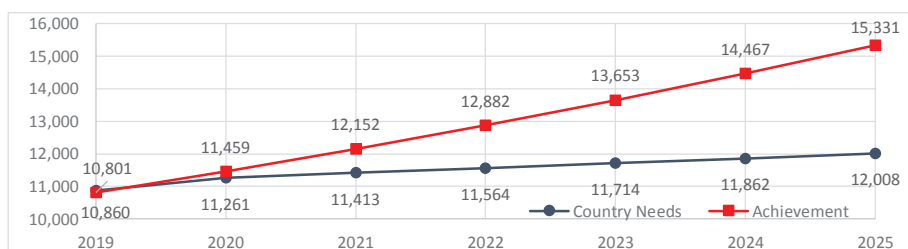
The projection of demand and supply for Medical Officers for the reference year 2020 leads to a shortage to fulfill for country's needs even though the numbers of supply for Medical Officers is increased as shown in [Figure 2.5](#). However, the gap of demand and supply of these professions became smaller when public universities and private higher education institution enlarge their training capacity include the graduates abroad.

Figure 2.5
Current Demands And Supply Of Medical Officer With Projection Using Ratio Of 1: 400 To Populations



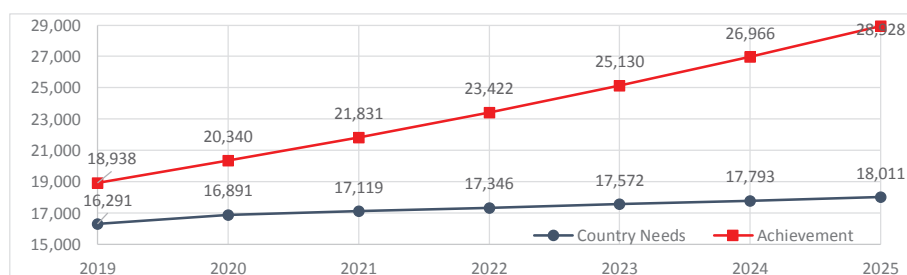
Source: Training Management Division, MOH

Figure 2.6
Current Demands And Supply Of Dentist With Projection Using Ratio Of 1: 3,000 To Populations



Source: Training Management Division, MOH

Figure 2.7
Current Demands And Supply Of Pharmacist With Projection Using Ratio Of 1: 2,000 To Populations



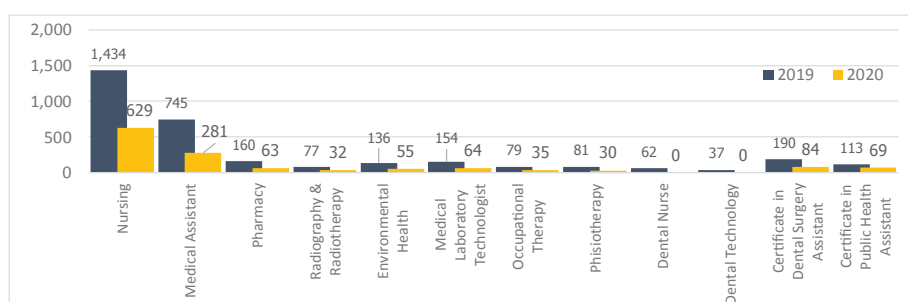
Source: Training Management Division, MOH

TRAINING PROGRAM

Pre-Service Training

In 2020, the Ministry of Health (MOH) Training Institutes offered 1,452 places for 11 programs in Pre-Service Training. Out of the total number offered, about 1,342 trainees have registered and currently undergoing training. Compared to 2019, the total number of trainees for the year 2020 is lower than in 2019. This is because student admission can only be conducted once during the year, which is in January 2020. MOH could not implement the July 2020 admission session as a measure to curb the widespread of the Covid-19 pandemic. The comparison of registered trainees for 2019 and 2020 according to each program/discipline is shown in Figure 2.8.

Figure 2.8
Numbers of Intake by Program, 2019 to 2020



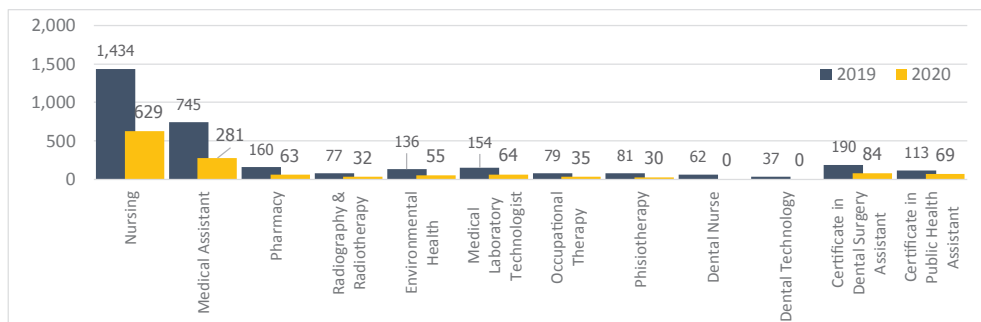
Source: Training Management Division, MOH

Advanced Diploma Program and Post-Basic/Specialisation Course

In 2020, a total of 1,996 trainees have registered in the Advanced Diploma (959) and Post-Basic/Specialisation courses (1,037). Of these, there were 1,594 members of Allied Health Sciences from the Ministry of Health and other government agencies, 63 from the Statutory Bodies, and 339 from Private Health Institutions. Twenty-nine programs were offered for Advanced Courses in 2020, as shown in Figure 2.9 and Figure 2.10. Advanced Diploma in Midwifery (497 participants) and Advanced Diploma in Emergency Care (189 participants) get the highest demand among all other programs.

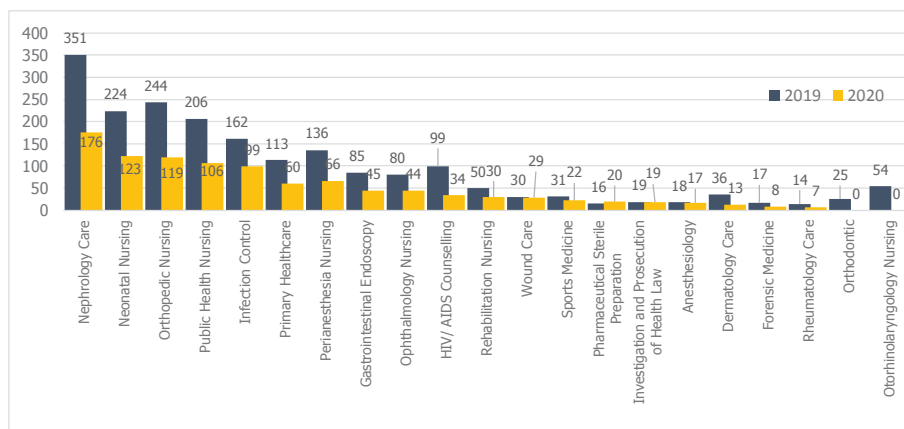
The significant decrease of Advanced Courses participation in 2020 compared to 2019 (4,430 people), is because of the single intake of new trainees in that year compared to twice in the previous years. This is due to the Health Institutions' constraints in managing the COVID-19 pandemic, which requires trained personnel in the field. Besides, trainees' total capacity is also reduced because MOH Training Institute (ILKKM) is subject to the SOP for academic sessions during the COVID-19 pandemic. Moreover, 11 ILKKMs have been gazetted as COVID-19 Quarantine and Low-Risk Treatment Centre (PKRC).

Figure 2.9
Intake of Advanced Diploma in MOH's Training Institution 2019 to 2020



Source: Training Management Division, MOH

Figure 2.10
Intake of Specialisation (Post Basic Program) in Ministry of Health Training Institution, 2019 to 2020



Source: Training Management Division, MOH

Master Program for Medical Officer

A total of 1,214 medical officers were granted a scholarship by the Federal Government to pursue a Master's in medical programs specialising in various fields for the year 2020, as shown in [Table 2.3](#). The number of Medical Officers granted scholarships increased by 7.8 per cent in 2020 compared to 2019.

Table 2.3
Intake of Medical Officers for Master Program, 2019 to 2020

No.	Discipline	2019	2020
1.	Anesthesiology	116	75
2.	Public Health/Community Medicine	94	116
3.	Clinical Oncology	14	67
4.	Neurosurgery	14	111
5.	Obstetrics & Gynecology	72	60
6.	Ophthalmology	54	69
7.	Orthopedics	74	69
8.	Otorhinolaryngology	48	56
9.	Pathology	71	75
10.	Pediatrics	72	47
11.	Internal Medicine	92	58
12.	Emergency Medicine	69	100
13.	Family Medicine	89	135
14.	Nuclear Medicine	6	11
15.	Rehabilitation	8	11
16.	Sports Medicine	7	85
17.	Transfusion Medicine	8	18
18.	Plastic Surgery	5	8
19.	Psychiatry	56	12
20.	Radiology	74	6
21.	General Surgery	68	12
22.	Pediatric Surgery	8	5
23.	Forensic	7	8
	TOTAL	1,126	1,214

Source: Training Management Division, MOH

Master's and Doctorate Programs

In 2020, 136 MOH's officers from various health service schemes have been offered the scholarship for the Master's program and a total of 29 officers at PhD level in areas related to the health sector. The number of scholarships offered in 2020 was slightly increased by 10% compared to 2019. The scholarships were offered to 56 Dental Officers, 38 Pharmacists while the rest are offered to other health professions in MOH.

Half Paid Study Leaves or Study Leaves Without Scholarship For MOH Support Group

In 2020, 32 applications were received and after the screening process and approval from top management, 22 officers were granted half-pay study leave without a scholarship to pursue their first degree. The qualified applicants are Assistant Medical Officers (16), Assistant Pharmacies (2), Staff Nurse (3) and Medical Laboratory Technologist (1).

Training Program Development

In the year 2020, Training Management Division has developed two specialisation programs namely Advance Diploma in Medical Imaging and Trauma while the other was Post Basic's Certificate in Stoma Care and Continence. This program will be offered in 2022 once it is endorsed by Education Board (*Lembaga Pendidikan*), MOH. Post Basic's Certificate in Otorhinolaryngology Treatment has been upgraded into Advanced Diploma in Otorhinolaryngology Care and these programs are expected to be implemented in 2022. A revision and improvement have been made upon three programs based on Malaysia Qualification Framework version 2.0 for:

- (i) Advance Diploma in Gerontology Treatment;
- (ii) Advanced Diploma in Palliative Care; and
- (iii) Advanced Diploma in Perioperative Care.

This division had also introduced a hybrid learning approach, an online learning concept to the whole MOH's training Institution. This method will be a part of the teaching and learning concept used in the future, through the development of the Learning Management System (LMS) in the MOH's training Institution.

Tutors Development

In 2020, the number of tutor posts (multiple fields) was 1,203 and the number of positions had been filled was 968 in 24 MOH's Training Institutions including Training Management Division. while the numbers of Clinical Instructors post are 445 and the number of positions had been filled was 391 Clinical Instructor, as updates on December 2020.

In the year 2020, Tutor Development Unit (UG), Training Management Division, has successfully organised 4 functional and 1 generic course or workshop including a professionalism program for Clinical Instructors in MOH's Training Institution. The courses or workshops are aimed at exposing teaching and learning techniques and forming a paradigm shift in leadership in driving ILKMM as a Centre of excellence (CoE).

Video competition for Tutors Day Year 2020 was organised by the Tutors Development Unit. The theme for Tutor Days year 2020 was New Norms: Evolution In Us. 24 MOH's Training Centre joined the video competition. The winner of this competition was ILKMM Sungai Buloh and the most viewers' video was ILKMM Seremban (Medical Assistants).

WAY FORWARD

BPL will further, play the role in realizing the achievement of the defined vision, mission and the Strategic Plan of training for MOH and innovation will be implemented to develop an excellent human resource for MOH thru a strategic training plan.

COMPETENCY DEVELOPMENT DIVISION

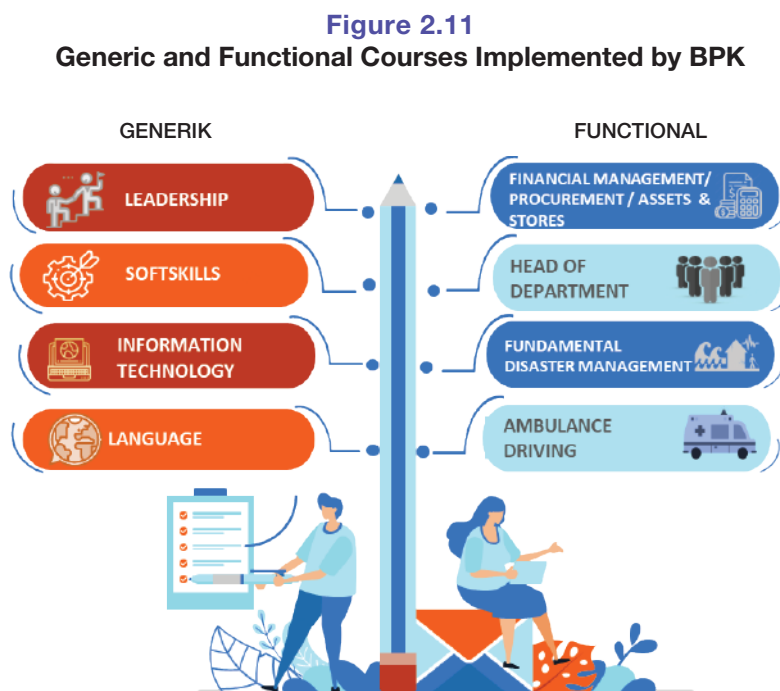
In line with the government's commitment to ensure the success of the digital transformation agenda and to help promote Malaysia as an Industry Hub 4.0 in the Southeast Asian region, BPK is committed to put competency development of MOH staff as an important aspect in ensuring the services provided by MOH is in line with the current and future needs of Ministry.

The COVID-19 pandemic in the year 2020 made BPK rethink and change its approach in conducting its programs, courses, conferences, seminars and workshops with new norms which comply with the safety procedures and health protocols issued by the Malaysian National Security Council (MKN) and MOH.

ACTIVITIES AND ACHIEVEMENTS

COMPETENCY-BASED TRAINING – GENERIC & FUNCTIONAL (GOVERNANCE) COURSES

In order to develop competencies that enhance the MOH's staff and organisation performance, BPK has been conducting various generic and functional courses covering the following areas (Figure 2.11).



Source: Competency Development Division MOH

In 2020, a total of 1,334 MOH staff attended BPK's generic and functional courses. The Pre-& Post Assessment analysis of the BPK's courses in 2020 shows an increase of up to 92.1% in the participants' understanding and knowledge after attending BPK's courses.

MyPORTFOLIO AND JOB DESCRIPTION

The main focus of BPK in 2020 is to make improvements on MyPortfolio and Job Description (JD) for MOH staff. BPK has been responsible for ensuring that all MOH staff are given briefings, workshops and information on the procedure of preparing MyPortfolio based on Pekeliling Kemajuan Pentadbiran Awam (PKPA) No. 4 Year 2018 - MyPortfolio: Public Sector Work Guide, as well as conducting an audit/inspection on MyPortfolio that has been prepared for each job position at MOH. A total of 3,398 MyPortfolio and JD of MOH staff were audited throughout 2020.

TALENT DEVELOPMENT PROGRAMME

Talent Development Programme (TDP) is a well-designed and structured program meant to help enhance the leadership skills of MOH officer's especially the emerging leaders in MOH. Five (5) characteristics of competencies for leadership in the future namely strategic, transformative, agile/adaptive, authentic and executive skills are emphasized in the TDP program. In 2020, BPK conducted the TDP course for the 2nd Cohort.

SPECIAL COURSE FOR THE CONFIRMATION OF THE SPECIAL GRADE C PROMOTION

Every year BPK conducts a special course for the confirmation of the Special Grade C promotion of MOH officers. This is a mandatory course for MOH's officers who have been newly promoted to the Special Grade C. The course is developed to ensure that the participants emerge with new knowledge, skills and competencies especially leadership, good governance and management skills to help enhance their performance as a Special Grade C officer in MOH.

Image 2.4

Special Course for the Confirmation of the Special Grade C Promotion of MOH Officers 2020



Source: Competency Development Division MOH

THE DEVELOPMENT OF MOH AMBULANCE DRIVING COURSE MODULE

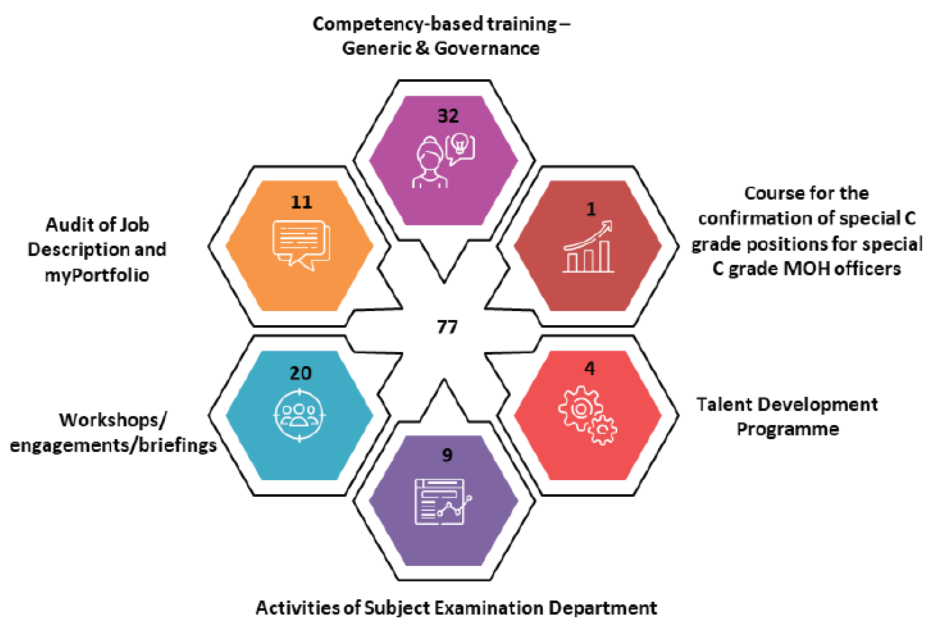
The development of the MOH Ambulance Driving Course Module was successfully implemented in 2020 in collaboration with the Malaysian Road Transport Department (JPJ), the Malaysian Institute of Road Safety Research (MIROS) and the Emergency Department of MOH. A total of 14 modules have been developed for the implementation of the Ambulance Driving Course in the future with a target of 2,600 ambulance drivers across Malaysia

Image 2.5
MOH Ambulance Driving Course Module Development Workshop



Source: Competency Development Division MOH

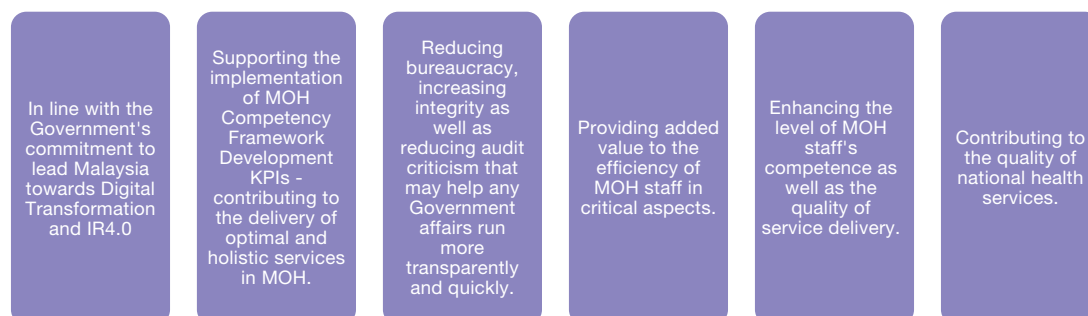
Figure 2.13
Summary of BPK Activities 2020



Source: Competency Development Division MOH

WAY FORWARD

Figure 2.14
Implementation of programs and courses implemented by BPK



Source: Competency Development Division MOH

The programs and courses implemented by BPK are very significant to ensure that the skills and competencies of MOH staff are developed and enhanced to help improve the efficiency of the MOH services.

BPK will focus on digital or online training approaches by organizing fully online blended learning courses to ensure the continual improvement of the MOH staff's competencies to ensure efficient and effective MOH service delivery.

MANAGEMENT SERVICES DIVISION (BKP)

Management Services Division (BKP) is responsible for managing matters related to financial and asset management, general administration, information resources and record management as well as the coordination of parliamentary and quality affairs for the Ministry of Health headquarters (MOH HQ). BKP also provides support services such as consultation in protocol matters and safety aspects to ensure efficient and professional management to support the enhancement of MOH's delivery health services quality.

BKP consists of four (4) main branches which are Finance and Asset Management Branch, General Management Branch, Information Resources and Record Management Branch and Parliament and Quality Branch.

FINANCE AND ASSET MANAGEMENT BRANCH

Finance and Asset Management Branch manages all finance-related matters for the MOH HQ including salary, allowances, claims and bonuses revenue collection, bills and claims payment, overseas applications and office space rental. This branch is also in charge of asset management (premises rental, maintenance and procurement) and is responsible for planning, designing, managing, coordinating and implementing the Protection Security System in MOH. The implementation of affairs under this branch is implemented through three (3) units namely the Finance Unit, Asset Management Unit and Security Unit.

FINANCE UNIT

For 2020, this Unit is responsible for the MOH HQ's Management Programme whereby a total of RM1.34 billion has been allocated under the operating budget. The performance-based expenditures for the HQ's Management Programme for the financial year ending on 31 December 2020 are 100.64 per cent. Total allocations and expenditures by activity are shown in [Table 2.5](#).

Table 2.5
Total Allocations and Expenditures by Activity under Management Programme for the Financial Year Ending 31 December 2020

Activity	Allocation (RM)	Expenditure (RM)
HQ Management	540,001,569.84	575,174,909.65
Human Resources	14,069,600.00	13,569,856.38
Finance	368,142,850.45	367,086,849.99
Training	377,751,065.25	359,073,572.28
Information Technology	38,817,877.36	32,896,619.83
Competency Development	4,295,690.00	3,936,747.82
TOTAL	1,343,078,652.90	1,351,738,555.95

Source: Management Services Division, MOH

ASSET MANAGEMENT UNIT

The Asset Management Unit is responsible for managing matters related to assets, rental of premises, maintenance and procurement. The performance for each activity for the year 2020 is as in [Figure 2.15](#).

Figure 2.15
Summary of Activities of Asset Management Unit for 2020

-
- ① Building Maintenance of MOH Putrajaya Office Complex; and
 - ② Cleaning services and Pest Control for Allied Health Sciences Division office in Diplomatic Precinct, Food Safety & Quality Division and Training Management Division in Precinct 2 and Cenderasari building (TCM, BPK and MMC)
 - One (1) maintenance meeting were held (Meetings were postpone due to MCO)
 - 9,360 Complaints and defects were fixed
 - Maintenance and Cleaning Services Company appointed
 - Compliances to the cleaning and pest control services standards based on quotation from the Quotations Committee
 - ③ Asset Registration
 - Capital Assets: 64 units;
 - Low valued Asset: 216 units
 - ④ Government Moveable Assets Management Committee (JKPAK)
 - Four (4) meetings per year

Source: Management Services Division, MOH

SECURITY UNIT

The Security Unit is responsible for planning, designing, managing, coordinating and implementing the Protection Security System in MOH. Security Unit provides advice in security matters including the law, regulations and security affairs regarding security protection to agencies and departments under the jurisdiction of MOH. This Unit is also the reference center for inquiries regarding confidential documents related to the Official Secrets Act 1972. Among the programs and activities that were organised in 2020 are as follows:

- i) Official Secret Document Management Workshop for MOH Professionals and Management Officers; 26 to 28 February 2020; MITC Hotel, Malacca.
- ii) Fire Safety and Emergency Course; 20 March 2020; MOH HQ.
- iii) Official Secret Document Management Workshop for MOH Middle Management Officer; 16 to 18 August 2020; Bayou Lagoon Park Resort, Malacca.
- iv) Protection and Security Management Workshop for KKM Security Officers 2020; 26 to 28 August 2020; The Regency Hotel, Kuala Lumpur.

Image 2.6

MOH Security Unit Programme 2020



Official Secret Document Management Workshop for MOH Professionals and Management Officers



Fire Safety and Emergency Course in MOH Headquarters



Official Secret Document Management Workshop for MOH Management Officer



Protection and Security Management Workshop for KKM Security Officers 2020

Source: Competency Development Division MOH

GENERAL MANAGEMENT BRANCH

The General Management Branch manages services and administration matters within MOH HQ to ensure that all MOH affairs, programs and activities are carried out in an orderly and efficient manner with compliance with the current guidelines and instructions from the Government. Apart from that, this branch also provides consultation for protocol and psychology matters. The units under this branch are Human Resource Management Unit, Administration Unit, Psychological Management Unit and Islamic Affairs Unit.

The summary of the programs/activities and achievements under the General Management Branch throughout 2020 is as shown in [Figure 2.16](#).

Figure 2.16

Summary of the programs or activities and achievements under the General Management Branch throughout 2020

Human Resources Management Unit

Selection of 524 recipients for MOH Outstanding Service Award 2020 (APC 2020)
 Management of 354 personnels for confirmation of appointment, confirmation of service and pension status
 Management of 80 personnels for confirmation of retirement (mandatory/ optional/ issuance)
 Management of 582 personnels for promotion
 Management of 7542 Kew. 8 documents

Administration Unit

97.69% issues solved through the Majlis Bersama Jabatan (MBJ)
 1,475 appointments for the Hospital Visitors Board (ALPH) for the period of 1 June 2020 to 31 May 2022
 205 appointments for the Visitors of Psychiatric Hospital Board (ALPHP) for the period of 1 August 2020 to 31 August 2023
 Coordination of ten (10) events on COVID-19 Contribution to MOH
 Coordination of the Opening Ceremony of the Kuala Lumpur Women and Children's Hospital Facility by Her Majesty the Raja Permaisuri Agong on 20 January 2020

Psychology Management Unit

Implementation of one (1) Financial Education Program through EPSA with 135 participants
 Implementation of three (3) Public Service Mentoring Partner Program (AKRAB) with 50 participants
 Implementation of three (3) MOH 'Training of Trainers' (TOT) Mentoring Programs 2020 with 42 participants
 Coordination of 'Duit for Baby' Program with Bank Simpanan Nasional (BSN) and Credit Counseling and Management Agency (AKPK)
 Implementation of one (1) 'Training of Trainers' Program (TOT Module) "Intensive Intervention for Average Performer" (IIAP) to MOH Psychological Officers with 35 participants

Islamic Affairs Unit

Advisory services related to the management of Islamic affairs in MOH pertaining:

- Worship Friendly Hospital Program
- Islamic Medical Practitioner Regulatory Board
- Patient Spiritual Care Program in all hospitals / health facilities
- Islamic Social Action Plan (PTSI) at MOH level
- Distribution of manuscripts published by KKM and JAKIM:
- Garis Panduan & Doa COVID-19; Buku Doa Wabak YBMK; Buku Inilah Doaku; Buku Soal Jawab Fiqh COVID-19 (Updated Version)

Source: Management Services Division, MOH

INFORMATION RESOURCES AND RECORD MANAGEMENT BRANCH

The Information Resources and Record Management Branch provides library services to MOH employees and is responsible for managing records at MOH. There are two (2) units under this branch.

INFORMATION RESOURCES UNIT

The Information Resources Unit provides library services as well as providing the access to online databases and journals through the Virtual Library Portal for MOH employees nationwide. The summary of activities and achievements of the Information Resources Unit for 2020 is as shown in [Table 2.6](#).

Table 2.6

Summary of Programs & Activities and Achievements of the Information Resources Unit

No.	Programs/ Activities	Achievements
1.	Library Development, Consultancy and Information Services	<ul style="list-style-type: none">• Coordinate 84 medical libraries under MOH.• Organised Workshop on 'Biblioterapi: Peranan Perpustakaan di Perpustakaan Perubatan' for MOH's medical libraries staff.• Documentation of 500 books and thesis for the library collection.• Subscribed five (5) databases for Virtual Library Portal: Access Medicine, Clinical Key for Nursing (including BiblioTech & Wiley eBooks), Emerald Insight, LawNet and OVID.• Virtual Library Portal access - 86,496
2.	Reading Motivation Programs	<ul style="list-style-type: none">• Organized four (4) themed exhibitions and 1 Merdeka Quiz: "MALAYSIA PRIHATIN"• Four (4) times bulk loan from the National Library of Malaysia• Online MOH <i>Language Competition 2020 in collaboration with Dewan Bahasa dan Pustaka (DBP)</i> - Covid-19 Themed Poetry Creation Competition, Crossword Competition & Children's Storytelling Competition

Source: Management Services Division, MOH

RECORD MANAGEMENT UNIT

The Record Management Unit is responsible for the management of records in MOH which includes providing consultancies on record management, implementation of records management programs, management of MOH mails and registry and also the monitoring of the implementation of Digital Document Management System (DDMS) for MOH. Summary of achievements as shown in [Table 2.7](#).

Table 2.7
Summary of Activities and Achievements of the Records Management Unit

No.	Activities	Achievements
1.	Digital Document Management System (DDMS)	Implementation of DDMS System on 5,293 MOH personnel and 37 divisions under MOH HQ
2.	Management of MOH Personnel Files	<ul style="list-style-type: none"> • Management of 30,817 Personnel Files to Human Resources Division, MOH HQ • Registration of 6,851 personnel files through Personnel Files Management System
3.	Implementation of Records Management Programme	<ul style="list-style-type: none"> • Implementation of six (6) courses and eight (8) briefing on record management to various PTJs • Consultation of file and mail management to 37 divisions in MOH HQ • Record Management Inspectorate in four (4) divisions in MOH HQ • Management of record disposal as below: <ul style="list-style-type: none"> - Disposal of 17,701 files - 612 files transferred to the National Archive of Malaysia - 2,057 service records transferred to the National Archive of Malaysia
4.	Management of MOH HQ Mails and Registry	<ul style="list-style-type: none"> • Management of 130,977 mails; and • Delivery of 138,917 mails and parcels

Source: Management Services Division, MOH

PARLIAMENT AND QUALITY BRANCH

The Parliament and Quality Branch is a new branch under BKP which effective on 1 September 2019. This branch previously in known as the KPI and PEB Unit, was one of the divisions under the MOH Management Program. Currently, this branch acts as the coordinator of matters related to Parliament, Key Performance Indicators (KPIs) for the ministerial level as well as the MOH Senior Managers and the focal point for the coordination of innovative innovation and creative initiatives for MOH. This branch consists of three (3) units, namely the Parliamentary Unit, KPI Unit and Innovation and Quality Unit.

PARLIAMENTARY UNIT

For 2020, Parliamentary Unit coordinated the movement of Minister, Deputy Ministers and MOH officials to the Parliament such as the arrangement of RT-PCR testing to comply with the enforcement of the Standard Operating Procedure (SOP) imposed by the National Security Council (MKN). A total of five (5) series of RT-PCR swab test sessions were arranged with the collaboration of the Putrajaya District Health Office (PKD), Precinct 11 involving at least 150 MOH officers, including the MOH's Top Management and officials.

A total of 440 questions were received throughout the 14th Parliamentary sitting which consists of the following categories:

- i. Oral Questions (165) and Non-Oral Questions (81);
- ii. Minister's Question Time (6);
- iii. Raised Issues during Royal Address Debate (58);
- iv. Raised Issues during Budget 2021 Debate (118); and
- v. Standing Orders 17 and Standing Orders 18 (1) (12).

Table 2.8
Number of Questions Answered Based on Divisions 2020

No.	Division	Number of Questions Received
1.	Disease Control	127
2.	Planning	47
3.	Medical Development	45
4.	Human Resource	42
5.	Development	34
6.	Finance	15
7.	Family Health Development	13
8.	Public Health Development	8
9.	Engineering Services	7
10.	Pharmaceutical Services	6
11.	Policy and International Relations	4
12.	Nutrition	3
13.	Food Safety and Quality	2
14.	Procurement and Privatization	2
15.	Medical Practice	2
16.	Nursing	2
17.	Training Management	1
18.	Allied Health Sciences	1
19.	Oral Health	1
20.	Malaysian Medical Council (MMC)	1
21.	National Blood Centre (PDN)	1

Source: Management Services Division, MOH

KEY PERFORMANCE INDICATOR (KPI) UNIT

For 2020, KPI Unit executed the KPIs as below:

- i. Ministerial Performance Indicator (MPI) for Minister of Health; and
- ii. Key Performance Indicators (KPIs) for Senior Managers of The Public Service.

The list of Tier 1 and Tier 2 PPTA under the Management Scheme, which is fully evaluated by the 2020 KPIs for the MOH senior managers of the public service as below:

Table 2.9
Tier 1 and Tier 2 PPTA

Tier 1	Tier 2
<ul style="list-style-type: none">Secretary-General	<ul style="list-style-type: none">Deputy Secretary-General (Management)Deputy Secretary-General (Finance)Senior Undersecretary (Development)Undersecretary (Policy and International Relations)Legal AdvisorHead of Internal Audit

Source: Source: Management Services Division, MOH

KPI Unit is also responsible for the implementation of PPTA Tier 3 pilot performance assessment projects based on KPIs for the MOH senior managers of the public service as below:

Table 2.10
Tier 3 PPTA

Tier 3	
<ul style="list-style-type: none">Undersecretary (Human Resource)Undersecretary (Management Services)Undersecretary (Training Management)Undersecretary (Information Management)Undersecretary (Competency Development)	<ul style="list-style-type: none">Undersecretary (Finance)Undersecretary (Procurement and Privatization)Undersecretary (Account)Senior Deputy Undersecretary (Development)Deputy Director (Management) of Hospital Kuala Lumpur

Source: Management Services Division, MOH

In order to ensure the continuity of the implementation of KPI-based performance appraisals, the 2021 performance appraisal will be expanded to PPTA Tier 3, Tier 4 and above which involve senior officers with JUSA C and above within MOH.

INNOVATION & QUALITY UNIT

The Innovation Unit is the focal point of the MOH to coordinate the implementation of strategic initiatives of innovation and creativity that focuses on improving the quality, productivity, efficiency and effectiveness of the public service delivery system in MOH. High-impact innovation projects are often given due recognition by MOH.

Ministry of Health's Innovation Award

In 2020, MOH coordinated the MOH Innovation Award. A total of four (4) categories were competed, namely product, service, process and technology. The winners of the awards received prizes in the form of trophies, certificates of appreciation and cash.

Public Sector Conducive Ecosystem (EKSA)

Three (3) agencies under the MOH have successfully obtained recognition on EKSA Do-It-Yourself (DIY) from MAMPU. The agencies are the Melaka State Health Department, the Selangor State Health Department and the MOH Children's Dental Center & Training Institute, Georgetown, Penang.

Certification OF MS ISO 9001:2015

For 2020, MOH applied for MS ISO 9001:2015 certification by combining ten (10) management divisions in MOH. The first stage of the audit was held on 26 and 27 November 2020 while the second stage audit was held on 15 to 17 December 2020 through an online method following the COVID-19 pandemic situation. MOH has successfully passed both of the audit stages without any finding of non-compliance.

Image 2.7

The Second Stage of MS ISO 9001:2015 Certification Audit through Online



Source: Management Services Division, MOH

INFORMATION MANAGEMENT DIVISION (IMD)

The Information Management Division plays an important role in providing ICT services in the Ministry of Health Malaysia (MOH). Information and Communication Technology (ICT) is widely used to improve the quality of integrated, quality and sustainable digital health service delivery by strengthening the delivery of health services through a conducive digital ecosystem.

ACTIVITIES AND ACHIEVEMENTS

HIS@KKM ENHANCEMENT

The project comprises of the development of Clinical Documentation (CD) Module, Operating Theater Management System (OTMS), Laboratory Information System (LIS), Central Sterile Supply Services Information System (CenSSIS), Radiology Information System (RIS) and Picture Archiving and Communication System (PACS).

The CD module was implemented in stages at the Raja Permaisuri Bainun Hospital (HRPB) Ipoh, Perak starting 23 November 2019 and was fully implemented on 30 November 2020. The implementation of the CD Module at HRPB facilitated the hospital to manage patient treatment records more effectively through the creation of Electronic Medical Record (EMR).

The RIS and PACS modules have been completed and used at Raja Perempuan Zainab II Hospital (HRPZ II), Kota Bharu Kelantan starting on 18 July 2019. The implementation of this module facilitates hospitals to manage diagnostic imaging to improve the quality of clinical service delivery at HRPZ II.

The CenSSIS module was implemented at the Tuanku Ja'afar Seremban Hospital (HTJS) on 12 October 2020 and is currently in the Provisional Acceptance Test (PAT) phase. Meanwhile, the OTMS and LIS Modules are in the User Acceptance Test (UAT) phase.

IN-HOUSE SYSTEM DEVELOPMENT FOR MOH

In 2020, BPM has implemented the upgrade of existing applications and continues the development of applications that have begun to be developed in 2019 by using the BPM's internal expertise.

Upgrade The Application System

The Sistem Tabung Bantuan Perubatan (STBP) has been redeveloped based on the latest work flow process for the application module and application review module. The objective of the *Tabung Bantuan Perubatan* (TBP) is to help the less fortunate to finance part or all of the cost of treatment, medical equipment, rehabilitation equipment and medicines. This system will be used by the Finance Division, Medical Development Division, hospitals under the MOH and teaching hospitals as well as university hospitals in the management of online *Tabung Bantuan Perubatan* applications.

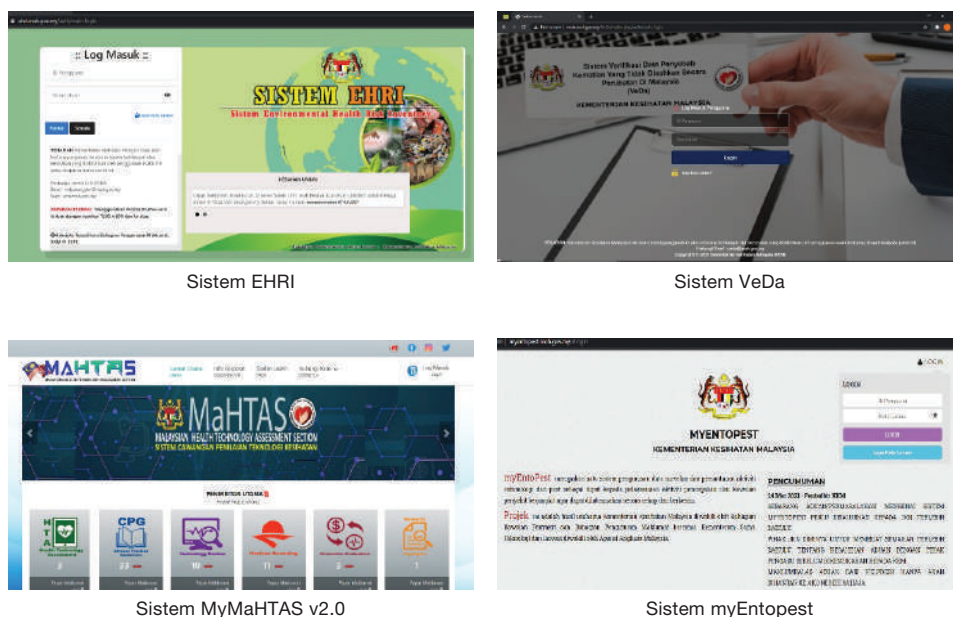
Application Development Extension

Below are four (4) applications that have started being developed in-house in 2019 and completed in 2020:

- i. **The EHRI** system aims to support the implementation of the Environmental Health Protection Program (PEKA) by providing an efficient and simple database system that can assist in analysing environmental health risks. Four (4) modules have been developed in 2020 namely Hazard Rating Module, Exposure Rating Module, Information Module and Report Module.
- ii. **The VeDa** system was developed in line with the "Guidelines and Procedures for Verifying Medical Uncertain Death Causes in Malaysia" to ensure a more efficient work process, more effective monitoring and ensure the security and confidentiality of Verbal Autopsy (VA) information at the national level. In 2020, system development will continue with Phase 2: Assignment Module, Phase 3: Report and Phase 4: Questionnaire Form for 12 Years and above.
- iii. **The MyMaHTAS v2.0** system is an easy and fast access application on the products of the *Cawangan Penilaian Teknologi Kesihatan* such as Clinical Practice Guidelines (CPG), Health Technology Assessment (HTA), Technology Review (TR) and Horizon Scanning (HS) which is based on the evidence-based medicine and value-based medicine to improve the quality of health in Malaysia. The focus of the development of MyMaHTAS for the year 2020 is the development of Mobile Applications as an alternative medium for users to obtain information.

- iv. The **myEntopest** system is a surveillance data management system and monitoring of entomological and pest activities as input to the implementation of infectious disease prevention and control activities in order to be implemented efficiently and effectively. In 2020, two (2) modules have been developed, namely the Larva Sample Module and the Adult Module for the scope of Malaria.

Image 2.8
Applications That Have Been Developed In-House



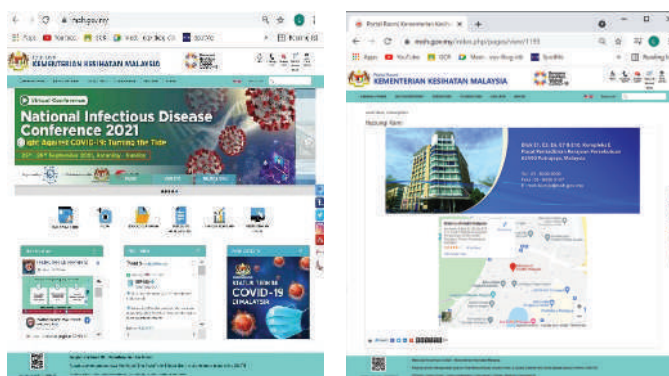
Source: Information Management Division, MOH

LAUNCH OF NEW PORTAL

The new MOH portal has been successfully launched on 10 September 2020. The new version provides desktop and mobile version display facilities to enable the portal to be displayed according to the access device screen, a more organised minimalist portal front page with three (3) frames news highlight and also implement the official MOH social media support (Facebook and Twitter) as well as comply with the portal monitoring criteria determined by MAMPU.

The design of the new MOH portal display is the result of the collaboration of the MOH Portal Team, namely the Information Management Division (BPM) and the Corporate Communications Unit (UKK) which also received consultation from the Chief Information Officer (CIO) and the MOH Minister's Office. While the content of the portal is a contribution from all Divisions/Units of IPKKM through the Content Supplier Officer appointed in each Division/Unit respectively.

Image 2.9
Ministry Of Health New Portal



Source: Information Management Division, MOH

ICT PROJECT TECHNICAL APPROVAL MANAGEMENT

The MOH ICT Steering Committee meeting chaired jointly by the Secretary-General and Director General of Health was held four (4) times, namely on 17 February 2020, 15 May 2020, 26 August 2020 and 17 December 2020.

The ICT Projects Technical Committee (JTI) meeting was held seven (7) times, namely on 4 February 2020, 17 April 2020, 29 June 2020, 4 August 2020, 1 September 2020, 23 September 2020 and 12 November 2020. A total of 95 ICT projects were given considerations for technical approval throughout 2020.

ICT TECHNICAL SUPPORT SERVICES

BPM receives MOH ICT Technical complaints via official phone call or email and is recorded into the ICT Complaints Management System (SPAI). ICT Technical Complaints received must be acted upon within three (3) working days. Actions taken include providing technical support services to complainants by BPM technicians and distributing ICT technical complaints received for supplier actions for technical support services under contract.

In 2020, BPM received a total of 9,364 ICT technical complaints. A total of 97.96% (9,173/9,364) of ICT technical complaints received were acted upon and resolved within the stipulated period.

INFORMATION SECURITY MANAGEMENT INSPECTION

Inspection of MOH Information Security Management is intended to review and monitor the compliance of MOH facilities on circulars, policies, acts and letters of instruction related to ICT security. Apart from that, this inspection also aims to see the availability of the implementation of the Standard Information Security Management System (ISMS) ISO/IEC 27001: 2013.

In 2020, a total of three (3) facilities have been selected to implement the inspection, namely Kajang Hospital, Selangor; Kuala Lumpur Hospital, Kuala Lumpur and Port Dickson Hospital, Negeri Sembilan.

Image 2.10
Implementation of Information Security Management Inspections at Facilities



Source: Information Management Division, MOH

TRAINING

In 2020, three (3) courses were organised by BPM, namely: -

Application System Size Calculation Course Using Function Point Analysis (FPA) Method

The course was held from 8 to 10 September 2020 at Kompleks Setia Perdana Putrajaya which was attended by 27 BPM officers and course conducted by guest speakers from MAMPU. The purpose of the course is to provide exposure and training to officers to estimate the size of application system development projects using FPA method. The knowledge can be applied in estimating project size for the development and maintenance of application systems more effectively.

MyPortfolio Workshop

The workshop was held on 23 to 25 September 2020 at Glory Beach Resort, Port Dickson, Negeri Sembilan and was attended by 33 BPM officers. The workshop was conducted by guest speakers from the *Jabatan Kesihatan Negeri* Melaka and Planning Division, MOH. The purpose of the workshop is to provide the understanding and improve the skills of officers to prepare MyPortfolio as well as build the ability to coordinate officers as reference experts and developing a group of dedicated officer to facilitate the implementation of MyPortfolio in BPM.

Government Procurement Method and Contract Administration Management Course (Supplies And Services)

The Government Procurement Method and Contract Administration Management (Supplies and Services) course at the Information Management Division (BPM), Ministry of Health Malaysia (MOH) was held on 25 to 26 August 2020 at Dewan Serbaguna, IPKKM, Level 8, Block E7, Complex E, Putrajaya. The purpose of the course is to provide useful knowledge and to improve competency in the procurement process and contract administration for the Information Technology Officers. A total of 28 participants attended the course comprising Management and Professional officers and implementing officers from the Information Management Division, MOH. The briefing was delivered by guest speakers from the Ministry of Education Malaysia and the MOH Procurement and Privatization Division.

WAY FORWARD

BPM will continue to play an important role in realizing the achievement of the defined vision, mission and the ICT Strategic Plan of MOH.

CONCLUSION

In conclusion, the main objective of the Management Program is to enable the achievement of the vision and mission of the MOH by providing support services such as human resource development, general administration, financial management, information system management and ICT infrastructure development. In the future, continuous improvement and innovation will be implemented to increase the effectiveness and efficiency of the digital service delivery system in MOH.



03

**FINANCE
DIVISION**

BUDGET MANAGEMENT

MOH was allocated RM30.6 billion in 2020 whereby RM27.94 billion was for Operating Budget (B42) and RM2.66 billion for Development Budget (P42). However, the Operating Budget was later revised to RM26.50 billion, a reduction of RM1.89 billion (6.76%) due to restriction warrant by the Ministry of Finance (MOF) and the reclassification of Operating Expenditure to Development Expenditure involving Hospital Support Services and Clinical Support Services.

PERFORMANCE OF OPERATING BUDGET

In 2020, MOH has spent RM27.01 billion (103.68%) of the total allocated budget. The highest operating budget allocation was for Medical Programme with the amount of RM14.23 billion (54.61%) followed by allocation for the Public Health Programme with the amount of RM5.75 billion (22.06%). [Table 3.1](#) shows the allocation and expenditure according to the program in 2020.

Table 3.1
Allocation and Expenditure of 2020 Operating Budget by Programme

PROGRAMME	ALLOCATION (RM)	EXPENDITURE (RM)	PERCENTAGE OF EXPENDITURE
Management	1,932,770,800	1,918,203,399	99.25
Medical	14,229,062,747	14,751,856,537	103.67
Public Health	5,747,911,239	6,158,221,536	107.14
Oral Health	979,350,458	1,003,537,403	102.47
Pharmaceutical Services	210,417,616	212,487,238	100.98
Research and Technical Support	334,113,153	329,894,992	98.74
Food Safety and Quality	93,039,587	99,491,543	106.93
Specific Programme	2,525,865,300	2,536,901,868	100.44
TOTAL	26,052,530,900	27,010,594,516	103.68

Note: The actual expenditures exceed 100 per cent due to additional provision for emoluments payments. Adjustments to the spending are made in the following year. (Data as of 31.12.2020 – not final)

Source: Finance Division, MOH

REVENUE MANAGEMENT

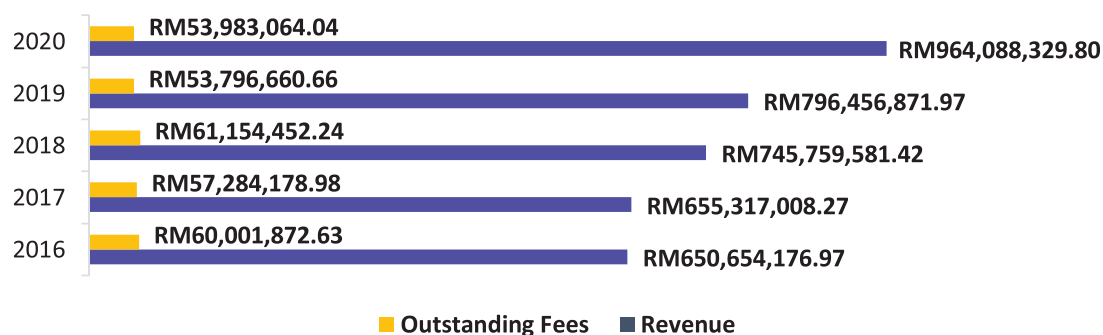
MOH recorded a total of RM964.09 million of revenues in 2020 whereby medical fees are the highest with RM465.44 or 48.28 per cent of the total revenue. [Table 3.2](#) shows MOH's total revenue in the year 2020. Meanwhile, [Graph 3.1](#) shows MOH's total revenue collection and outstanding fees from 2016 to 2020.

Table 3.2
Revenue Collection For Year 2020 According To Classification

CODE	CLASSIFICATION	REVENUE (RM)	PERCENTAGE (%)
71000	License, Registration Fees & Permits	115,544,357.94	11.98
72000	(i) Medical Fees	465,436,254.08	48.28
	(ii) Others (Non-medical fees)	49,908,923.36	5.18
73000	Sales of Goods	3,424,552.01	0.36
74000	Rentals	29,131,581.98	3.02
75000	Investments & Return of Investments	297,275.33	0.03
76000	Fines & Penalties	75,556,220.51	7.84
77000	Contribution & Compensation from Overseas & Local Contribution	38,626,605.11	4.01
80000	Non – Revenue Receipts	186,162,559.48	19.31
MOH TOTAL REVENUE		964,088,329.80	100.00

Source: Finance Division, MOH

Graph 3.1
MOH Total Revenue and Outstanding Fees (2016 to 2020)



Source: Finance Division, MOH

In 2020, the total outstanding medical fees in MOH is RM53.98 million whereby RM43.29 million (80.20%) of the outstanding medical fees is from non-Malaysian. The breakdown of revenue collected and outstanding fees under the Fees (Medical) Order by nationality is shown in [Table 3.3](#).

Table 3.3
Breakdown Of 2020 Revenue Collection and Outstanding Fees Under Fees (Medical) Order by Citizenship

NATIONALITY	COLLECTED FEES (RM)	PERCENTAGE OF COLLECTED FEES	OUTSTANDING FEES (RM)	PERCENTAGE OF OUTSTANDING FEE
Malaysian	254,414,662.82	54.66	10,690,606.80	19.80
Non-Malaysian	211,021,591.26	45.34	43,292,457.24	80.20
Total	465,436,254.08	100.00	53,983,064.04	100.00

Note: *Data as at 30 November 2020

Source: Finance Division, MOH

To ensure an effective government revenue collection management, MOH continuously updating and improving guidelines related to revenue management as well as ensuring that all officers involved in revenue management in MOH are given the training to increase their level of knowledge and competency in charge collection as outlined in the Fees (Medical) Order. In line with the new technology, MOH has implemented digital payment methods and expanded the e-Payment method at MOH facilities to facilitate the payment of medical bills. In order to encourage payment using the e-Payment method at the MOH facilities payment counter, the Ministry has launched Pay Using ATM MyDebit at Hospitals and Government Clinics Campaign. The campaign was launched by Minister of Health Malaysia, YB Dato' Sri Dr. Adham bin Baba on 14 August 2020

Image 3.1

Launching of the Pay Using ATM MyDebit at Hospitals and Government Clinics Campaign by MOH



Source: Finance Division, KKM

COVID 19 CASH DONATION

Due to the spread of COVID-19 in Malaysia in 2020, various kind-hearted companies, Non-Governmental Organizations (NGOs) and individuals in the country want to help MOH Front liners to fight the pandemic by making cash contributions. Therefore, MOH on 23 March 2020 in accordance to the Section 9, Financial Procedure Act 1957 has set up a trust account called *Akaun Amanah*

Pembelian Alat Kelengkapan, Keperluan Perubatan, Kemudahan dan Perkhidmatan di Fasilitas Kesihatan KKM. As of 31 December 2020, RM34,831,601.40 has been contributed to MOH through this Trust Account and MOH's Trust Account Committee has approved a total of RM31,134,620.53 for the purchase of medical equipment such as ventilators, infrared thermometers, ultrasound machines, manual crank beds and reagents for COVID-19 test. This expenditure is in line with the main intention of the creation of this Trust Account which is to purchase medical supplies and equipment to curb COVID-19.

FINANCIAL AIDS AND SUBSIDIES

MEDICAL ASSISTANCE FUND (TABUNG BANTUAN PERUBATAN)

Medical Assistance Fund or known as *Tabung Bantuan Perubatan* (TBP) was established on 15 January 2005 following Section 10, Financial Procedure Act 1957, governed by the Trust Deed, TBP Guidelines and the current regulations in force. The aim of TBP is to assist underprivileged patients by either partially or fully financing their treatment costs and purchase of rehabilitation devices or medications at the Government Hospitals and Public University Medical Centres. From 2005 until 2020, a total of RM457 million allocation has been received and more than 64 thousand patients have benefited from this Fund. In 2020, RM40 million has been allocated for TBP and a total of RM39.59 million funds for 3,271 patients has been approved by 31 December 2020.

HEMODIALYSIS TREATMENT COST AND ERYTHROPOIETIN (EPO) INJECTION SUBSIDIES

Haemodialysis treatment cost and EPO injection subsidy for poor or underprivileged patients with kidney disease getting treatment at Non-Governmental Organization (NGO) hemodialysis centres were introduced on 1 April 2001. This financial assistance in the form of treatment cost subsidy of RM100.00 for each hemodialysis treatment and Erythropoietin (EPO) injection of RM18.50 is given through NGO Haemodialysis Centre recognised by MOH. A total of RM35.50 million has been allocated to this program by MOF for the year 2020 whereby RM33.38 million has been spent. The subsidy payment involved 64 NGOs, comprising 126 dialysis centres and 2,657 active patients.

FINANCIAL ASSISTANCE FOR NGOS

Starting from 2002, MOH provides financial assistance for NGOs to carry out health activities like counseling, awareness campaigns, treatment and other activities for patients and communities. In 2020, a total of RM3.43 million was spent for various health-related activities carried out by 40 NGOs such as the Malaysian Hospice Council for Home Palliative Care for Cancer Patients, the Malaysian Association for the Prevention of Tuberculosis and the Child Obesity Prevention Organization and Adults.

MEDICAL BENEFITS FOR GOVERNMENT DEPENDENCE PATIENTS AND SUBSIDIES FOR UNDERPRIVILEGE PATIENTS AT INSTITUT JANTUNG NEGARA SDN BHD (IJNSB)

The government through MOH has channeled allocation to pay the cost of treatment for government dependence patients namely Federal Civil Servants, Retired Federal Civil Servants and underprivileged patients at IJNSB. In 2020, MOH has paid RM527.73 million to IJNSB whereby RM498.23 million (98.41%) of the payment is for the subsidy cost of government dependence patients. Other than that, the Government has spent RM28.44 million for payment of Fully Paid Patients from the government hospitals referred to IJNSB during the COVID-19 period and RM1.06 for payment of treatment under the Heart and Liver Transplant and Mechanical Heart Program in IJNSB.

PROCUREMENT AND PRIVATISATION DIVISION

The Procurement and Privatisation Division is responsible for managing programs related to procurement and privatisation, asset and store programs at the Ministry of Health (MOH). The Division needs to ensure that all procurement processes of equipment and services are the best, transparent, fair and providing value for money to the Government. Besides the procurement programs, the Division is also responsible for managing privatisation programs involving drug and store laboratories, procurement and maintenance of medical equipment at MOH Clinics, Hospital Support Services as well as Foreign Workers Health Supervision and Inspection Services. These privatisation programs must be in line with National Privatisation Policy. Therefore, the programs have been closely monitored and improvised constantly to ensure they achieve their objectives and desired output. The Division also regulates the management of stores, inventories and MOH assets to ensure all applicable rules adhere at all times.

MINISTRY'S PROCUREMENT PERFORMANCE

Procurement through a tender that has been implemented at MOH covers the procurement of pharmaceuticals, medical equipment, services, ICT, vehicles and Approved Products Purchase List (APPL). In line with the national resource optimisation policy, MOH has implemented savings in procurement expenditure to ensure the allocation received is sufficient to cover core services and patient care needs. This is to ensure health care services are not affected. The savings obtained are based on the comparison between the department's estimation price with the contract price offered as well as the price negotiation with the company which will be held after special approval by the Ministry of Finance Malaysia (MOF) has been received. [Table 3.4](#) shows the achievement of MOH Procurement in 2020 by categories.

Table 3.4
Achievement of MOH Procurement 2020

BIL	CATEGORY	PROCUREMENT VALUE (RM)	SAVINGS (RM)
1.	ICT	185,670,055.84	17,131,680.34
2.	Medical Equipment	117,605,624.00	17,762,906.47
3.	Pharmaceutical	1,964,946,101.82	436,431,595.90
4.	Toner / MTO	12,630,867.33	959,535.21
5.	Services	650,168,507.83	40,448,032.48
6.	Printing	4,776,471.13	1,584,216.87
7.	Medical Gas	285,630,772.20	20,345,000.00
8.	Uniform	90,413,569.08	18,780,071.87
TOTAL		3,311,841,969.23	553,443,039.14

Source: Procurement and Privatisation Division, MOH

MANAGEMENT OF MOH'S MOVEABLE ASSET

As of 31 December 2020, MOH has a total moveable asset of 2,738,425 units with a value of RM12,125,875,778.50. Every Payment Center is required to conduct inspections on all Government Assets at least one (1) time a year. This is to ensure the movable assets can be used and function optimally.

IMPLEMENTATION OF e-PROCUREMENT (eP) SYSTEM

The e-Procurement (eP) system which was developed in the year 2000 serves as a platform to enable Government agencies to procure online supplies and services from government-registered vendors. The system is one of the largest Government-to-Business (G2B) virtual markets in ASEAN with two (2) million online catalogs. Starting from January 2018, MOF has introduced a new eP system. Based on the records, MOH is the largest eP system user compared to other ministries and has used the eP system optimally. [Table 3.5](#) shows the Ministry's achievement in the use of the eP System for the year 2020.

Table 3.5
MOH Achievements in the Use of the eP System 2020

YEAR	TOTAL TRANSACTION	TRANSACTION VALUE (RM)	ALLOCATION (RM)	ACHIEVEMENT (%)
2020	715,345	5,731,877,322.29	7,000,000.00	81.9

Note: Data is until November 2020

COVID-19 NON-CASH CONTRIBUTION MANAGEMENT

The Procurement and Privatisation Division has prepared the Application Guidelines for Contribution to the MOH in order to address the spread of the COVID-19 Outbreak. Approval of non-cash contributions (goods) is by Approval Authority Board (Controlling Officer). All contributions shall be given free of charge without any terms and conditions. Contribution received according to the categories as of 31 December 2020 are as per [Table 3.6](#).

Table 3.6
COVID-19 Non-Cash Contribution

Ventilator Contributions	1,075 Units
Equipment (Medical equipment/machines including patient monitor, ultrasound, dialysis, thermometer)	1,583 Units
Consumables	159,788,345 Units
Other contributions (Non-medical equipment such as bed, kiosk, filter/air conditioner, vehicle, mobile phone, TV, printer etc)	13,824 Units
Overall Number of Contributors	609

Source: Procurement and Privatisation Division, MOH

EMERGENCY PROCUREMENT MANAGEMENT (AP173.2) IN DEALING WITH COVID-19

The Procurement and Privatisation Division has coordinated 989 emergency procurement applications to deal with the COVID-19 outbreak from 30 Divisions/Departments/Agencies under the MOH from March 2020 until 31 December 2020 with a value of RM1,088,252,837.08. This emergency procurement involves the acquisition of assets (medical and non-medical), medicines, reagents, consumables and Personal Protective Equipment (PPE). The implementation of the Emergency Procurement is to ensure sufficient medical and non-medical supplies at the MOH Health Facilities to combat the covid-19 pandemic.

CONCESSION AGREEMENT

The Procurement and Privatisation Division is managing four (4) Concession Agreements as follows:

- i. Medical Equipment Enhancement Tenure (MEET) Concession Agreement;
- ii. Foreign Workers Medical Examination Coordination & Surveillance System In Malaysia (FOMEMA);
- iii. Privatisation Of *Makmal Ubat & Stor* Concession Agreement With Pharmaniaga; and
- iv. Hospital Support Service Concession Agreement (HSS).

Privatisation projects implemented in the Ministry of Health Malaysia (MOH) have provided various benefits to the Government. Among them is to enable the comprehensive maintenance of medical equipment which will extend the “life-cycle” of the equipment. In addition, it also provides long-term financial savings to the Government. These benefits have enabled MOH to provide the best health services to the people.

ACCOUNT DIVISION

Account Division (BA) is responsible for providing comprehensive government accounting and financial services to enhance Responsibility Center (RC) accountability. As an Accounting Office, BA is responsible for ensuring all RCs transactions are being accounted for accurately and completely within the time frame. These are to ensure adequate internal controls are being implemented. The main functions of BA include accounting, consultancy, training and auditing as well as monitoring. Accounting management includes accounting for revenue collection, payment, trust account, asset and inventory in compliance with Federal Government accounting standards and policies.

In 2020, the accounting of COVID-19 pandemic management which covers the accounting of allowances payment to MOH front liners, procurement payments for medical equipment, reagent, medicine and consumable as well as trust account of *Akaun Amanah Pembelian Alat Kelengkapan, Kemudahan dan Perkhidmatan Hospital Kerajaan* were part of tasks performed by BA. BA had also issued two (2) specific guidelines for the management of transactions involving COVID-19 pandemic, namely *Tatacara Memperakaunkan Aset Secara Perolehan Darurat & Sumbangan Diterima Dalam Tempoh Wabak COVID-19 Di iGFMAS* and *Tatacara Pengurusan Perakaunan Terimaan Sumbangan Kemudahan Perubatan KKM*.

FINANCIAL MANAGEMENT

EXPENDITURES



Bills payment of MOH for the year 2020 amounted to RM12.31 billion (2,085,549 vouchers) as compared to RM8.5 billion (1,611,531 vouchers) in 2019. There was an increase in the payment amount by 44.82 per cent while the number of processed vouchers increased by 29.41 per cent for MOH PTJ.

BA had managed the payment of bills for PTJ *Ibu Pejabat Kementerian Kesihatan Malaysia* (IPKKM) amounting to RM3.44 billion (336,175 vouchers) as compared to RM2.68 billion (309,472 vouchers) in the year 2019.

EMOLUMENT MANAGEMENT

MOH emoluments in 2020 for permanent officers amounted to RM16.86 billion compared to RM15.88 billion in 2019, an increase of 6.17 per cent against the year 2019. Meanwhile, the payment of emoluments and remunerations for non-permanent officers amounted to RM15.50 million as compared to RM4.82 million in 2019. Emolument payment for IPKKM MOH Headquarters officers amounted to RM2.20 billion involving 32,935 officers.

TRUST ACCOUNT MANAGEMENT

Trust Account Section 10, Financial Procedure Act 1957

Kumpulan Wang Amanah Tabung Bantuan Perubatan (KWATBP) Fund was established for helping the underprivileged to finance the costs of medical treatment. The account balance of KWATBP as of 31 December 2020 amounted to RM85.02 million.

Trust Account Section 9, Financial Procedure Act 1957

The account balance of 21 Trust Accounts under Section 9 as of 31 December 2020 amounted to RM44.30 million.

DEPOSIT ACCOUNT MANAGEMENT

The account balance of 14 MOH Deposit Accounts as of 31 December 2020 amounted to RM102.18 million. Out of the 14 accounts, five (5) Deposit Accounts were hospital security deposits amounted to RM32.17 million whilst nine (9) were General Deposit amounted to RM70.01 million.

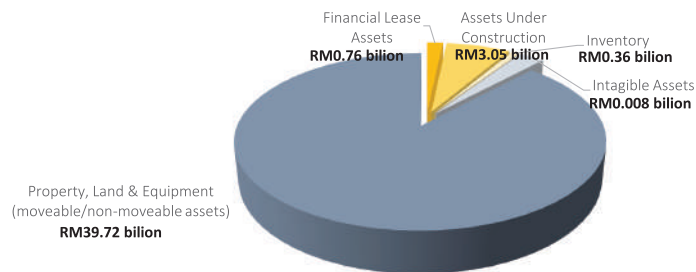
Asset Accounting

Figure 3.3 was shown on Non-Financial Assets As of 31 December 2020 that include opening balance assets and current procurement assets from 1 January 2018 until 31 December 2020 that classify base on the class of assets.

Accounting for Assets is carried out following accrual accounting standards and policies throughout the asset life cycle:

- Preliminary measurement during acquisition (cost element, cost component and additional cost),
- Subsequent measurements (depreciation, revaluation or impairment, and
- Derecognition (disposal and write-off).

Figure 3.2
Accumulated Data on Non-Financial Assets As at 31 December 2020

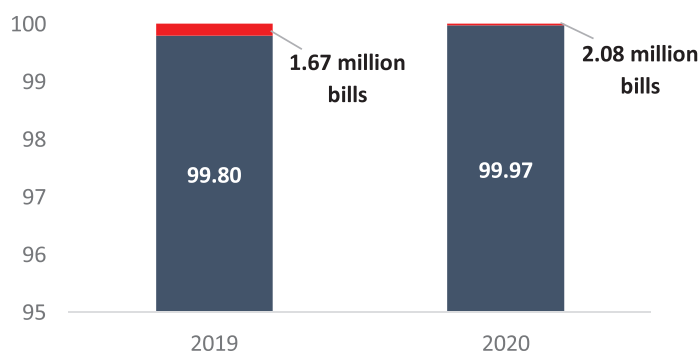


Source: Account Division, MOH

BILL PERFORMANCE MANAGEMENT

In 2020, a total of 2,085,549 payment vouchers amounting to RM12.31 billion were processed by the MOH RC. The performance of bill payments within 14 days for MOH payments was 99.97 per cent (2,084,974 bills) amounted to RM12.29 billion, an increase of 0.17 per cent as compared to 99.80 per cent in 2019. In 2020, 64.09 per cent of RCs (291 out of 454) managed to process payment within 14 days as compared to 41.67 per cent in 2019, an increase of 22.49 per cent.

Figure 3.3
Performance of Bill Payment in 14 days for 2019 & 2020

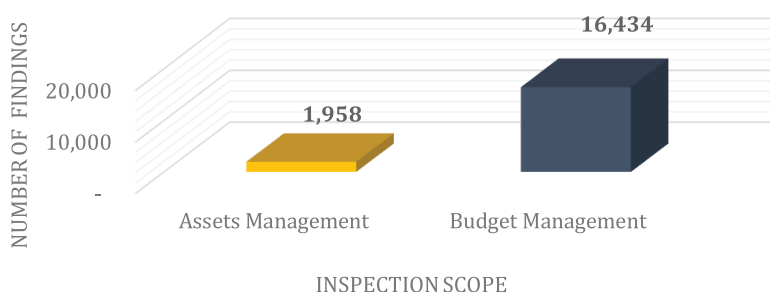


Source: Account Division, MOH

GOVERNANCE AND COMPLIANCE

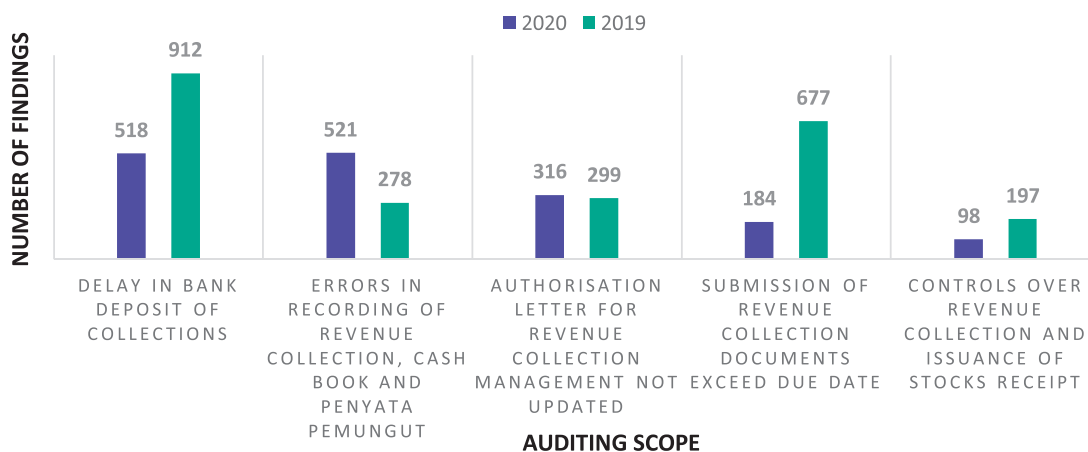
BA and the Accountant General of Malaysia have carried out accrual accounting compliance inspection for the scope of assets and expenses on 196 MOH PTJ RCs. Verification of monthly revenue collection document was also carried out on 432 MOH Main Collector's Offices. This monitoring is carried out to ensure that the existing procedures comply with accounting policies and standards as well as ensuring adequate internal controls to strengthen governance and accounting management at MOH RC. Audit Reports of accrual accounting compliance and observation letter on revenue collection management have been submitted to RCs for corrective actions and improvements.

Figure 3.4
Number of Findings on Auditing of Accrual Accounting Compliance 2020 of MOH RC



Source: Account Division, MOH

Figure 3.5
Number of findings for Revenue Collection documents review at MOH Collector Offices For the Year 2019 & 2020



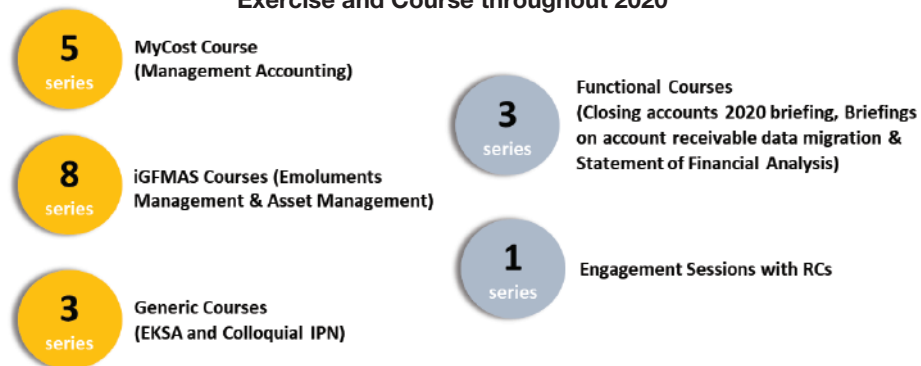
Source: Account Division, MOH

CONSULTATION AND TRAINING

A total of 20 trainings, courses and program series involving accrual accounting, management accounting and iGFMAS systems were held throughout the year 2020 to strengthen the efficiency and skills of financial officers.

Four (4) courses were held online in accordance with the new norms including Closing Accounts 2020 briefing and Briefing on accounts receivable data migration.

Figure 3.6
Exercise and Course throughout 2020



Source: Account Division, MOH



04

PUBLIC HEALTH

INTRODUCTION

The main role of the Public Health Program (KA) is to help individuals and communities achieve and maintain optimal levels of health through the provision of health services based on the Vision and Mission of MOH. The health services provided are based on the concepts of integration of disease prevention and control, early detection and treatment, rehabilitation care as well as the promotion of a healthy lifestyle to achieve optimal health so that individuals and communities can lead productive lives.

PUBLIC HEALTH DEVELOPMENT DIVISION

PUBLIC HEALTH POLICY AND SERVICES SECTION

The public health policy and services section is responsible for ensuring that public health policies and legislation are in line with the requirement of public health governance. Among the activities carried out are:

- i. Public Health resource planning based on needs.
- ii. Coordinate and analyse quality improvement programs in Public Health Services.
- iii. Coordination of Public Health Program policy planning.
- iv. Planning, coordination, monitoring and analysis of the Special Health Programs.
- v. Formulation of government policy and coordination of ICT projects in the Public Health Program

SPECIAL PROGRAM SECTOR

The core function of the Special Program Sector is to formulate policies, monitor implementation and identify improvement measures in the delivery of more comprehensive, effective and holistic medical and health services to the *Orang Asli* indigenous community.

ORANG ASLI COMMUNITY HEALTH SERVICES

Measures in ensuring accessibility of health services for *Orang Asli* communities in urban, rural and remote localities continued to be implemented in 2020 in line with the 2nd Strategic Thrust under the 11th Malaysia Plan: Improving People's Wellness. The Key Performance Indicator (KPI) used is four (4) weekly Health Service visits to remote *Orang Asli* villages by the *Orang Asli* Mobile Teams with an 80 per cent achievement target. The KPI achievement for 2020 was 81.4 per cent.

In 2020, the Ministry of Finance had allocated a special provision (B11) totaling RM2million to empower the *Orang Asli* Mobile Teams through the procurement of Four-Wheel Drive (4WD) Vehicles, Medical and Non-Medical Equipments. A total of 13 Four-Wheel Drive (4WD) vehicles were acquired, of which Pahang received five (5), Kelantan four (4) and Perak four (4) Four-Wheel Drive (4WD) vehicles and 2 (two) motorcycles. This special provision was also used in the procurement of Medical and Non-Medical Equipments for the *Orang Asli* Mobile Teams at Hospital Orang Asli Gombak (HOAG).

For 2020, the Flying Doctor Services (FDS) based at Hospital Bahagia Ulu Kinta and the Kinta District Health Office, Perak continued to provide health services to 10 extremely remote *Orang Asli* villages which are difficult to access via land or water. The KPI achievement for FDS visits for 2020 was 96.4 per cent of the total flights planned.

In 2020, a total of 532,889 visits involving *Orang Asli* patients were reported for various health services offered by the Ministry of Health's Primary Health Care Services ([Table 4.1](#)).

Table 4.1
Number of Health Visits by Orang Asli Community Using MOH's Primary Health Care Services Year 2020

SERVICES	NUMBER OF VISITS
Outpatient	115,328
Antenatal	61,435
Postnatal	4,798
Family Planning	80,639
Child Health	168,399
Home Visits	102,290
TOTAL	532,889

Source: Public Health Development Division, MOH

Two (2) research projects involving the *Orang Asli* community were completed in 2020, of which one was about diabetes conducted by the National Diabetes Institute (NADI)–World Diabetes Foundation (WDF) with the cooperation of the Public Health Program; and the other was the Kuala Koh *Orang Asli* Ethnography Study, Gua Musang, Kelantan by the Health Education Division. The results of the NADI–WDF research however has not yet been finalised, whereas the *Orang Asli* Health Survey 2020 by the Institute For Public Health had to be postponed due to the COVID–19 pandemic.

The Technical Meeting for *Orang Asli* Health Services was held on 10 August 2020 at the Grand Blue Wave Hotel, Shah Alam and attended by 64 officers from District Health Offices, State Health Departments and Technical Officers from the Public Health Program, Ministry of Health Headquarters to discuss issues related to health services of the *Orang Asli* community. In addition to that, the Joint Committee Meeting On *Orang Asli* Health Services comprising representatives from the Ministry of Health and the Department of *Orang Asli* Development (JAKOA) chaired by the Director-General of JAKOA, was held on 18 September 2020. This meeting is the main platform to discuss health and well-being issues in finding solutions and coordinating methods in the effort to enhance and improve the *Orang Asli* community's health status.

Image 4.1

Four-Wheel Drive (4WD) Vehicle Receive For *Orang Asli* Mobile Team



Four-Wheel Drive (4WD) Vehicle for PBOA Bera, Pahang



Four-Wheel Drive (4WD) Vehicle for PBOA Kuala Kangsar, Perak



Four-Wheel Drive (4WD) Vehicle for PBOA Tanah Merah, Kelantan



Flying Doctor Services (FDS), Perak State Health Department

Source: Public Health Development Division, M0H

THE PUBLIC HEALTH PROFESSION DEVELOPMENT SECTION

The Public Health Profession Development Section is responsible for the development and advancement of the profession in the Public Health Program. The section ensures that staff in the Public Health Program meet the competency standard in delivering services to citizens. This section had carried out several activities including:

- a) Public Health Medicine Specialty Services Development;
- b) Public Health Professions Development;
- c) Training and Continuous Professional Development (CPD); and
- d) Monitoring of Public Health Facilities Usage for Training.

The section monitors the training planning and the implementation to the staff in the Public Health Program. In 2020, a total of 3,148 courses were conducted throughout the country with the value of RM3,582,438.89 as compared to 6,940 courses with the value of RM11,678,818.28 in 2019. There was no staff sent abroad to attend Short-term Training Courses in 2020 due to COVID-19 pandemic. The overall achievement for In-service Training Program carried out in the years 2019 and 2020 are as shown in [Table 4.2](#).

Table 4.2
In-service Training Achievement for Public Health Program in the Year 2019 and 2020

	ACHIEVEMENT			
	Year 2019		Year 2020	
	No. of Course attended	Expenditure (Per cent from annual allocation)	No. of Course Attended	Expenditure (Per cent from annual allocation)
OVERSEA	3	RM66,000.00 (100 per cent)	0	RM0.00 (0 per cent)
LOCAL	6940	RM11,678,818.28 (98.80 per cent)	3148	RM3,582,438.89 (98.99 per cent)

Source: Profession Development Section, Public Health Development Division, MOH

Besides, this section processes the application and monitors the usage of public health facilities such as the District Health Offices, Health Clinics and Public Health Laboratories for training purposes. In 2020, a total of 27 applications were approved either for renewal of Memorandum of Agreement (MoA) or additional facilities application involving seven (7) for Medical Program, 16 for Allied Health Sciences Program and four (4) for Nursing Program.

GLOBAL HEALTH SECTION

The Global Health Section working on behalf of the Ministry of Health Malaysia as an active advocate had successfully conducted several programs and activities in the arena of global health diplomacy. Here are some of the achievements accomplished during the year 2020

WHO PROGRAM BUDGET 2020 AND 2021

Malaysia had concurred with the World Health Organization (WHO) Program Budget 2020 to 2021 at the 72nd World Health Assembly in May 2019. Various divisions from MOH had brought forward their proposals and subsequently at the Review Board Meeting in August 2019 chaired by our former WHO Focal Point/Deputy Director of Health (P&ST), Datuk Dr. Christopher Lee; the meeting had finalised a total of 32 projects to be implemented within the biennium.

VIRTUAL OBSERVATION OF WORLD HEALTH DAY 2020 (WHD2020)

In conjunction with the 2020 International Year of Nurses and Midwifery, Malaysia and the rest of the globe celebrated WHD2020 on 7 April 2020. Ministry of Health Malaysia alongside the WHO Country Office honoured the contribution of our healthcare workers and frontliners with an Appreciation Letter for their tireless sacrifices during the COVID-19 pandemic. This appreciation letter had been jointly signed by the Honorable Minister of Health Malaysia and the WHO Country Representative to Malaysia, Brunei Darussalam and Singapore.

73rd WORLD HEALTH ASSEMBLY - VIRTUAL DE MINIMIS MEETING & RESUMED SESSION

Due to the uncertainty of the ongoing COVID-19 pandemic, the 73rd World Health Assembly (WHA) convened in a virtual de minimis session that was held from 18 until 19 May 2020. This was a special session that prioritised the COVID-19 crisis. Member States utilised this platform to exchange real-time information and best practices and experiences in managing the pandemic. As the Head of Malaysian Delegation, the Honorable Health Minister, H.E Dato' Sri Dr. Adham Baba delivered a pre-recorded country statement that highlighted the importance of solidarity among international and regional partners to fight against the threats of the pandemic. Subsequently, the assembly resumed from 9 to 14 November 2020. Senior officers from Diseases Control Division, Family Health Development Divisions, Nutrition Division, Medical Development Division, Food Quality & Safety Divisions and Global Health team from Public Health Development Division represented the Malaysia Delegation. Ministry of Health Malaysia had the opportunity to intervene on several agendas; Primary Healthcare, Global Action Vaccine Plan, Eliminating Cervical Cancer, Health Emergencies & IHR 2005, Poliomyelitis, Maternal & Infant Nutrition, Healthy Ageing and Food Safety.

23rd BRUNEI DARUSSALAM-INDONESIA-MALAYSIA-SINGAPORE-THAILAND (BIMST) PUBLIC HEALTH CONFERENCE

The Government of Indonesia hosted the 23rd BIMST Public Health Conference virtually on 18 August 2020. Amidst the unfolding impacts of COVID-19, this session was yet another platform that provided an opportunity to exchange views on the ongoing and future response of the pandemic, to enhance regional as well as cross-border collaboration in the health sector. Senior officers from the Disease Control Divisions and Global Health Section, Public Health Development Divisions represented the delegation from Malaysia. Malaysia was delighted to share on health security collaboration and key strategic approaches (surveillance & public health intervention, test & diagnostic, evidence-based approach, risk communication, control movement of people, isolation and treatment) to fight the battle.

71st REGIONAL COMMITTEE MEETING WESTERN PACIFIC REGIONAL OFFICE WHO

For the year 2020, this meeting convened virtually from 6 to 9 October. As the Head of Delegation for Malaysia, the Honorable Minister of Health, H.E Dato' Sri Dr. Adham Baba highlighted the importance of developing a safe vaccine and equitable deployment and distribution globally during the country statement. Technical officers from Public Health & Medical Program and Policy and International Relations Divisions representatives were present as well. During the session, Malaysia had delivered several interventions, namely on Vaccine-Preventable Diseases, Safe & Affordable Surgery, Ageing & Health, Special Program of Research on Human Reproduction and WHO Program Budget.

ASEAN HEALTH MINISTERS MEETING (AHMM) AND ASEAN PLUS THREE HEALTH MINISTERS MEETING (APTHMM)

A Special Video Conference (SVC) of the ASEAN Health Ministers Meeting (AHMM) and ASEAN Plus Three Health Ministers Meeting (APTHMM) on Enhancing Cooperation on COVID-19 Response had commenced on the 7 of April. This back-to-back SVC took place at the CPRC Room participated by Malaysia alongside the other nine (9) the ASEAN Member States as well as the Plus Three (3) Member States; Japan, Korea and China. The first part of the AHMM was led by SOMHD Malaysia focal point, the Deputy Director-General Health (Public Health), Dato' Dr. Chong Chee Kheong whilst the APTHMM was led by H.E Health Minister, Dato' Sri Dr. Adham Baba.

ASEAN SENIOR OFFICIALS MEETING ON HEALTH DEVELOPMENT (SOMHD) MEETING

The 15th ASEAN SOMHD, an annual event was attended by a delegation from Malaysia led by Dato' Dr. Chong Chee Keong, the Deputy Director-General of Health (Public Health) from 24 until 28 August. The meeting revolved around COVID-19 and was a platform to discuss concept papers plan for ASEAN Health Cluster 1, 2, 3 and 4. In accordance with the theme Accelerating Health for all in ASEAN, Malaysia presented updates on the enhancement of the ASEAN Risk Assessment Centre on Food and ASEAN Food Safety Regulatory Framework.

5th ASEAN HEALTH CLUSTER 3: STRENGTHENING HEALTH SYSTEMS & ACCESS TO CARE

The 5th Meeting of ASEAN Health Cluster 3 convened virtually from 13 to 14 August 2020. This meeting was led by the Public Health Development Division Director, Dr. Nik Jasmin Nik Mahir who is the Country Coordinator for Cluster 3. Malaysia had the honor of presenting updates on the Pharmaceutical and Quality in Care health priorities. This meeting was chaired by Thailand and participated by all the 10 AMS. The discussion was aplenty as new activities were discussed for the upcoming 2021 to 2025 work program.

SPECIAL MEETING OF THE OIC STEERING COMMITTEE ON HEALTH ON COVID-19 PANDEMIC

The Global Health team from Public Health Development Division was privileged to participate in this special virtual session on 9 April 2020. Malaysia's participation was led by the honourable Minister of Health, H.E Dato' Sri Dr. Adham Baba.

PUBLIC HEALTH PHARMACY SECTOR

SUPERVISION OF PHARMACY AT PRIMARY HEALTHCARE FACILITIES

The standard of Pharmaceutical services in public health facilities has been monitored and reported since 2019 as one (1) of the Key Performance Indicator (KPI) under the purview of the Director of Public Health Development Division. 90 per cent of primary healthcare clinics (*Klinik Kesihatan*, KK) staffed with pharmacy personnel were targeted to achieve Grade A service (80-100%) performance standards. This indicator serves to monitor the overall performance of pharmaceutical care services in MOH health clinics as well as implementation issues in ensuring compliance with current policies and circulars. The achievement of this KPI had shown an increase of 8.1 per cent in 2020 as compared to the performance in 2019 ([Table 4.3](#)).

Table 4.3
Performance of Pharmaceutical Care Services in MOH Primary Healthcare Clinics

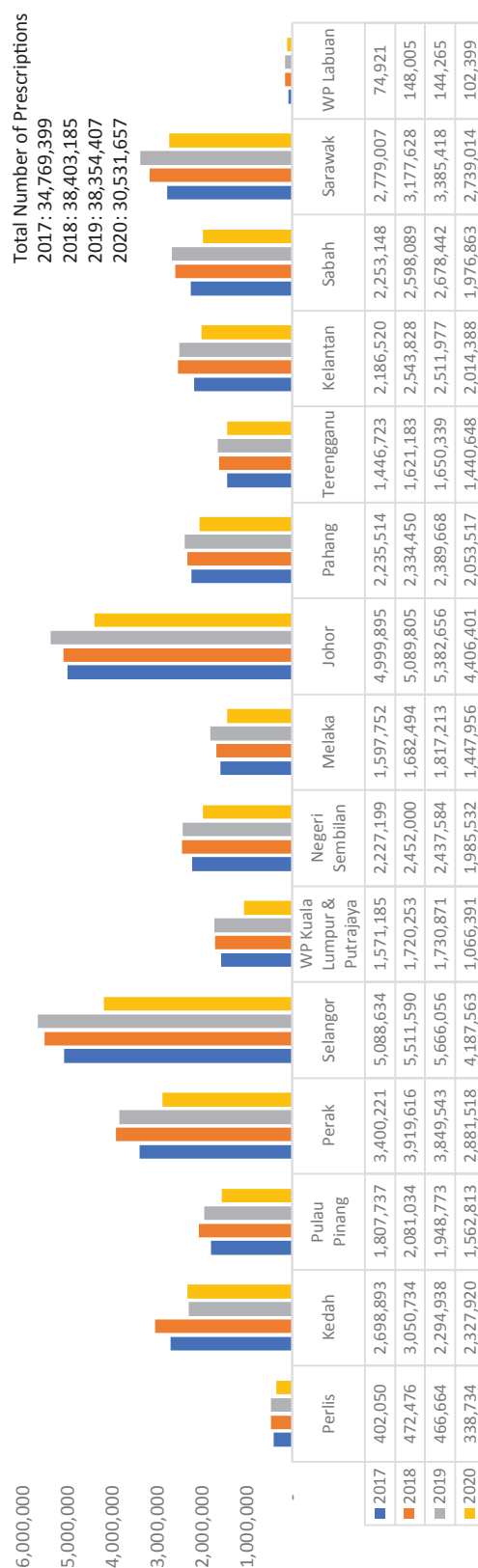
Total Performance	2019		2020	
	No. of KK	Per cent	No. of KK	Per cent (%)
Grade A (80-100%)	398	87.9	645	96.0
Grade B (65-79.9%)	46	10.2	24	3.6
Grade C (50- 64.9%)	8	1.8	3	0.4
Grade D (< 50%)	1	0.2	0	0.0
Accomplishment	453	100.0	672	100.0

Source: Public Health Pharmacy Sector

WORKLOAD AT PHARMACY COUNTER IN PRIMARY HEALTHCARE CLINICS: THE NEW NORM

Due to the COVID-19 pandemic, all MOH facilities have adopted new norms in providing health services. Patients are encouraged to use the Value Added Services (VAS) or appointment system to get their balance medication supply. The number of prescriptions supplied through VAS have increased 30 per cent in 2020 compared to 2019 with a total of 2,627,312 prescriptions serviced (2019: 1,848,342 prescriptions). In accordance with such an increment, the total number of prescriptions dispensed over the counter dropped by 20.4 per cent last year (Figure 4.1).

Figure 4.1
Number of Prescriptions Received At The Health Clinics Pharmacy Counter, 2017 to 2020

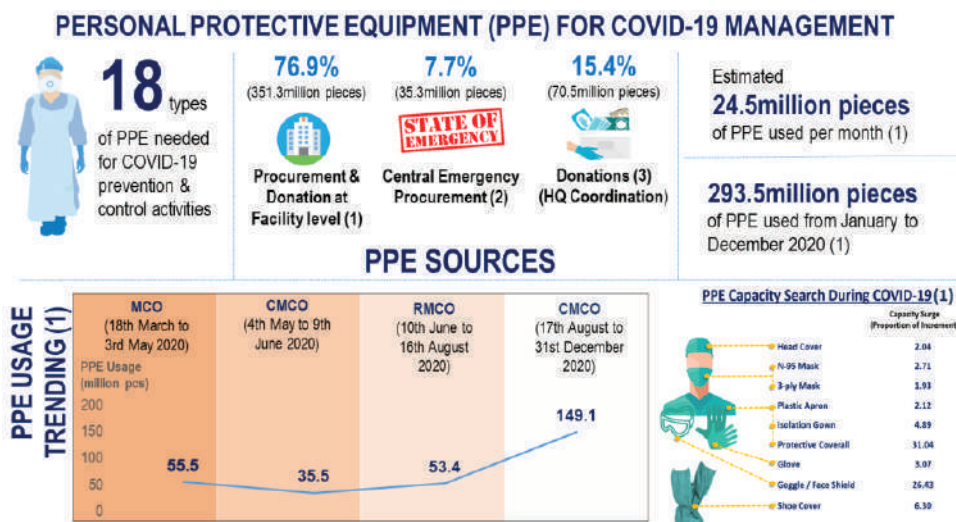


Source: Pharmaceutical Service Division, MOH

PROCUREMENT AND SUPPLY OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

The World Health Organization (WHO) on 11 March 2020 declared a world pandemic due to COVID-19. The tremendous increase of PPE usage following the increase of cases worldwide has caused a global shortage. For the public health program, acquisition of PPE was done by the Public Health Pharmacy Sector through emergency procurement to ensure the constant availability of its supply for a total value of RM 115 million. In addition, this sector also coordinated PPE donations received from various agencies for distribution among MOH facilities. An estimation of 70.5 million pieces of various types of PPE were received by MOH through donations for 2020.

Figure 4.2
The Procurement and Utilization of PPE in The Hospital and Health Clinics



Sources:

- 1) Pharmacy PPE Tracker, dated 18 March 2020 to 31 December 2020, Pharmaceutical Services Program, MOH.
- 2) PPE Emergency Procurement Report, Medical Development Division and Public Health Development Division, MOH.
- 3) Report on the MOH Approval of Donation for the year 2020, Procurement & Privatisation Division, MOH

INSPECTORATE AND LEGAL SECTOR

Inspectorate and Legal Sector are responsible for regulating policies, planning, implementing and evaluating all activities related to the enforcement of Public Health Act and Regulations which encompasses Prevention and Control of Infectious Disease Act 1988 [Act 342], Disease Destruction Bearing Insect Act 1975 [Act 154], Food Act 1983 [Act 281], Control of Tobacco Product Regulation 2004 and Hydrogen Cyanide Act 1953 [Act 260].

AMENDMENT OF LAWS AND DEVELOPMENT OF STANDARD OPERATING PROCEDURE (SOP)

In 2020, there were three (3) laws amendments that technically involved Inspectorate and Legal Sector; amendment of Prevention and Control of Infectious Disease Act 1988 [Act 342], proposed bill of Tobacco Product Control Act and proposed bill of Hydrogen Cyanide Act (Fumigation) 1953. In conjunction with enforcement of Act 342, four (4) Regulations were gazetted and eight (8) Standard Operation Procedure (SOP) were developed to prevent and control the spread of the COVID-19 pandemic.

APPOINTMENT OF AUTHORIZED OFFICERS AND DELEGATION OF AUTHORITY

The appointment of authorized officers under the Public Health Act and Regulations is important to ensure that all enforcement activities were carried out according to Standard Operating Procedures. The number of authorized officers appointed under the Public Health Act and Regulations is shown in [Table 4.4](#). In addition, the delegation of authority under Act 342 was given to 28 agencies and four (4) of them were authorized for issuing compound under this Act. The agencies were Royal Malaysia Police, Ministry of Domestic Trade and Consumer Affairs, Ministry of International Trade and Industry, Malaysia and Immigration Department of Malaysia.

Table 4.4
Appointment of Authorized Officers, 2018 to 2020

Authorized Officers	2018	2019	2020
Authorized Officers under Prevention and Control of Infectious Disease Act 1988	293	327	793
Authority for Issuing Compound under Prevention and Control of Infectious Disease Act 1988	47	46	247
Authorized Officers under Food Act 1983	348	547	651
Authority for Issuing Compound under Food Act 1983	269	391	380
Authority of Premise Closure under Food Act 1983	111	114	80
Identification Card for Enforcement Officers	268	324	291
Total	1,336	1,749	2, 442

Source: Public Health Pharmacy Sector

ENFORCEMENT OF PREVENTION AND CONTROL OF INFECTIOUS DISEASES ACT 1988

Starting on 1 April 2020, the Prevention and Control of Infectious Diseases Act 1988 [Act 342] and Regulations of Prevention And Control of Infectious Diseases (Measures Within Infected Local Areas) were widely enforced to prevent and control of COVID-19 pandemic as shown in [Table 4.5](#).

Table 4.5
Enforcement Act 342 and Regulations of Prevention And Control of Infectious Diseases (Measures Within Infected Local Areas), 2020

Period (MCO/CMCO/RMCO)	Number of Inspected Premises	Number of Premises Closed	Number of Compounds Issued	Number of Paid Compounds	Number of Cases Registered in Court	Total Fine Imposed by Court (RM)
1 April – 31 Dec 2020	465, 267	2, 599	51, 124	41, 805	1, 033	118, 300

Source: Public Health Development Division, M0H

Overall, enforcement activities under Act 342 showed a significant increase in trend in 2020 compared to the previous years ([Table 4.6](#)).

Table 4.6
Enforcement Of Disease Destruction Of Bearing Insects Act 1975, 2018 to 2020

Year	Number of Premises Inspected under Section 18 (1)	Number of Premises Closed under Section 18 (1)	Number of Compounds Issued	Total Amount of Paid Compounds (RM)
2018	5,573	1,201	35	19,950
2019	2,619	731	34	15,100
2020	471,449	2,907	54, 021	2,180,500

Source: Public Health Development Division, M0H

ENFORCEMENT OF DISEASE DESTRUCTION OF BEARING INSECTS ACT 1975

Seven (7) series of ‘Ops Gempur Aedes’ were conducted in 2020. The overall achievement of enforcement operation activities is n shown in [Table 4.7](#).

Table 4.7
Enforcement Of Disease Destruction Of Bearing Insects Act 1975, 2018 to 2020

Year	No. of Premises Inspected	No. of Premises with Positive Breeding	No. of Compounds Issued	No. of Premises Closed Under Act 154	No. of Cases Registered in Court	Total Fine Imposed By Court
2018	4,688,302	119,418	21,370	120	2,599	3,130,300
2019	4,877,369	161,506	24,869	117	2,665	1,037,231
2020	4,685,063	175,642	21,748	71	1,418	836,460

Source: Public Health Development Division, M0H

ENFORCEMENT OF CONTROL TOBACCO PRODUCT REGULATIONS 2004

Control of Tobacco Product Regulations 2004 is a subsidiary law under Food Act 1983 [Act 281] which encompasses enforcement on smoking at prohibited places, sale of cigarettes in open packs, online selling of tobacco products and others. Achievement of enforcement activities under Control Tobacco Product Regulations 2004 as shown in [Table 4.8](#)

Table 4.8
Enforcement Of Control Tobacco Product Regulations 2004, 2018 to 2020

Year	Number of Notices Issued Under Section 32	Number of compounds Issued	Total Amount of Paid Compounds (RM)
2018	57,268	25,834	3,215,366
2019	50,946	29,819	3,653,774
2020	34,338	19,433	2,615,814

Source: Public Health Development Division, M0H

INVESTIGATION AND PROSECUTION

Investigation and prosecution for any contravention under Public Health Act and Regulations were conducted by Environmental Health Officer and Assistant Environmental Health Officer. The detailed achievement of the activities is shown in [Table 4.9](#)

Table 4.9
Investigation and Prosecution Under Public Health Act and Regulations, 2018 to 2020

Year	Number of Investigation Papers	Number of Consent for Prosecutions by Deputy Public Prosecutor	Number of NFA
2018	92,376	18,538	575
2019	102,122	20,385	680
2020	80, 144	10, 515	309

Source: Public Health Development Division, MOH

FUMIGATION

Issuance of fumigation license is in line with the requirement of Hydrogen Cyanide Act (Fumigation) 1953 which requires fumigation operators to be licensed for fumigation activities. In 2020, there were 23 applications for fumigation licenses and 240 applications for renewal licenses for fumigation activities.

INFECTION CONTROL DIVISION

NON-COMMUNICABLE DISEASES (NCD) SECTION

The year 2020 has been challenging overall, especially for the overall NCD prevention and control program. COVID-19 disproportionately affects high-risk populations, and this includes people living with NCDs and healthcare workers. The movement restrictions impact community-based and school-based NCD prevention programs, NCD screening, and access and delivery of care for people living with NCDs. The economic injury due to the movement restrictions also negatively impacted mental health and has resulted in the unintended consequences of domestic violence.

CARDIOVASCULAR DISEASES AND DIABETES UNIT

In 2020, MOH, the WHO and Deakin University Australia quantified the productivity losses and burden of disease costs that stem from the three largest NCDs (CVD, Diabetes and Cancer). These NCDs are estimated to have cost the Malaysian economy RM12.88 billion in terms of productivity losses due to presenteeism, absenteeism or premature deaths in persons of working age. The estimated burden of disease cost, which is intangible costs related to the value placed by individuals on the loss of life or healthy life is between RM100.79 billion to RM302.37 billion.

In 2020, almost 1.7 million diabetes patients were registered in the National Diabetes Registry (NDR) and 902,991 were on active follow-up. Only 30.7 per cent of Diabetes patients achieved an HbA1C of ≤ 6.5 per cent. The NDR Report 2013 to 2019 was released in conjunction with World Diabetes Day celebrations in November 2020.

A mid-term evaluation of Salt Reduction Strategy To Prevent and Control NCD for Malaysia, 2015 to 2020 found that progress was moderate and low in establishing a mechanism to engage the Malaysian population and food manufacturers. MOH is currently focusing on gap areas highlighted in the report through the strategy for 2021 to 2025.

CANCER UNIT

The Colorectal Cancer Screening Program using immunological Fecal Occult Blood Test (iFOBT) followed by colonoscopy targets asymptomatic individuals aged 50 to 75 years. COVID-19 had negatively impacted the iFOBT screening. From January to September 2020, 31,529 clients came for screening, and 8.46 per cent were positive for iFOBT. From all positive iFOBT cases, 90.82 per cent agreed to be referred for colonoscopy. However, only 60 per cent undergone colonoscopy and of these, 2.82 per cent were cancer, and 25.24 per cent were positive for colonic polyps.

The implementation of the Verbal Autopsy in 2020 was also negatively impacted by COVID-19. Only 25.6 per cent of a total of 74,372 Non-Medically Certified Death (NMCD) cases registered at the National Registration Department in 2019 were able to be verified in 2020. The percentage of MCD was reduced from 68.2 per cent in 2018 to 62.8 per cent in 2019 (source: Statistics on Causes of Death Malaysia 2020).

NCD INTERVENTION SECTOR

Komuniti Sihat Pembina Negara (KOSPEN) is a community-based NCD intervention program using the concept of community empowerment, through the formation of volunteers who have been trained to carry out advocacy and health promotional activities, community screenings and to coordinate community-level health intervention activities. The seven (7) scopes of KOSPEN are healthy diet, active lifestyle, no smoking, healthy mind, alcohol harm reduction, screening of NCD risk factors and body weight management. In 2020, the total number of adults who have been screened for NCD risk factors was 1,045,274. 85 per cent of KOSPEN localities do have 10,000 steps tracking. 72 per cent of KOSPEN localities achieved the requirements for Healthy Menu Policy, and 69 per cent achieved the targets for the Smoke-Free House Program. 93 per cent of KOSPEN localities have achieved the target of placing a no-smoking sign in public areas.

TOBACCO CONTROL SECTOR AND FCTC SECRETARIAT

The Tobacco Control Sector & Framework Convention on Tobacco Control (FCTC) Secretariat has taken the “out of the box” approach by introducing the online quit-smoking service. This is implemented through Phase 3 of the mQuit Service, via a Private-Public Partnership. An MoU was signed between MOH and all related partners from the academia and the private sector on 14 December 2020. The mQuit Service was started in Phase 1 from 2015 until 2017, then Phase 2 from 2017 until 2020, and the current Phase 3 from 2020 until 2025.

The online mQuit Service currently operates through www.jomquit.com, where smokers can get various information about smoking and especially the risk of getting COVID-19 infection. In addition, there is also information about how they can start to quit smoking. From there, the smokers need to register, and they will be assisted until successfully quit smoking over six (6) months. The online mQuit Service can also be easily accessed through the MySejahtera app.

From the start of the mQuit Service until end of 2020, the Jomquit website has received over 100,000 visitors. There has been a tremendous increase in the number of registered smokers to quit smoking, with 4,469 smokers registered to quit in 2020 compared to only 1,678 registered in the year 2019. The number of smokers registered for the quit-smoking services has also increased, with 28,167 smokers' signups for smoking cessation in 2020 compared to only 22,601 smokers registered in 2019. The quit smoking rate was 51 per cent among those who registered with quit date.

Image 4.2
mQuit Quit Smoking Service



Source: Tobacco Control Unit & FCTC Secretariat, MOH

MENTAL HEALTH UNIT

The Mental Health Promotion Advisory Council which was chaired by the Minister of Health held a meeting on 2 October 2020. The National Strategic Plan for Mental Health (NSPMH) 2020 to 2025, formulated to address the gaps in addressing the burden of mental health problems in Malaysia, was tabled, and subsequently endorsed by the Director-General of Health on 4 December 2020.

Under the Let's TALK *Minda Sihat* Campaign, fact sheets on mental health and suicide prevention were produced in conjunction with World Suicide Prevention Day and World Mental Health Day 2020. Three (3) mental health promotional videos were made and aired on social media to raise awareness on Mental Health in the COVID-19 pandemic.

For Mental Health Screening and Intervention in primary health care, a pilot project at health clinics was conducted from August to October 2020 in five (5) states (i.e. Perlis, Negeri Sembilan, Johor, Kelantan and WP Kuala Lumpur) to improve the Mental Health Screening in primary care to be more specific in detecting depression and anxiety within the community. This project will be rolled out nationwide starting in June 2021.

At the start of the COVID-19 pandemic, the Mental Health and Psychosocial Support Services (MHPSS) have been activated at national, state and district levels. The services provided include screening, psychosocial support helplines, pre and post-deployment briefing, Webinar sessions, online forum discussions, media broadcasts and interviews to update Mental Health and COVID-19 awareness to the general public. Briefing Notes, Standard Operating Procedures (SOPs) and Guidelines on Psychosocial Support at Quarantine Centres were developed to guide and streamline implementation. In 2020, MOH had also recruited 200 Psychology Counselling Officers to further strengthen the service.

ALCOHOL AND SUBSTANCE ABUSE UNIT

As of December 2020, a total of 319 health clinics provided alcohol screening and intervention services. In addition, currently, 30 health clinics have been identified to provide the OSCA (One-Stop Centre for Addiction) services nationwide. This program was initiated in 2017 to provide a comprehensive integrated and holistic service for substance abuse and addiction. The services include screening, intervention and rehabilitation at the primary care level.

In 2020, methanol poisonings were reported in five (5) states involving 14 cases with seven (7) deaths (fatality rate of 50%). All cases were reported to have consumed alcoholic beverages suspected to be contaminated with methanol.

VIOLENCE AND INJURY PREVENTION UNIT

The proposal for the development of the National Suicide and Fatal Injury Registry Malaysia (NSFIRM) had been submitted to the Ministry of Economic Affairs, where an allocation of RM4.2 million was approved under the 12th Malaysia Plan. A Suicide Prevention Technical Working Group was formed with members comprising experts in suicide prevention and representatives from Royal Malaysian Police, Department of Fire and Rescue, academicians and NGOs.

For abuse prevention awareness, two (2) modules were developed, i.e., the 'Child and Adolescent Abuse Prevention Awareness Training Module' and the 'Case Management of Suspected Abuse Practices for Health Workers'. Throughout this COVID-19 pandemic, several SOPs and guidelines had been prepared, including 'Guidelines for Prevention of COVID-19 Transmission After Movement Control Order for the Safety of TASKA Citizens', 'SOP in Handling Domestic Violence Cases in COVID-19 Situations', and the 'SOP for Cases at Sheltered Homes and Safe Places'.

OCCUPATIONAL HEALTH UNIT

In 2020, the Occupational Health Unit (OHU) had been involved in the management of COVID-19 among the working population, which involves the development of policies and guidelines, data analysis of workers as well as information and advice on managing COVID-19 at the workplace. This included developing Annex 21: Management of Healthcare Workers (HCWs) during COVID-19 Pandemic; Annex 25: COVID-19: Management Guidelines for Workplaces; Annex 27a: *Tindakan Pencegahan, Kawalan Infeksi dan Penggunaan Personal Protective Equipment (PPE) di Fasilitas Tahanan dan Rumah Perlindungan*; and several other annexes of the COVID-19 Management Guidelines by MOH.

In addition, other occupational health activities were still carried out i.e., prevention activities, notification and investigation of occupational injuries and diseases. Under the Sharps Injury Surveillance (SIS) program, a total of 1,177 cases of sharps injuries were notified to the Occupational Health Unit, MOH from 1 January 2020 to 14 January 2021. The number of cases reported showed a decrease of 26.2 per cent compared to the 1,486 cases in 2019. As for the Accidents and Injuries, Dangerous Occurrence, Occupational Poisoning and Occupational Diseases Surveillance Program, there was a reduction of 16.9 per cent in the number of cases of accidents and injuries (not including sharp injuries) reported among HCWs, and a 65.1 per cent reduction in the number of occupational poisoning reported in 2020 compared to 2019. Meanwhile, there were 400 cases of occupational lung diseases notified in 2020 compared to 136 in 2019. This increase was mainly due to the COVID-19 pandemic that affected the whole nation.

To date, 979 agencies had conducted the KOSPEN Plus wellness program involving 68,297 workers since the program started five (5) years ago. Of these, 193 agencies were enrolled in 2020. In May 2020, the KOSPEN Plus website (www.moh.gov.my/kospenplus) was developed as a resource centre for information related to the program and worker's health. A total of 7,512 (88.2%) workers were screened for NCD risk factors through the KOSPEN Plus program this year. A KOSPEN Plus YouTube channel has been developed to publish videos, infographics have been designed and webinars conducted, and participation in the KFAIR, KWSP online expo on 15 to 16 December 2020 to promote the program. A webpage called 'eMinda' has been developed to increase the accessibility of workers to psychosocial support (www.moh.gov.my/kospenplus/eminda).

ENVIRONMENTAL HEALTH UNIT

The Environmental Health Unit (EHU) was involved in assisting National CPRC in dealing with the COVID-19 pandemic in 2020, in coordinating information and guidance to the public through risk communication, coordinating quarantine exemption applications for those who qualified and assisted in developing and reviewing standard operating procedures (SOPs) for various sectors. The activities carried out included the development of two annexes in the COVID-19 Management Guidelines by MOH, i.e. the 'Cleaning and Disinfection Procedures in Public Places' (Annex 36) and 'Guidelines for the Temporary Evacuation Center for Disaster Victims to Avoid COVID-19' (Annex 41.).

The EHU also updated the 'Health Management Action Plan Due to Haze, MOH Malaysia 2020'. As the technical agency to offset development impacts, the EHU had reviewed and commented on 36 reports of development projects in different categories and provided input on health risk assessment of solid waste disposal projects (landfills, thermal plants, and transfer stations) under the 11th Malaysia Plan by the Department of Environment, as well as carried out activities under the Thematic Working Group under NEHAP. In addition, the EHU also organised the Non-Ionising Radiation (NIR) webinar in August 2020 and provided technical input to the Lynas Permanent Disposal Facility Location (PDF) Appropriations Technical Committee.

SURVEILLANCE SECTOR

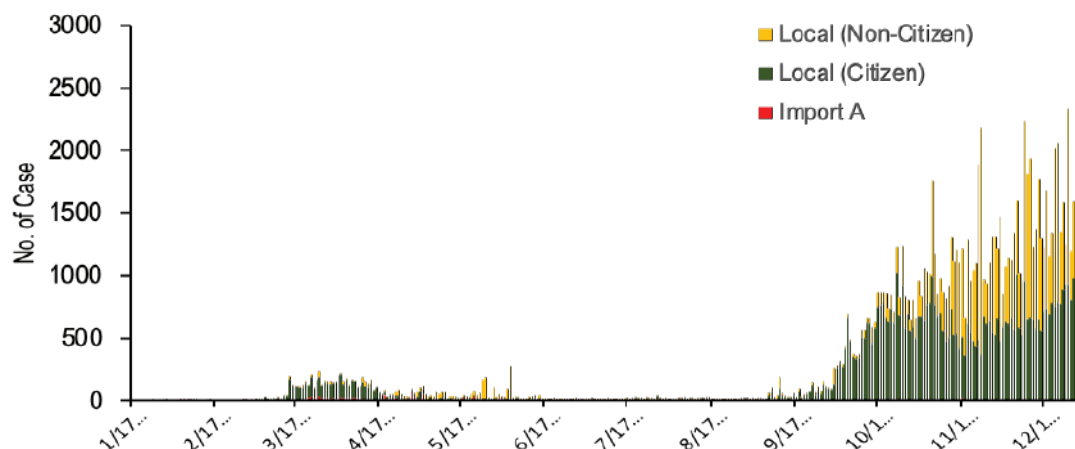
COVID-19 PANDEMIC IN MALAYSIA

The first wave of COVID-19 infection in Malaysia started on 25 January 2020, detected upon three Chinese nationals entering the country via Singapore. On 4 February 2020, Malaysia then reported the first case involving a Malaysian citizen who had travel history to Singapore for a business meeting. The first local transmission in Malaysia was on 6 February 2020, the patients were the close contacts of the first Malaysian case. The first wave lasted until 15 February 2020 with the identification of additional 22 cases, with no death recorded. There were 11 consecutive days with no cases, from 16 to 26 February 2020. The second wave began on 27 February 2020 and without a definite closure, the third wave then began on 20 September 2020.

The second wave was established after the detection of a positive case with a history of attending a religious mass gathering at Masjid Sri Petaling, Kuala Lumpur. This gathering involved approximately 16,000 participants, of which about 14,500 of them were from Malaysia. Sri Petaling mass gathering cluster was first detected on 11 March 2020 and infected a total of 3,375 individuals that were detected from 42,023 samples taken (38.9 per cent positivity rate), while 34 deaths were recorded. On 8 July 2020, the closure of the cluster was officially announced. Meanwhile, Malaysia recorded a total of 10,145 cases during the second wave.

The third wave of COVID-19 infections in the country coincided with the 2020 Sabah state election, which took place on 26 September 2020. The return of voters and politicians from Sabah to other states nationwide had caused an influx of COVID-19 cases in Malaysia. Four (4) weeks after the election on 24 October 2020, Sabah recorded 11,285 cumulative cases – becoming the first state in the country to record more than 10,000 cases. As of 31 December 2020, Sabah has recorded 37040 cases and 265 deaths. Malaysia overall recorded 113,010 cumulative cases, with 471 death recorded at the end of the year 2020.

Figure 4.5
Daily Reported COVID-19 Cases in Malaysia, 2020



Source: National Crisis Preparedness and Response Centre, MOH

INTERNATIONAL HEALTH REGULATIONS & TRAVEL HEALTH SECTOR

In the year 2020, due to the COVID-19 pandemic, this sector focuses more on health screening activities at the Point of Entry (POE). On 30 January 2020, the World Health Organization (WHO) declared the 2019 Coronavirus Disease (COVID-19) as a Public Health Emergency of International Concern (PHEIC) following a significant increase in the number of COVID-19 cases globally and an increasing number of countries reporting positive cases. The WHO then declared the COVID-19 incident as a pandemic on 11 March 2020 when there is a significant increase in cases involving 114 countries globally. In Malaysia, the first case of COVID-19 was reported on 25 January 2020 which was an imported case from Wuhan, China. As of now, Malaysia has been facing a pandemic situation for more than a year.

Screening of travelers for COVID-19 at 78 International POEs started on 4 January 2020. In the beginning, the screening focused only on travelers from Wuhan, China. However, started from February 2020, the screening was extended to five (5) countries with high COVID-19 cases which are the Republic of China, South Korea, Japan, Italy and Iran.

On 18 March 2020, the Malaysian Government began implementing the Movement Control Order which prohibited the entry of foreign travelers and Malaysian citizens leaving this country. From 3 April 2020, the Malaysian Government stipulates that the policy of all travelers from abroad should be placed at the quarantine station where the cost of quarantine at the quarantine station is borne by the government. However, on 10 June 2020, the Malaysian Government announced that all travelers from abroad to be quarantined at home.

Starting from 24 July 2020 the Malaysian Government stipulates that all travelers from abroad must be quarantined at the quarantine station where the quarantine cost at the quarantine station is borne by the traveler. From 4 January 2020 to 31 December 2020 a total of 16,763,679 travelers and crews arrived at POE had undergone screening. Among those, only 823 travelers and crew were detected as PUI at all POE. Among those PUI, only 128 (15.6%) were confirmed COVID-19 positive. (Table 4.10)

TUBERCULOSIS & LEPROSY PREVENTION AND CONTROL SECTOR

NATIONAL TUBERCULOSIS PREVENTION & CONTROL PROGRAM

Tuberculosis (TB) remains a global public health problem including in Malaysia. A total number of notified TB cases for 2020 was 23 689, a reduction of 2663 cases (10%) compared to 26,352 cases (Notification Rate (NR) 80.88 per 100,000 populations) in 2019. Total number of TB Mortality for 2020 was 2316 deaths with a Mortality Rate of 6.76 per 100,000 populations. The summary of achievements is summarized in Table 4.11.

Table 4.11
Summary Achievements of National TB Control Program (2016 to 2020)

	Year				
	2016	2017	2018	2019	2020
Total TB cases (Notification rate per 100,000 population)	25739 (81.3)	26168 (80.7)	25837 (78.6)	26352 (81.1)	23689 (69.2)
TB Mortality (Mortality rate per 100,000 population)	1945 (6.30)	2098 (6.48)	2184 (6.65)	2205 (6.88)	2316 (6.76)
Total TB Pediatrics (Age <15-year-old)	710	738	728	863	774
TB co-morbid HIV (per cent)	1498 (6.5)	1463 (6.4)	1352 (5.9)	1312 (5.8)	1114 (6.5)
TB among MOH health care workers (Incidence per 100,000 HCW)	282 (119.6)	287 (118.0)	305 (126.5)	305 (124.1)	279 (111.6)
Rifampicin Resistant/ Multi Dr.ug Resistant TB (RR/MDR-TB)	201	352	192	159	169
Treatment Success Rate (Malaysian) (per cent)	83	83	89	87	86
BCG coverage (per cent)	98.3	98.5	98.4	98.5	98.8
Contact Screening at First Visit	188,870	188,642	179,423	177,121	136,952

Source: Tuberculosis & Leprosy Prevention And Control Sector

Table 4.10
Numbers of PUI Among Travelers And Crew At POE from 4 January to 16 December 2020

STATES	JAN FROM 4/1/2020	FEB 2020	MAC 2020	APR 2020	MEI 2020	JUN 2020	JUL 2020	OGOS 2020	SEP 2020	OKT 2020	NOV 2020	DEC 2020	TOTAL PUI	TOTAL COVID-19 +VE
PERLIS	0	0	3	0	0	0	0	0	0	0	0	0	3	0
KEDAH	0	0	1	0	0	3	4	0	3	1	0	0	12	4
P.PINANG	0	0	2	2	0	2	2	2	0	3	0	1	15	0
PERAK	0	0	0	0	0	2	0	0	0	0	0	0	2	1
SELANGOR	3	1	65	319	200	46	49	9	4	4	3	1	704	115
N.SEMBILAN	0	0	0	0	0	0	0	0	5	0	0	0	5	5
MELAKA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JOHOR	1	0	4	4	4	6	0	0	1	2	1	0	23	0
PAHANG	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERENGGANU	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KELANTAN	0	0	0	0	0	0	0	1	0	0	1	0	2	0
SARAWAK	0	0	13	4	13	2	6	8	0	2	1	0	49	0
SABAH	3	0	0	2	2	0	0	0	0	0	0	0	7	0
WP LABUAN	0	0	7	2	0	0	1	0	0	0	0	0	10	3
TOTAL	7	1	95	333	219	61	62	20	13	12	6	3	832	128

Note: Numbers of PUI detected among travelers and crew at POE in 2020. From 4 January to 16 December 2020, 823 travelers and crew detected PUI. From these PUI cases, only 128 (15.6 per cent) are confirmed positive COVID-19.

Source: International Health Regulations & Travel Health Sector, MOH

TB prevention and control program is committed to reducing the TB burden in Malaysia towards the targets to end the TB epidemic by the year 2035.

NATIONAL LEPROSY CONTROL PROGRAM (NLCP)

The detection of new Leprosy cases in 2020 has remained consistent despite the overwhelming and increasing trend of COVID 19 burden in Malaysia. Screening of contacts and high-risk populations in particular at pockets of endemicity persevered. This is witnessed by the profound increment of 17 per cent cases detected via active case detection or ACD, from the average of eight (8) to 10 per cent for the past few years. There is also a discernable increment in the involvement of Community Health Clinic (CHC) for the past three (3) years, recorded by the increasing number of cases detected at CHC; reaching 35 per cent in comparison to only 21 per cent for the year 2016. Leprosy control and prevention are greatly depending on ACD and promotional activities especially among contacts and high-risk populations.

Table 4.12 shows five (5) years' achievements based on the main indicators under our NLCP. To date, there are several unmet indicators as set by the WHO. Nonetheless, under our 10 years National Strategic Plan of Leprosy 2021 to 2030, ACD continues to be emphasized and we will be expecting surges of new cases among children as well as new cases among Grade 2 Deformity (G2D), further pushing the numbers exceeding the targets. This upsurge is expected to continue for the initial five (5) years, follows by a plateau and a decline, earnestly meeting the target. The percentage of our patients who reported completing treatment is low and perturbing. Steps have been taken to expand our diagnostic and treatment capacity at designated CHC located within the vicinity of endemic localities to ensure a convenient and accessible service to our patients. In this way, treatment adherence is better monitored too.

Table 4.12
Achievements Based on the Main Indicators under NLCP

NO	INDICATORS	2016	2017	2018	2019	2020	TARGET
1	New cases	191	194	182	195	181	-
2	Incidence Rate	0.62	0.62	0.57	0.61	0.56	<1 case/100,000 population
3	Prevalence Rate	0.02	0.02	0.03	0.05	0.14	<1 case/10,000 population
4	Grade 2 Deformity Rate	0.02	0.02	0.03	0.05	0.05	<0.02 case / 100,000 population
5	Percentage of children with Leprosy (New case)	3.7 per cent	6.2 per cent	5.5 per cent	4.6 per cent	3.9 per cent	<3 per cent
6	Percentage of Complete Treatment	58.3 per cent	58 per cent	53.4 per cent	58.3 per cent	41.5 per cent	>80 per cent
7	Percentage of treatment using MDT – WHO Regime	100 per cent	100 per cent	100 per cent	100 per cent	100 per cent	100 per cent

Source: Tuberculosis & Leprosy Prevention And Control Sector, Infection Control Division

ZOONOSIS SECTOR

Zoonosis Sector is under the Communicable Disease Control Section of the Disease Control Division which looks into the prevention and control of zoonotic diseases. Zoonotic diseases that are gazetted under the Prevention and Control of Infectious Diseases (PCID) Act 1988 for mandatory notification include Avian Influenza, Ebola, Leptospirosis, Nipah, Plague and Rabies. Besides those diseases, Hand Foot and Mouth Disease (HFMD) is also handled by Zoonosis Sector. Brucellosis and Melioidosis are both administratively notifiable diseases.

In 2020, the Leptospirosis incidence continued to be high with 2,914 cases reported at an incidence rate of 8.63 per 100,000 populations. There were 38 deaths with a mortality rate of 0.1 per 100,000 populations. There were eight (8) reported leptospirosis outbreaks and 50 percent of them occurred in households.

In 2020, there were three (3) lab-confirmed brucellosis cases reported. There were nine (9) cases of human rabies reported in Sarawak and eight (8) of the cases have succumbed to the disease. Since July 2017, the total number of rabies recorded in Malaysia was 31 cases including 29 deaths. Two (2) children survived but one of them has a severe neurological complication. There was no Q fever, avian influenza, ebola, Nipah and plague cases reported in 2020.

There are two (2) non-zoonotic diseases under the purview of the Zoonoses Sector. Melioidosis was made administratively notifiable in 2015 after a big flood in Peninsular Malaysia. In 2020, there were 427 cases reported with 68 deaths. Meanwhile, 17,235 HFMD cases were reported with an incidence rate of 51.02 per 100,000 populations. The cases reported were 67 per cent less than cases in 2019 (52,716). It was because the closure of nurseries and kindergartens following the movement control order (MCO) during the COVID-19 pandemic. There were no HFMD deaths. There were 452 HFMD clusters. The predominant circulating enterovirus strain was Coxsackie A16 with 67 percent in Peninsular Malaysia, 100 per cent in Sarawak and 60 per cent in Sabah.

FAMILY HEALTH DEVELOPMENT DIVISION

MATERNAL HEALTH

The coverage of vital maternal health care services in Malaysia was above 95 per cent after year 2010. These include antenatal coverage (at least one visit), safe deliveries and a postnatal home visit. In year 2020, the coverage for the services was 90 per cent, 99.3 per cent and 96.2 per cent respectively. The average antenatal visit per person exceeded 11 visits.

Malaysia is facing a great challenge to further reduce the relatively low incidence of MMR. The MMR has been stagnant since year 2000, which was 24.4 per 100,000 LB in year 2000 and remained as 23.8 per 100,000 LB in 2015. The reduction is minuscule and this pattern continued until 2019 with an MMR incidence of 21.1 per 100,000 LB. The five (5) most common causes of maternal deaths in Malaysia were Postpartum Hemorrhage, Pulmonary Embolism, Associated Medical Conditions, Hypertensive Disorders in pregnancy and Amniotic Fluid Embolism.

The total number of new family planning acceptors registered in MOH clinics has decreased from 126,086 (2019) acceptors to 120,437 (2020) acceptors. The number of active users has also increased from 354,987 in 2019 to 359,077 in 2020.

Modifications to home visit guidelines and telephone consultations were carried out in curbing the spread of the COVID-19 pandemic. The revised version of the maternal health record book and checklist of maternal health risks guided by the colour coding system is expected to take place beginning January 2021.

CHILD HEALTH SERVICES

Compared to 2019, children under one (1) year old attending clinics decreased from 76.2 per cent to 73 per cent, and that of children aged one (1) to four (4) years old declined from 47.4 per cent to 40.7 per cent, while attendances among children five (5) to six (6) years old dropped from 24.3 per cent to 18.7 per cent.

NEONATAL, INFANT AND UNDER 5 DEATH RATES

The mortality rate among children under five (5) years decreased in 2019 ([Figure 4.6](#)). Neonatal deaths (0-28 days) accounted for 1,980 cases (52.6%), while 1,137 cases (30.2%) deaths were among infants aged 28 days to one (1) year and a total of 648 (17.2%) toddler deaths (1 to 4 years) were reported during the same period. The main causes of neonatal death were congenital malformations and conditions during perinatal, where the majority of cases were not preventable. Preventable deaths such as injuries and infections were mostly among children 28 days to four (4) years.

NATIONAL IMMUNIZATION PROGRAM

Immunization services continued as usual despite the pandemic. Sabah and Labuan achieved high coverage during the Polio Immunization Campaign (KIP) and the campaign ended on 6 November in Labuan and 31 December 2020 in Sabah.

There were two new initiatives involving a change in the National Immunization Schedule in 2020, namely:

- i. The change from the pentavalent vaccine DTaP-IPV/Hib to hexavalent vaccine DTaP-IPV-HepB-Hib was implemented in stages at MOH health facilities starting in early October 2020.
- ii. The introduction of pneumococcal vaccine (10-valent) beginning 1 December 2020 where all children born in 2020 and beyond are eligible to receive three (3) doses of pneumococcal vaccine at the age of four (4), six (6) and 15 months.

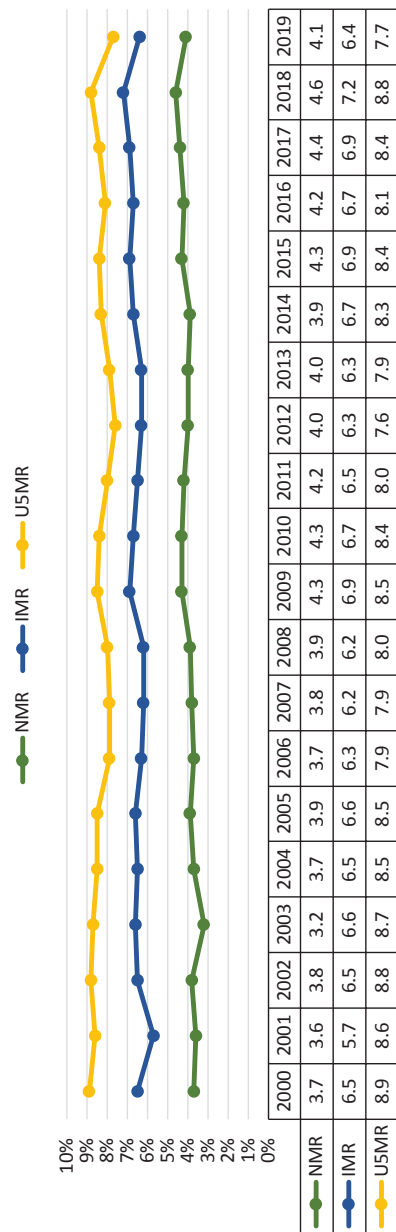
SCHOOL HEALTH SERVICES

In general, the school health services coverage for Year 1, Year 6 and Form 3 school children exceeded 98 per cent for the past five (5) years. Overweight and obesity among students were the main health issues identified especially in Sarawak.

The coverage of MR and DT vaccines for Year 1 students, HPV and ATT vaccines for Form 1 and Form 3 students respectively were lower in the year 2020 compared to the year 2019. This was due to the Movement Control Order which had been imposed to curb COVID-19 pandemic.

For the Thalassaemia Prevention Program, 131,227 Form 4 students were offered for Thalassaemia screening to determine Thalassaemia carrier status. Of those who were offered the screening, approximately 122,736 (93.53%) students obtained written consent from their parents. Approximately 118,016 of those with written consent have been screened. Results from the screening showed that

Figure 4.6
Neonatal Mortality Rate (NMR), Infant Mortality Rate (IMR) and Under-5 Mortality Rate (U5MR) Malaysia, 2000 to 2019



Source: Department of Statistics Malaysia

Table 4.13
National Immunisation Coverage, Malaysia, 2010 to 2020

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BCG ¹	99.0	98.7	98.7	98.5	98.6	98.5	98.3	98.5	98.4	98.5	98.6
DPT-IPV//HiB Dos 3 ²	94.3	99.5	99.7	96.9	96.7	99.0	97.9	98.9	100.0	100.0	97.6
Hep B Dos 3 ²	82.6	97.1	98.1	96.3	96.3	99.2	97.9	98.2	100.0	100.0	100.0
MMR Dos 1 ²	96.1	95.2	95.4	95.2	92.0	93.1	94.3	93.5	96.6	99.4	96.8

Note:

1- Denominator for coverage calculation is based TBIS denominator

2-Denominator – Estimated Live Birth 2019 (Department of Statistics Malaysia)

Immunization coverage reached the target of > 95%

The year 2020 is preliminary data

Source: Health Informatic Center, MOH

30,669 students (25.99%) were suspected to be Thalassemia carriers while 14,418 students (12.22%) were suspected to have iron deficiency anemia. The screening coverage had declined in 2020 to 30.37 per cent from 83.6 per cent in 2019.

ADOLESCENT HEALTH SERVICES

As many as 198,303 adolescents (3.7%) out of 5,385,700 total adolescent population in 2020 underwent screening from January to December 2020 (less than the annual target of 5 per cent due to the COVID-19 pandemic). The five (5) most commonest health problems detected among adolescents' were nutritional problems 16,882 cases (8.5%), risky behaviour 5,651 cases (2.9%), sexual reproductive health problems 2,193 cases (1.1%), mental health problems 1,254 cases (0.6%) and physical health problems 1,250 cases (0.6%) (data from State Health Department, December 2020).

Age-Specific Fertility Rate (ASFR) among adolescents 15-19 years old has decreased from 28.0/1000 per population (1991) to 8.5/1000 (2018) (Department of Statistics Malaysia, 2019). New antenatal cases among adolescents registered in the MOH primary healthcare facilities over five (5) years showed a decline from 12,492 (2016) to 6,683 (January to September 2020). From a total of 6,683 new antenatal cases, it was found that 2,940 (44.0%) were unmarried and 5,283 (79.1%) were no longer in school. For 2020, Sarawak recorded the highest number (1,517 cases) of teenage pregnancy registered in the MOH primary healthcare facilities, followed by Sabah (1,141 cases) and Johor (590 cases) (data from State Health Department, December 2020).

The initiative of Best Practice Adolescent Friendly Health Services (AFHS) was presented in the 7th Multi-Country Network Meeting of the Southeast Asia HIV Stigma Reduction Quality Initiative Learning Network, in Bangkok Thailand from 5 to 6 February 2020 which awarded star ratings to 38 health clinics in the country. This achievement was published in various international journals.

A workshop to review the National Adolescent Health Plan of Action 2015 to 2020 was held on 22 to 24 September 2020, involving representatives from various government agencies, universities and non-governmental organisations.

ADULT HEALTH SERVICES

The Cervical Cancer Screening Program targets sexually active women between the ages of 30 and 65 years where the target has been set at 40 per cent. The cervical cancer screening coverage indicated no significant increase in the trend throughout five (5) years (2015 to 2019) which ranged between 23 per cent and 26 per cent. In 2020, the coverage showed only 11.8 per cent as of September. In the year 2020, there are two (2) screening tools provided by the health clinics which are cytology and HPV screening. Out of the total, 4.6 per cent was contributed by the HPV screening method whilst the rest had utilized the cytology technique (State Health Department, November 2020).

With regards to the early detection program of breast cancer, 1,140,834 women came to the health clinics for clinical breast examination as of September 2020. Out of this, 0.3 per cent were found to be symptomatic and were referred for further assessment and intervention (State Health Department, November 2020).

The achievement of health screening among adult men and women in 2020 showed a significant decrease compared to 2019. A total of 228,565 adult men (2.7%) and 245,989 adult women (3.0%) underwent screening in 2020 (until November) (target for men and women respectively was 5%) (State

Health Department, November 2020). The main problems identified among men and women were related to the risk of non-communicable diseases (NCDs) namely overweight and obesity, smoking, pre-hypertension, unhealthy diet and inactive physical activity.

HEALTH SERVICES FOR PERSONS WITH DISABILITIES (PWDs)

DOMICILIARY HEALTH CARE SERVICES (DHC) AND PALLIATIVE CARE IN PRIMARY HEALTHCARE

Home visits for the Domiciliary Health Care Services were still carried out. For cases that has been assessed and were deemed non-critical, physical visits were replaced by virtual meeting, through using the telecommunication medium.

Palliative care element that has been incorporated in the domiciliary program since the year 2016 was expanded to 11 other health clinics in the year 2020, bringing it to a total of 50 health clinics. It focuses on improving the quality of life of terminally ill patients, relieving their sufferings through prevention and treatment of pain, and various aspects of support.

In the year 2020, a total of 1,862 patients had benefited from the Domiciliary Health Care program of which 70 per cent of the total patients consist of the elderly. For palliative care services, 107 patients had been enrolled in the program in the year 2020.

EARLY DETECTION OF DISABILITY IN CHILDREN FOR EARLY INTERVENTION PROGRAM (EIP)

'Percentage of detection of disabilities among children age 0 till 1 year, an indicator for early intervention program (EIP) showed an annual upward trend. The target was set at 0.12 per cent. This indicates that more children were screened at an early age to provide prompt holistic intervention. For the year 2020, some 941 (0.18%) children from 508,685 estimated live births were identified with disabilities in Malaysia and were given appropriate treatments and early interventions.

ELDERLY HEALTH SERVICES

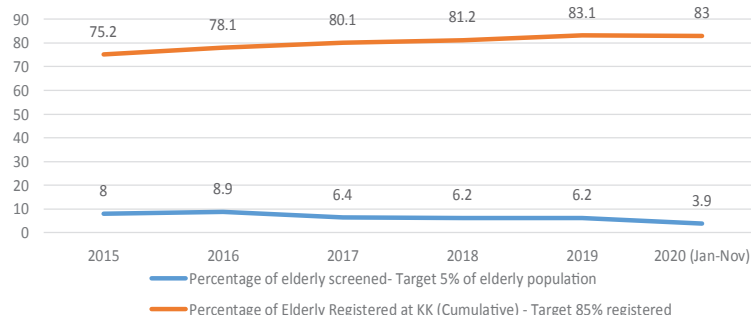
Elderly health services are based on the National Elderly Health Policy and adapting the Public Health Framework introduced by the World Health Organization with the concept of Healthy Ageing in the life cycle 'from womb to tomb'.

The services provided at health facilities include a promotion, health education, health screening and evaluation, medical examination, treatment and referral, home visits and care, physiotherapy, occupational therapy; and establishment of the Elderly Club (KWE) at the Health Clinic (KK) for recreational, social and welfare activities.

Until the year 2020, a total of 2,958,396 elderly (83 per cent of the country's estimated elderly population) were registered in the KK; and 144,989 elderly had health screening done in KK in the year 2020 ([Figure 4.7](#)). A total of 284 KWEs were active under the auspices of KK throughout Malaysia.

As the country is expected to become an Aged Nation by 2030, elderly health services ought to be sustained and strengthened.

Figure 4.7
Percentage of Senior Citizen Registration at Health Clinics (Cumulatively) and Percentage of Senior Citizens Health Screening 2015 to November 2020



Source: Reten PKWE 101 pind.1/2013, 2015-2019, Family Health Development Division, MOH

PRIMARY HEALTH CARE INFORMATICS

NEW NORMS AT HEALTH CLINIC

Ministry of Health Malaysia (MOH) has implemented several measures to break the chain of COVID-19 infection and to flatten the curve. Measures to minimise COVID-19 transmission are by early detection, screening, testing and contact tracing.

1. Triage And Screening

Temporary tents in designated areas outside the main building of the facility have been created for patients to undergo COVID-19 screening before entering the health clinic. COVID-19 Sampling for people under investigation (PUI) is done in this tent. The health clinic also has a separate examination area to ensure that patients with respiratory symptoms do not share the same waiting area with other patients.

2. Waiting Area

The waiting rooms inside the clinic were modified. Only seats that have been determined at a distance of one (1) meter can be occupied. Hand sanitizers and surgical masks are made available for those with respiratory symptoms.

3. Virtual Health Advisor

A virtual health advisory platform was developed via collaboration with a private digital health firm to allow the public to have free consultations either through conversations, audio and video calls with Family Physicians through the website of the Ministry of Health Malaysia (MOH) instead of directly going to the health clinic.

The session started at the end of February 2020 until the end of May 2020 and the number of calls increased from 42 to 1482 in one (1) month. However, as more information on COVID-19 is available in other forms of media, the number of calls decreased to 132 by May 2020. During those two (2) months, 222 cases of PUI were identified and referred to the National CPRC for further action.

4. Reference And Ambulance Services

Suspected COVID-19 patients are transferred from primary health facilities to designated hospitals using designated ambulances following the standard operating procedures.

5. Virtual Clinic Service

Virtual clinic (VC) is a virtual, live and interactive health service that includes clinical consultation, treatment plans for the clients between the health care provider and clients. It complements the existing health services. This service was started as a Proof of Concept (PoC) in five (5) selected health centers (Figure 4.8) for a one (1) year period from 14 August 2019 to 13 August 2020. A total of 3,101 clients were registered during the stated period and out of that, 2,406 (78%) clients had successfully received these services while the rest had issues concerning internet coverage.

Subsequently, this service was expanded to address the new norm of the COVID-19 pandemic. A total of 40 health centers were involved in delivering virtual health services in Malaysia (Figure 4.8). Under Emergency Procurement, RM450, 000 were allocated to procure ICT hardware for 35 health centers and outsource services for the subscription of the platform (40 health centers) from the BookDoc through Emergency Procurement procedure (6 months).

The additional scope added were chronic disease, respiratory, physiotherapy/occupational therapy/ Dietetic and pharmacy. These services commenced on 1 September 2020 and will end on 31 March 2021. So far 4,882 clients had benefitted until December 2020.

Figure 4.8
List of Health Centers



6. Online Appointment System (OAS)

Data showed that 60 per cent of clinic attendance was related to walk-ins (without an appointment) and this had resulted in congestion, especially during peak hours. To address this, an Online Appointment System (OAS) was established to manage the customer attendance and crowd. This OAS is targeted at walk-in cases and non-emergency cases.

The Online Appointment System is provided by three companies namely BookDoc, EncoreMed and QueueMed through a Corporate Social Responsibility (CSR) project from 1 April to 31 December 2020 at six (6) health clinics. Subsequently, it was expanded and to date, 189 health clinics were using OAS in Negeri Sembilan (50), WPKL & Putrajaya (17), Selangor (58), Penang (31), Melaka (21), Perak (9) and Perlis (3). The states of Sabah, Sarawak, Terengganu and Pahang will follow in the next phase.

Table 4.14
OAS registration report from April to December 2020

States	Total Appointments									Total
	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
WPKL & Putrajaya	86	1,189	12,084	18,495	22,009	25,810	31,775	25,358	30,579	167,385
Selangor	0	0	0	53,093	63,795	88,888	95,950	100,458	122,434	524,618
Negeri Sembilan	0	0	0	0	2,862	5,910	5,425	5,161	7,024	26,382
Melaka	0	0	0	0	13	350	931	1,684	3,728	6,706
Perak	0	0	0	11	28	386	879	885	3,969	6,158
P. Pinang	0	0	0	0	75	324	4,705	6,865	10,283	22,252
Perlis	0	0	0	0	2	82	88	503	645	1,320
Total	86	1,189	12,084	71,588	88,784	121,750	139,753	140,914	178,662	754,821

Source: Family Health Development Division, MOH

This CSR project is an immediate and short-term solution until the Clinical Appointment System developed by MAMPU is established for health clinics.

SAMPLING FOR COVID-19

SAMPLING AT THE HEALTH CLINIC

The COVID-19 test at a health clinic is performed for individuals who meet the criteria as outlined in the COVID-19 Management Guidelines in Malaysia. Tests are performed for those with acute respiratory infections (sudden onset of respiratory infections with at least one (1) of them: shortness of breath, cough or sore throat) with or without fever and meet one or more of the prescribed criteria.

Health personnel at the health clinic are trained to take nasopharyngeal and oropharyngeal smears and specimen handling. The COVID-19 test can be performed in more than 460 health clinics. Drives through sampling services are provided, at several community centers, public health clinics and District Health Offices. All positive patients, either asymptomatic or symptomatic are referred to a COVID hospital designated for further management.

UBERISATION: COVID-19 HOMETESTING

The COVID-19 test is performed on request and is performed at the home of individuals who wish to know the status of the infection but do not meet the criteria for testing at a health clinic. This is done through the collaboration of private medical practitioners with MOH.

MOH provided training and certification for private medical practitioners in the collection and handling of specimens as well as the use of personal protective equipment. The charges of sampling services are determined by their respective private sectors. In addition to home sampling, private medical practitioners also provide 'Drive through' testing services at their respective facilities.

PERSONAL PROTECTIVE EQUIPMENT (PPE) UTILISATION AND IMPLEMENTED STRATEGIES IN HEALTH CLINICS DURING COVID-19 PANDEMIC

Personal Protective Equipment (PPE) usage has increased during the outbreak due to the requirement of sampling and contact tracing for each positive COVID-19 case. The central purchasing of personal protective equipment under the provision of emergency procurement for combating COVID-19 was implemented as the urgent action to the requirement of more supply of PPE according to the standard technical specifications. The PPEs were distributed to the frontliners via the State Health Offices.

The illustrative guidelines on the recommended use of PPE in health care settings about COVID-19 according to functions of the HCW concerning the managing of patients with a probable and confirmed case of COVID-19 were officially developed and distributed to all states. This guideline was aimed to overcome the inappropriate use or overuse of PPEs which is one of the causes of the shortage of PPEs stock nationwide during the COVID-19 outbreak.

In order to assess the appropriateness of PPE used by HCW, a short pilot project on the use and control of PPE during the COVID-19 outbreak was done for five (5) weeks; starting from 27 April until 31 May in two (2) selected health clinics. Analysis by the Institute of Health System Research showed that the daily trend for PPE usage was directly proportionate to the number of clinic attendees and the number of HCW working in both health clinics.

To address the issue of increased and inappropriate use of PPE, the following arrangement was made:

- a) Control and monitoring measures were put in place with centralized purchasing of PPE,
- b) Distribution of illustrative guidelines
- c) The pilot project in the study of control and use of PPE and inter-unit audits was conducted on a regular basis.

MIGRATION OF TPC TO TPC-OHCIS

Teleprimary Care System had been used in government health clinics since 2005 and had rolled out in phases to 96 health clinics in seven (7) states by 2010. There is an operation system, keeping an extensive patient's electronic medical record (EMR) and allow an end-to-end solution for a faster, seamless and efficient way to improve health service delivery to the public in the primary health care setting.

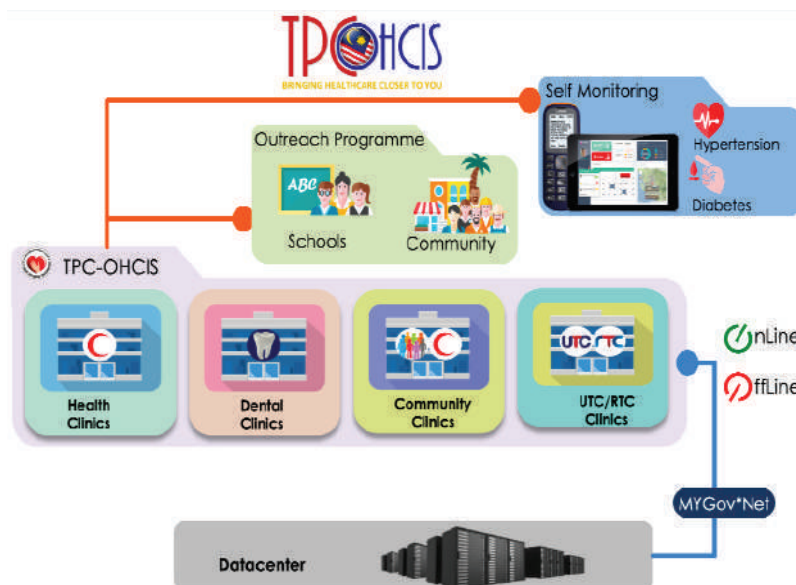
In 2014, the Ministry of Science, Technology and Innovation (MOSTI) has embarked on developing an Electronic Medical Record System, later known as TPC-OHCIS in collaboration with MIMOS Bhd. and the Ministry of Health Malaysia. TPC-OHCIS was piloted in six (6) health clinics in Seremban in 2017. This homegrown technology system will replace the current TPC System that is approaching its end of life period.

The deployment of the TPC-OHCIS System needs detailed planning and preparation. This includes preparing for physical infrastructure, electricity, additional hardware especially for the queue management system that is embedded in TPC-OHCIS, change management and training of staff as well testing and commissioning of both hardware and application before simulation and Go-

Live. The challenge lies mainly in the integration activities between multiple systems, for example, Laboratory Information System (LIS), Pharmacy Information System (PHIS), e-GL System, Public Health Laboratory System (SIMKA) and e-Notification System with TPC-OHCIS. However, the biggest challenge lies in the uncertainties of planning and executing a project during the pandemic COVID-19 period, taking into account multiple movement control orders that were imposed throughout this period. The project timeline has to be modified and training has to be converted through the online method to allow the project to continue.

The TPC-OHCIS is a comprehensive system that allows for vast health data collection that can be translated for management purposes, and big data analysis when needed. As an operation system, TPC-OHCIS rollout will be beneficial in providing seamless and continuous patient management in the future. This is a way forward for the digitalisation of services in Primary Health Care facilities in the public sector.

Figure 4.9
Schematic Diagram of TPC-OHCIS System

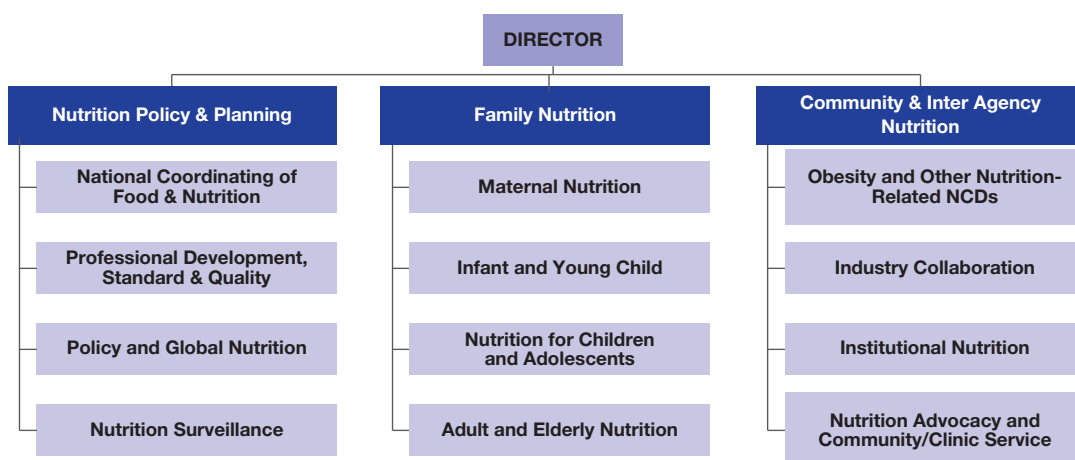


Source: Family Health Development Division

NUTRITION DIVISION

Planning, establishment, development, implementation, monitoring and evaluation of nutrition programs are the functions of the Nutrition Division. To facilitate these functions, the Nutrition Division is divided into three (3) branches, namely Nutrition Policy & Planning, Family Nutrition, and Community & Inter-Agency Nutrition. Each branch is comprised of several sectors as shown in Figure 4.10.

Figure 4.10
Organization Chart of the Nutrition Division



Source: Nutrition Division 2018

NUTRITION POLICY & PLANNING

NUTRITION ACTIVITIES IN ASEAN HEALTH CLUSTER 1 (AHC1) ON PROMOTING HEALTHY LIFESTYLE

Nutrition Division plays an active role in collaborating with ASEAN member states (AMS) through AHC 1 activities. Nutrition components are a part of activities in Health Priorities (HP) 1: Prevention and Control of NCD and HP 7: Promotion of Good Nutrition and Healthy Diet. For Malaysia, as a lead country, we managed to establish the Framework for Fiscal Measure for Sugar-Sweetened Beverages within the timeline as stated in The Work Program 2016 until 2020 of ASEAN Health Cluster 1. The 6th Meeting of the ASEAN Health Cluster 1 on 'Promoting Healthy Lifestyle' through was held through video conference on 5 until 7 October 2020. During this meeting, we proposed to be a lead country for new activities in the next Work Program 2021 until 2025 such as the guideline establishment of the Healthy Central Kitchen in child care centers and kindergartens for AMS and ASEAN Guideline on Healthy Plate Concept. Hopefully, this effort will strengthen AMS collaboration and technical partnership is nutrition-related.

NUTRITION DURING COVID-19 PANDEMIC

In having a pandemic situation, Nutrition Division plays a leading role in ensuring the nutritional well-being of the population. The nutrition activities, particularly during the Movement Control Order (MCO) of the COVID-19 pandemic, are currently ongoing especially for the most vulnerable groups such as infants, young children, pregnant women, older persons and aborigines. To facilitate the execution of these nutrition activities following the new norms, a Guideline for New Norm for the Delivery of Nutrition Services during Movement Control Order is circulated to all the states practitioners. This guideline emphasizes the procedures of rendering nutrition services taking into consideration the COVID-19 pandemic.

Nutrition programs for infants and young children such as the Rehabilitation Programme for Malnourished Children or known as PPKZM and growth monitoring are run accordingly in the Health Clinics. During MCO, more hands-on and interactive nutrition information is disseminated through social media including Facebook, the website and Instagram of the Nutrition Division and State Health Departments. Nutrition information is also disseminated through mass media such as television and

radio to guide families in preparing affordable healthy foods. To ensure optimal nutritional status among the people in the COVID-19 quarantines centers, nutritionists are assigned to the menu planning and monitoring of the foods.

MALAYSIA FOOD COMPOSITION DATABASE (MyFCD)

Information about food composition is of great importance in the assessment of diet quality and the development and application of healthy food-based dietary guidelines for the population. The Malaysia Food Composition Database (MyFCD) is one of the mediums that is monitored under the National Nutrition Surveillance System. The updated version of Malaysian FCD is currently in its third phase. The Institute for Medical Research (IMR), Department of Chemistry Malaysia and Malaysian Palm Oil Board (MPOB) are currently analyzing the nutrient for raw and processed foods analysis whereas the universities are analyzing prepared foods.

In terms of achievement, MyFCD won third place out of eight (8) systems in the MOH's Innovation Award 2020 under the Technology category.

REVISION OF MALAYSIAN DIETARY GUIDELINES (MDG) AND MALAYSIAN FOOD PYRAMID (MFP) 2020

Every 10 years, MDG and MFP are reviewed in line with changes in nutritional status, food intake patterns, nutrient intake recommendations as well as the latest scientific evidence on nutrition. This review is under the responsibility of the Nutrition Guidelines Technical Working Group consisting of academics, and nutritionists from various government and non-government agencies. This MDG 2020 document had gone through a series of writing and refining workshops before it is finalised. Discussions through focus group discussion (FGD) among health professionals were held on 5 to 7 February 2020, whilst a Consensus Meeting with relevant ministries, agencies and departments was held on 22 to 24 July 2020 which aims to ensure all messages and recommendations in MDG and MFP 2020 are in line with existing policies in the country. Preliminary advocacy on MDG and MFP was conducted to all MOH's Nutritionists on 17 December 2020 before more comprehensive and structured advocacy to the various target groups will be carried out starting in 2021.

INVOLVEMENT IN CLUSTERS UNDER THE FOOD SECURITY POLICY CABINET COMMITTEE (FSCC)

The Food Security Policy Cabinet Committee (FSCC) was established based on Cabinet Decisions on 25 March 2020 and 29 April 2020 following the impact of COVID-19. This Cabinet Committee is chaired by the Prime Minister. Under the FSCC, an Executive Committee (Executive Committee) formed and chaired by the Minister of Agriculture and Food Industry (MAFI) is consists of the Secretary Generals of the relevant ministries including the Ministry of Health Malaysia (MOH).

The MOH is responsible to lead the Food Safety and Nutrition Cluster which is chaired by the Secretary-General of the Ministry of Health. The Nutrition Division and Food Safety and Quality Division (BKQM) are joint secretariats for this cluster. A paper entitled "Proposed Incentives to Promote the Availability and Access of Healthy Food in the Market" was presented by this cluster in the first meeting FSCC Meeting on 8 September 2020. This paper was approved by the FSCC and the detailed implementation of this initiative needs to be identified. Therefore, the first meeting of the Food Safety and Nutrition Cluster was carried out on 21 December 2020 to discuss the actions that need to be taken based on the FSCC's decision as well as refining the terms of reference, membership and action plan for this cluster. In addition, the Director of Nutrition Division and Senior Director of Food Safety and Quality Division are also members of all clusters under the FSCC.

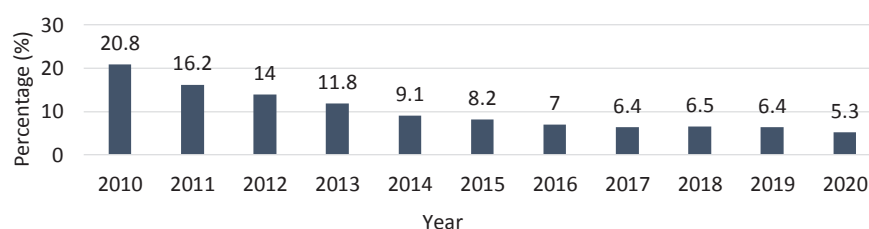
FAMILY NUTRITION SECTOR

PREVENTION AND CONTROL PROGRAM FOR ANAEMIA AMONG PREGNANT MOTHERS

Iron deficiency anemia (IDA) is the common cause of anemia among pregnant mothers. It occurs due to the increment of iron and other vitamin requirements for the development of the fetus and maternal physiological changes during pregnancy. The percentage of anemia among pregnant mothers (Hb less than 11gm %) who attend government health clinics at 36 weeks of pregnancy decreased from 20.8 per cent in 2010 to 5.3 per cent by September 2020. The trend of achievement is as [Figure 4.11](#) below.

Figure 4.11

Percentage Of Anaemia Among Pregnant Mother (Hb < 11gm%) Attending Government Health Clinic At 36 Weeks Of Pregnancy For 2010 – September 2020



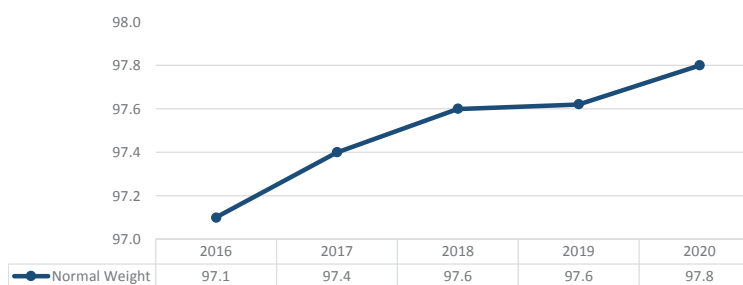
Source: Health Informatics Centre, Ministry of Health Malaysia (2020)

NUTRITIONAL STATUS FOR CHILDREN BELOW 5 IN MALAYSIA

Generally, in 2020 the status of child nutrition under 5 years old in Malaysia has been improved with the percentage of children with normal weight increased from 97.6 per cent (2019) to 97.8 per cent (2020). The percentage of children with moderate weight problems decreasing from 1.8 per cent (2019) to 1.6 per cent (2020). The trend from 2016 to 2018 is shown in [Figures 4.12](#) and [4.13](#).

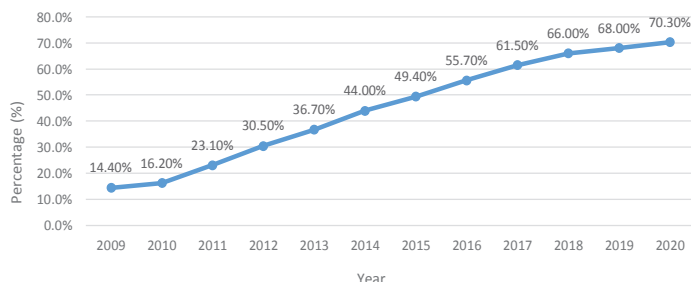
Figure 4.12

Nutritional Status of Children Under 5 Years in Malaysia for Normal Weight, 2016 until 2020



Source: State Health Department, 2020

Figure 4.13
Nutritional Status of Children Under 5 Years in Malaysia for Severe Underweight, Moderate Underweight and Overweight, 2016 until 2020

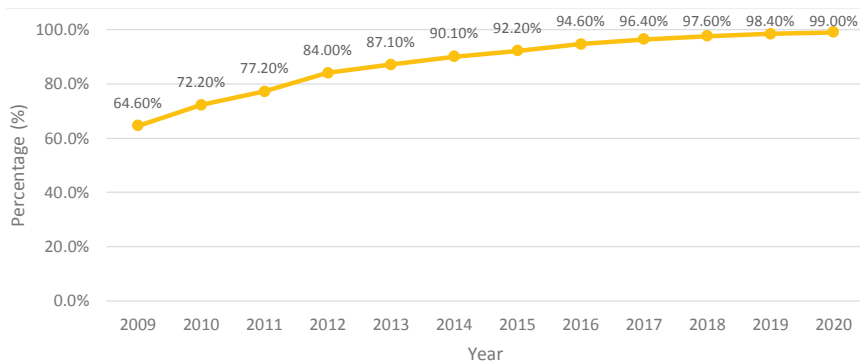


Source: State Health Department, 2020

INFANT AND YOUNG CHILD FEEDING

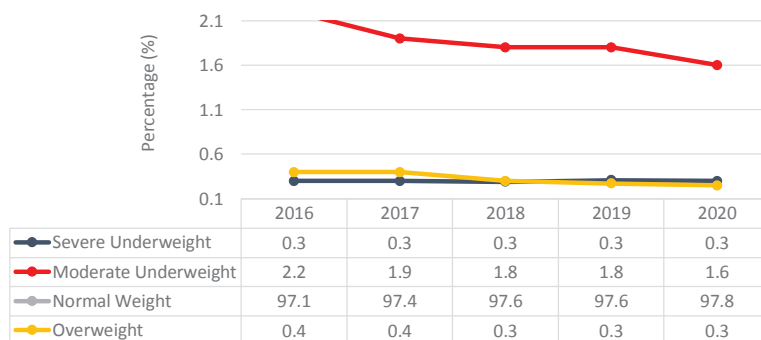
Since 2009, exclusive breastfeeding rates in Malaysia have been increasing as shown in [Figure 4.14](#). Exclusive breastfeeding at six (6) months has increased from 68.0 per cent in 2019 to 70.3 per cent in 2020. [Figure 4.15](#) shows that the timely initiation of complementary feeding at six (6) months increase from 98.2 per cent in 2019 to 99.0 per cent in 2020. The trend from 2009 to 2020 is shown in [Figures 4.14](#) and [4.15](#).

Figure 4.14
Exclusive Breastfeeding Practices at 6 Months From the Year 2009 To 2020



Source: State Health Department, 2020

Figure 4.15
Timely Complementary Feeding Practices at 6 months



Source: State Health Department, 2020

BABY-FRIENDLY HOSPITAL INITIATIVE (BFHI)

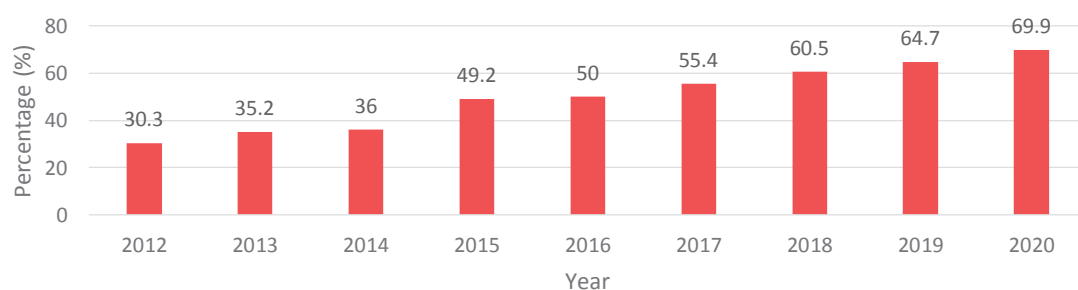
Baby-Friendly Hospital Initiative (BFHI) is a global initiative by the World Health Organization (WHO) and UNICEF aiming to give every baby the best start in life by creating a health care environment in supporting breastfeeding as a norm. By December 2020, 159 hospitals from a total of 312 hospital government and private with maternal and childcare services in Malaysia designated as the Baby-Friendly Hospitals, with 133 hospitals under the Ministry of Health Malaysia, three (3) from the Ministry of Higher Education Malaysia, three (3) from Ministry of Defense Malaysia and 22 from private hospitals. In 2020, only six (6) hospitals were evaluated before the COVID-19 outbreak hit. All of these hospitals have successfully maintained their status as baby-friendly hospitals.

REHABILITATION PROGRAM FOR MALNOURISHED CHILDREN

Rehabilitation Program design, especially for Undernourished Children, is a government's effort to improve the nutritional status of undernourished children aged six (6) months to below six (6) years old targeted among low-income households. The Rehabilitation Program for Undernourished Children is also known as the Food Basket Program.

A total of 6,516 (Preliminary data – PIK up to September 2020) undernourished children from low-income households with monthly income below RM2,000 received food baskets in 2020. Based on [Figure 4.16](#) below, 69.9 per cent have managed to increase weight during the assessment period in 2020. This percentage has shown a positive increment from 2017 even during the COVID-19 pandemic.

Figure 4.16
Percentage of Malnourished Children with Increased Body Weight, 2012 to 2020



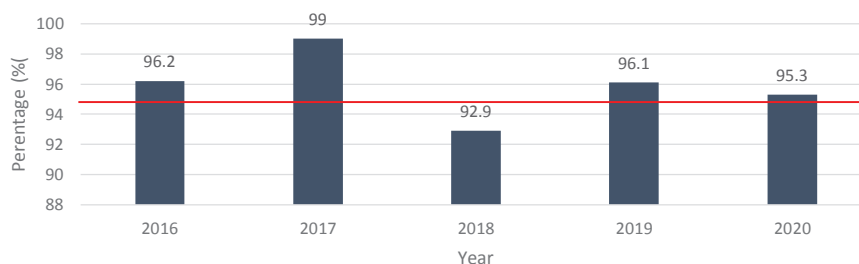
Source: State Health Department

COMMUNITY FEEDING PROGRAM (PCF)

Community Feeding Program was started in 2013 in few states in Perak, Pahang, Kelantan and Sarawak. This is a complementary program to strengthen the implementation of the Rehabilitation Program for Malnourished Children, which had been implemented since 1989 to increase the nutritional status of children aged between six (6) months to six (6) years from hardcore poor households among indigenous people.

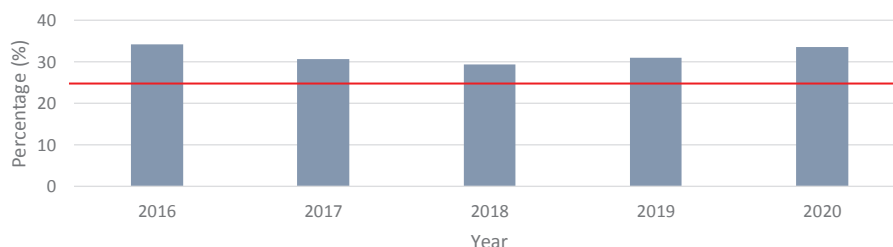
There are 43 centers in Perak, Pahang and Kelantan in 2020 that benefited 1,353 indigenous children. The achievements for both indicators of this program showed over the target which is 95.3 per cent for the percentage of coverage (target: $\geq 95\%$) while 33.6 per cent for the percentage of recovery for malnourished children after six (6) months in the program (target: $\geq 25\%$).

Figure 4.17
Percentage of Coverage for Malnourished Children In Community Feeding Program In 2016 to 2020



Source: State Health Department

Figure 4.18
Percentage of Recovery for Malnourished Children After 6 Months In the Program In 2016 to 2020



Source: State Health Department

NUTRITION ACTIVITIES INVOLVING PARENTS IN KINDERGARTENS AND PRESCHOOLS

This activity aims to empower parents on healthy eating thus they can be role models to their children. Reporting on nutrition activities involving parents has been conducted in government preschool institutions of Ministry of Education (MOE), kindergartens of Ministry of National Unity (MNU) and Community Development Department (KEMAS). As of June 2020, 54.6 per cent (8,944 of government preschool institutions) have conducted these activities. Activities that have been carried out with parents include Smart Garden Project/edible garden, healthy eating tour, cooking demonstrations, healthy bento preparation, nutrition collage and establishment of nutrition information corner. However, several preschools are unable to carry out these activities due to the COVID-19 outbreak in the country.

NUTRITIOUS SCHOOL MEAL PROGRAM (HiTS)

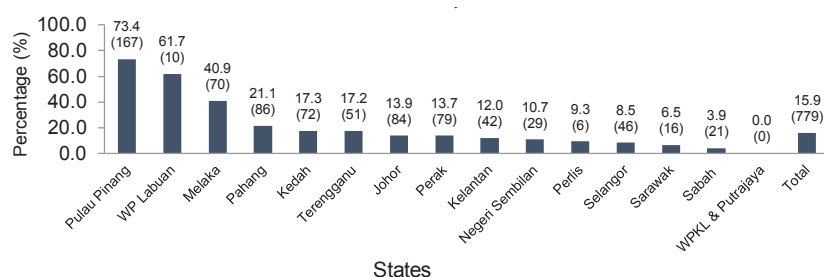
Nutritious School Meal Program (HiTS) is a package of nutritious meals consisting of carbohydrate and protein sources, vegetables and fruits. The enrollments of the students in this program are voluntary. 74 schools had implemented HiTS throughout Malaysia, with 13 new schools implemented HiTS in 2020. However, until December 2020, HiTS has not started in six (6) states; Perlis, Pahang, Kelantan, Sarawak, Sabah and Labuan. As a result of the COVID-19 pandemic, this program has been continuously implemented under the new norms as recommended in School Reopening Management Guidelines. On the other hand, infographics on HiTS are available through the website and Facebook: Nutrition Division, Ministry of Health Malaysia. On top of that, the advocacy on HiTS through virtual conferencing has been conducted by the Department of Education of Federal Territory Labuan together with Taklimat C-HAT (*Cara Hidup Anda Terbaik*) on 11 December 2020.

SALE ON FOODS AND BEVERAGES AT SCHOOL CANTEEN

In 2020, the list of foods and beverages sales in the school canteen has been monitored to ensure compliance with the list of foods and beverages that have been underlined by MOE. This activity was reported to Nutrition Division twice a year i.e June and December. However, due to the closure of schools resulting from the COVID-19 pandemic, school operation was suspended. In relation to that, this activity was reported until June 2020. The Ministry of Education Malaysia (MOE) has circulated guidelines and circulars related to the re-opening of the school in July 2020. Meanwhile, 714 schools have been awarded certificates of appreciation on compliance for a period of January to March 2020.

Figure 4.19 shows the percentage of schools that complied with the sale of foods and beverages in school canteens. There was 15.9 per cent (779 schools out of a total of 8,188 schools) of schools complied with the list that has been underlined by MOE. Penang showed the highest compliance to the list as compared to other states (167 schools (73.4%) out of 240 schools monitored). Meanwhile, it was found that none of four (4) schools that have been monitored in Kuala Lumpur and Putrajaya complied with the list that has been determined. Thus, for the purpose to improve compliance with the list of foods and beverages that are allowed to be sold in the school canteen Healthy Catering Training was provided to canteen operators and continuous guidance has been carried out by the nutritionists.

Figure 4.19
Percentage Of Schools Compliance For Sale On Food And Beverages At School Canteens By State In 2020

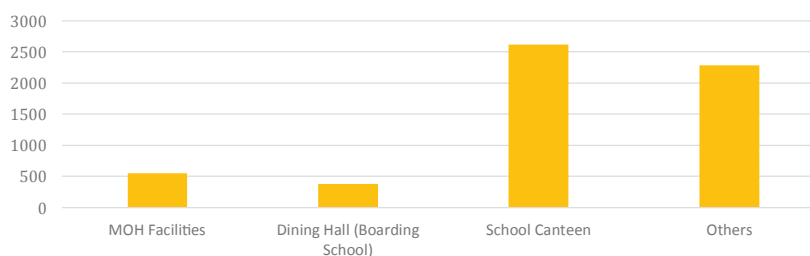


Source: State Health Department

HEALTHY CATERING TRAINING

In 2020, one Healthy Catering Training was conducted by the Head Quarter Ministry of Health, which involves operators and food handlers who provides food service in local governance building in Putrajaya. Meanwhile, at the states level, 82 out of 118 districts had each conducted a minimum of two trainings. Some of the districts are unable to proceed with the training due to the Movement Control Order that restricts any activities involve large gatherings to break the chain of COVID-19. A total of 5693 food operators and food handlers have participated in this training in 2020. The percentage of food operators and food handlers trained by settings in 2020 is shown in Figure 4.20:

Figure 4.20
Numbers of Food Operators and Food Handlers Trained by Settings



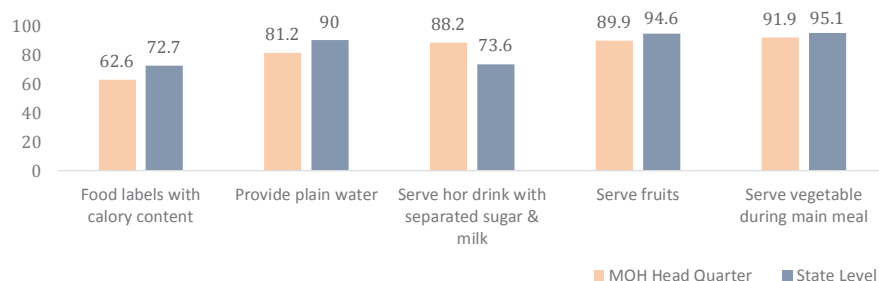
Source: State Health Department

HEALTHY FOOD PREPARATION DURING MEETINGS (PHSSM)

Healthy Food Preparation During Meetings (PHSSM) is an initiative by the Ministry of Health (MOH) in encouraging healthy eating practices in the workplace by serving healthier food choices to the meeting participants. PHSSM has been implemented in MOH since 2011. Up to September 2020, 22 out of 29 (75.9%) Division in MOH Headquarters has implemented PHSSM, which involved 2,136 meetings. PHSSM also has been implemented at the state level which involved 4,150 meetings between January until September 2020. The details of the implementation of PHSSM at the MOH Head Quarter and state level according to the PHSSM criteria are shown in [Figure 4.21](#).

Figure 4.21

Percentage of PHSSM Implementation According to PHSSM Criteria at the MOH Head Quarter and State Level Up to September 2020



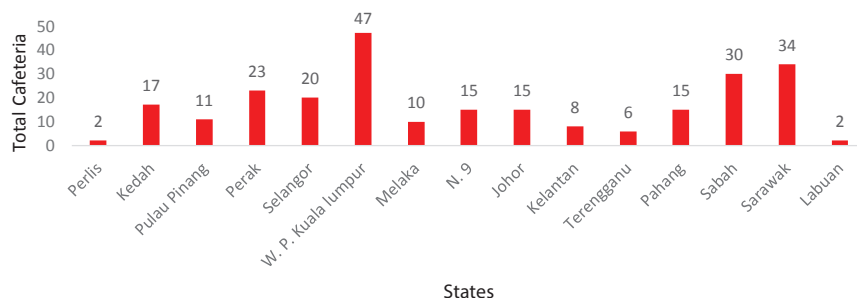
Source: State Health Department

HEALTHY CAFETERIA

Healthy Cafeteria recognition is one of the initiatives taken by the Ministry of Health in supporting healthy eating practices among Malaysians. This recognition is awarded to cafeterias that prepare, serve and sell healthy, clean and safe food in accordance with Healthy Cafeteria Recognition Guidelines. In 2020, 40 cafeterias in health facilities and seven (7) cafeterias in other government agencies have been recognised as Healthy Cafeterias. Apart from that, one (1) cafeteria in private facilities has been recognised as Healthy Cafeteria which includes food premises under TNB Bandar Perda, Pulau Pinang.

Figure 4.22

Distribution of Healthy Cafeterias throughout the Country in 2020



Source: State Health Department

COMMUNITY & INTER-AGENCY NUTRITION

EMPOWERMENT OF PARENTS AND TEACHER ASSOCIATION (PTA) INITIATIVE TO COMBAT OBESITY AMONG SCHOOL CHILDREN (*CARA HIDUP ANDA TERBAIK*) - C-HAT

The C-HAT Initiative (*Cara Hidup Anda Terbaik*) is a smart collaboration with the Ministry of Education Malaysia (MOE) that uses trained PTA's members as ambassadors to address obesity problems among school children. During the year 2020, the Coordination Meeting on the Implementation of C-HAT Initiative Activities was held for the States of Perlis, Kedah, Penang, Perak, Johor and Terengganu to discuss the implementation plan of C-HAT activities as well as methods to expand the implementation of C-HAT activities.

Besides that, the C-HAT Initiative has been selected as the Key Performance Indicator (KPI) Director of the Nutrition Division in 2020, namely; Percentage of districts implementing at Least one (1) C-HAT Activity, with the target of 100 percent of districts implementing this activity. Two (2) online meeting sessions with C-HAT Head Coach (JU) were held to discuss appropriate alternative activities that can be implemented during the Movement Control Order (MCO) Phase such as nutrition talks or exercises together (online), exercise/physical activity competitions using smartphone applications, *Kembara Pasar Raya Sihat* video screenings, self-weight management competitions and others according to the new norm. Despite the limited implementation of activities, the achievement of C-HAT Initiative activities is encouraging where 57.3 per cent (86/150) districts have successfully carried out at least one (1) C-HAT activity. C-HAT Initiative will be expanded by training and strengthening more JU C-HAT so that each district has at least one JU C-HAT who is committed to implementing C-HAT activities in their respective schools or districts.

TRIM & FIT WEIGHT MANAGEMENT PROGRAM SEMINAR

Trim & Fit Weight Management Program Seminar was held on 20 to 21 July 2020 at Seminar Room, Medical Device Authority Office, Cyberjaya. This seminar was attended by 60 participants from various agencies in Putrajaya and Kuala Lumpur. The main objective of this seminar is to strengthen the participants' knowledge and skills on weight loss management through healthy lifestyle practices. This seminar is also a "kick-off" that aims to increase participants' motivation before enrolled in the six (6) months of intervention activities. This seminar involved lectures on obesity and health, abuse of supplements and slimming pills, healthy eating practices, MyNutridiari 2 briefing, motivational session, group nutrition consultation and exercise session.

CODE OF ETHICS FOR THE MARKETING OF INFANT FOODS AND RELATED PRODUCTS

Code of Ethics for the Marketing of Infant Foods and Related Products has been implemented in Malaysia since 1979 to protect breastfeeding practices from the marketing activities of infant formula milk products, complementary foods, feeding bottles, teats and pacifiers. The Code of Ethics is implemented through monitoring activities by the state monitoring team to detect alleged violations by companies and professionals or health personnel.

Starting at the end of 2019 until mid-2020, a total of 898 complaints on alleged violations of the Code from 15 states and companies' competitors were received for monitoring sessions conducted throughout 2019. A total of 335 (37.3%) complaints met the criteria to be brought to the discussion of the Disciplinary Committee on the Code of Ethics for the Marketing of Infant Foods and Related Products held in 2020. A total of 144 complaints on alleged violations involving 54 companies (12 infant formula milk companies, 19 complimentary food companies and 25 feeding equipment companies) were discussed at the meeting. The committee has decided that 131 (90.97%) of the alleged complaints discussed are valid and imposed penalties.

In addition, the Code of Ethics also conducts vetting on labels and information materials of infant formula milk products and complementary foods to control promotion through product marketing. In 2020, a total of 83 labels and information materials of infant formula products and complimentary food were received from 16 manufacturers and distributors of infant formula and complementary foods. A total of 63 materials have met the checklist and have been discussed in four (4) series of Vetting Committee on the Code of Ethics for The Marketing of Infant Foods and Related Products Meeting which was held throughout 2020. Following the meeting, the total number of approval codes issued in 2020 is 42.

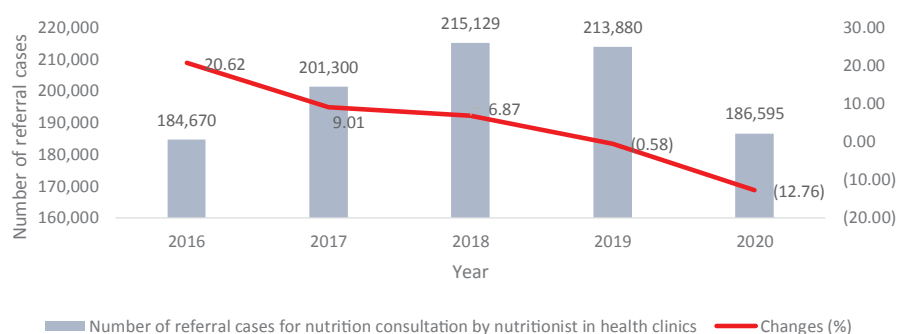
HEALTHIER CHOICE LOGO MALAYSIA INITIATIVE

The Healthier Choices Logo (HCL) Malaysia is an initiative started on 20 April 2017. Those HCL products consider as the healthier option if compared to the other products within the same category. In general, the HCL initiative aims to help the consumers to make informed choices by merely looking at the front label of the food packages as well as to identify the healthier products compared to others in the same category. Moreover, HCL encourages the food and beverage industries to conduct reformulation and changing the recipes of the products and hence manufacture healthier products in the market. HCL Expert Committee has been established and is responsible for HCL's nutrient criteria revision since 2018. Started 1 April 2019, HCL applications and authentications are solely depending on the latest released HCL's nutrient criteria. Presently, 410 total cumulative products have been authenticated with HCL Logo usage until 31 December 2020. The continual supports and efforts from multi-stakeholders are required to strengthen the implementation of the HCL initiative. Also, HCL advocacy and promotion will be carried out from time to time to boost up the consumers' awareness and understanding of the HCL initiative.

NUTRITION CONSULTATION

The Nutrition Consultation service was carried out by 295 nutritionists covering 332 health clinics throughout Malaysia. The nutritional consultation sessions were being conducted either on an individual basis or in groups that cover pregnant mothers, infants and young children, adolescents, adults and the elderly. [Figure 4.23](#) indicates a total of 186,595 cases being referred for nutritional consultation in 2020. The number of referred cases decreases to about 12.8 per cent compared to the number of cases referred in 2019 (213,880). The decrease was believed to be closely related to the implementation of the new referring criteria which has been implemented since 2019. The new referring criteria were established following the enforcement of the Allied Health Profession Act (Act 774).

Figure 4.23
Trends and Number of Cases Referred for Nutrition Consultation by Nutritionist in Health Clinics throughout Malaysia from 2016 to 2020



Source: Reten RCP 201 (2020)

The top highest cases being referred for nutrition consultation were underweight cases (32.7%), followed by anemia (24%), stunting (11.7%) and wasting (9.4%). [Table 4.15](#) shows the type of cases being referred for nutrition consultation by the nutritionists in descending order.

Table 4.15

Number of Referral for Nutrition Consultation by Nutritionist in Health Clinics by Type of Cases for 2020

No.	Type of Cases	Number of Referral	Percentage
1	Underweight	60,993	32.7
2	Anaemia	44,855	24.0
3	Stunting	21,810	11.7
4	Wasting	17,461	9.4
5	Others	13,542	7.3
6	Obesity	11,873	6.4
7	Gestational Weight Gain (GWG)	11,386	6.1
8	Overweight	3,529	1.9
9	Other Nutritional Anaemia	552	0.3
10	Breastfeeding	482	0.3
11	Micronutrient Deficiency/ Excess	112	0.1
		186,595	

Source: Reten RCP 201 (2020)

SMARTPHONE APPLICATION 'MyNUTRIDIARI 2' (MND2)

In line with current technological developments, the smartphone application was introduced and known as 'MyNutriDiari 2' (MND2). The MND2 application is designed to help users monitor the number of calories they consume to obtain their ideal weight. As of December 2020, almost 160,500 users have downloaded the application.

NUTRITION ADVOCACY THROUGH SOCIAL MEDIA

In line with current technology developments and COVID-19 epidemic hit in our country in 2020 which has limited almost all physical encounters especially nutrition activities at both community and health clinics settings. In order to make sure the nutritional messages get through to them nutrition advocacy and promotion have also been intensified using social media platforms. The most commonly used social media were Facebook, Instagram, Twitter and Youtube Channel. To date, the Nutrition Division's Facebook page has a total of 172,000 followers, Instagram (13,000), Twitter (10,000) and Youtube Channel (1,000 subscribers). A total of 601 posts of nutrition-related information has been shared on social media platforms. Nutrition messages were also disseminated via mass media channels such as interview slots on television channels (18), radio channels (6) while four (4) nutrition articles were published in the local newspapers.

WEBINAR ON PROMOTING HEALTHY DIET FOR CHILDREN THROUGH THE ESTABLISHMENT OF HEALTHY CENTRAL KITCHEN IN CHILDCARE AND KINDERGARTEN

A webinar on promoting a healthy diet for children through the establishment of the healthy central kitchen in childcare and kindergarten was held on 27th August 2020 at Medical Devices Authority Office, Cyberjaya. The webinar was coordinated by Nutrition Division, Ministry of Health Malaysia and collaboration with Japan International Cooperation Agency (JICA) Malaysia-Tokyo. Various ministries and agencies attended the webinar included the Public Civil Department, Ministry of Education Malaysia, Ministry of Women, Family and Community Development, KEMAS, Social Welfare Department, The Association of Registered Childcare Providers Malaysia (ARCPM) and UNICEF. The main objective of the webinar was to gather more information regarding Japan's School Lunch Program through School Lunch Center @ Central Kitchen in preparing a central kitchen proposal to be endorsed by the higher level ministry. In addition, it also aimed to learn about the programs and activities carried out by the Japanese Government in ensuring the health nutritional status of the people are at an optimal level.

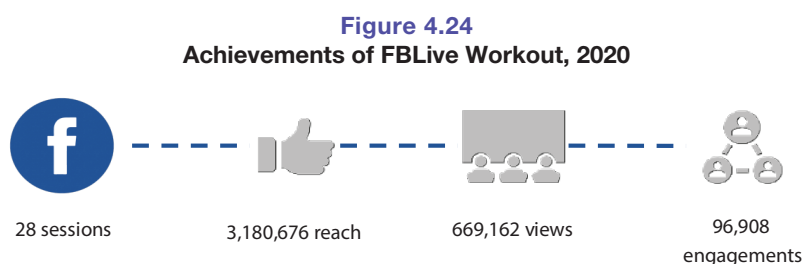
HEALTH EDUCATION DIVISION

The Health Education Division (BPK) has been a major leader in the implementation of national health promotion activities since 1991. BPK has implemented various health promotion initiatives by focusing on fostering a healthy lifestyle to improve health literacy and sustaining behavior change. The health promotion activities were implemented based on some predetermined focuses.

ACTIVE LIFESTYLE CAMPAIGN, “WHEN ACTIVE LIVING KICKS” (WALK) FOR RISK REDUCTION OF NON-COMMUNICABLE DISEASES

FBLive WORKOUT 2020

Being physically active through the FBLive Workout sessions as a new norm was broadcasted via the social media platform of the Ministry of Health Malaysia from 8 April 2020 to 26 November 2020, involving fitness instructors and collaborations with Wellness Hub throughout Malaysia (Figure 4.24 and Image 4.2).



Source: Health Education Division, MOH

Image 4.2
FBLive Workout, 2020

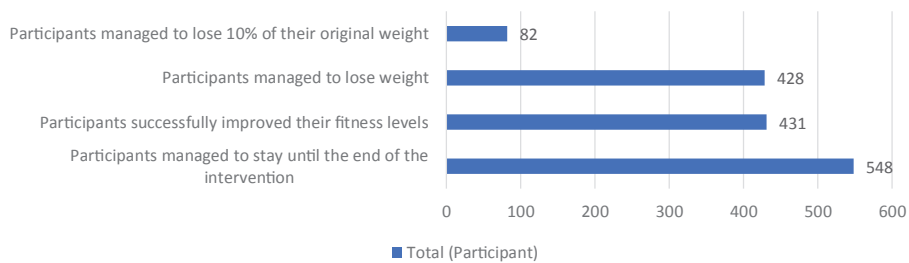


Source: Health Education Division, MOH

I FIT AND EAT RIGHT (IFitEr) PROGRAM

The IFitEr program has been implemented in all Wellness Hubs throughout Malaysia to help communities to manage their weight problems through weight management behaviour interventions modification (**Figure 4.25** and **Image 4.3**).

Figure 4.25
Achievements of IFitEr, 2020



Source: Health Education Division, MOH

Image 4.3
Activities of IFitEr, 2020

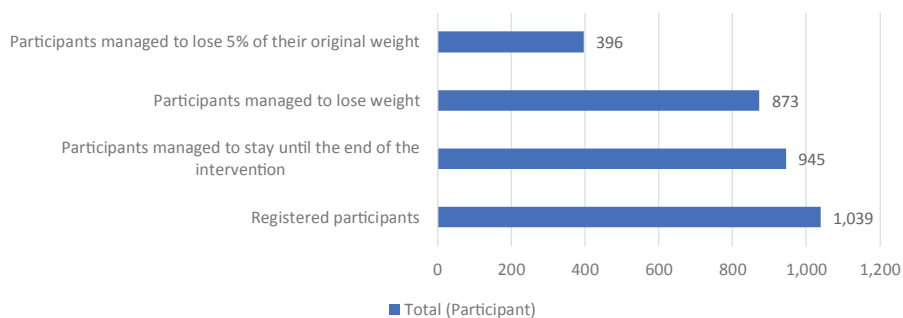


Source: Health Education Division, MOH

VIRTUAL I FIT AND EAT RIGHT (V+IFitEr)

It was a virtual weight management behaviour intervention in line with the practice of new norms. V+IFitEr was officiated by the Minister of Health on 21 August 2020. This program was a collaborative effort with the Obesity Prevention Association of Children and Adults with the theme “Not about Thin”. (Figure 4.26 and Image 4.4).

Figure 4.26
Achievements of V+IfitEr, 2020



Source: Health Education Division, MOH

Image 4.4
V+IFitEr, 2020

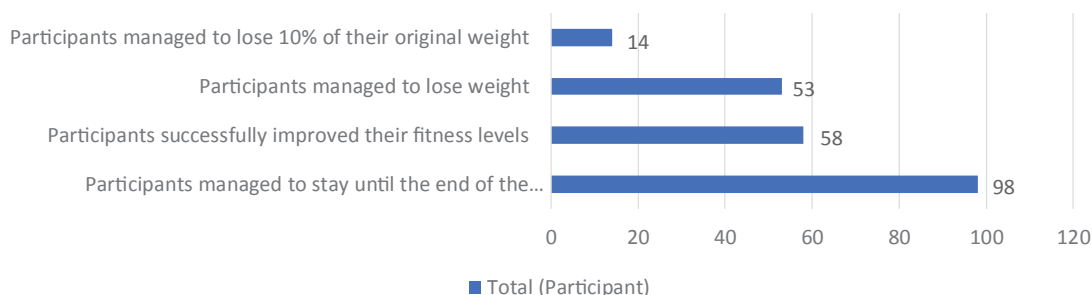


Source: Health Education Division, MOH

JOM NAK SIHAT BAGAN SERAI

The Division in collaboration with the Bagan Serai Parliamentary Office, and the Perak State Health Department conducted a *Jom Nak Sihat* intervention in Bagan Serai, Perak. 105 participants have joined the program that was implemented from 16 August 2020 to 30 October 2020 (Figure 4.27 and Image 4.5).

Figure 4.27
Achievements of Jom Nak Sihat Bagan Serai, 2020



Source: Health Education Division, MOH

Image 4.5
Activities of Jom Nak Sihat Bagan Serai, 2020



Source: Health Education Division, MOH

KOSPEN@Activ

KOSPEN@Activ was an initiative by the Ministry of Health (MOH) in collaboration with BookDoc to promote an active lifestyle among the MOH workforce and the general public. This digital application uses the concept of games via smartphone and fitness trackers to track the number of steps done by an individual and rewarded when the individual reaches a certain level (Figure 4.28 and Image 4.6)

Figure 4.28
Achievements of KOSPEN@Activ, 2020



Source: Health Education Division, MOH

Image 4.6
KOSPEN@Activ, 2020 Virtual Challenges



Source: Health Education Division, MOH

HEALTH PROMOTION IN LEARNING INSTITUTIONS (HePiLI)

EMBRACING THE NEW NORM AND LET'S TALK HEALTHY MIND

The launching ceremony of the Embracing New Norm and Let's TALK Healthy Minds was officiated by the Minister of Health on 26 July 2020 at SMK Seri Pinang, Johor. The program aimed to observe the compliance of Standard Operating Procedure (SOP) of the new norm in schools as well as promoting the Let's TALK Healthy Mind Campaign among students and school citizens (Image 4.7).

Image 4.7
Observing New Norm Compliance and Let's TALK Healthy Mind Campaign, 2020



Source: Health Education Division, MOH

VIRTUAL E-LEARNING HEPILI

This virtual interactive education and promotion were introduced in April 2020 using Facebook and Instagram HePiLi Network. There are four (4) phases of implementation which are Phase 1: #STAYATHOME KIT 1.0, Phase 2: #STAYATHOME KIT 2.0, Phase 3: Special Edition of Ramadan & Lebaran and Phase 4: Virtual E-Learning with Kak Long (Figure 4.29 and Image 4.8).

Figure 4.29
Achievements of Virtual E-Learning HePiLi, 2020



Source: Health Education Division, MOH

Image 4.8
FB Live Virtual E-Learning HePiLi sessions and Virtual Challenge HePiLi, 2020



Source: Health Education Division, MOH

TABLE TALK MINDA SIHAT

It was an initiative by the Ministry of Health Malaysia in collaboration with the Ministry of Education Malaysia which has been implemented since 2018. In 2020, 8,096 tables talk on Healthy Lifestyle Practice messages were installed in primary schools and 400 tables talk Let's TALK Healthy Mind installed in secondary schools around Kuala Lumpur and Putrajaya (Image 4.9).

Image 4.9

Table Talk Healthy Lifestyle Practices and Let's TALK Healthy Mind, 2020



Source: Health Education Division, MOH

COMMUNITY WELLNESS INITIATIVE THROUGH WELLNESS HUB

LAUNCHING OF WELLNESS HUB

The launch of Wellness Hub Bagan Pinang, Negeri Sembilan was officiated by the Minister of Health on 12 September 2020. To date, 27 Wellness Hub has been established throughout Malaysia (Figure 4.30 and Image 4.10).

Figure 4.30

Achievements of Wellness Hub, 2020



Client attendance (54,008)
Female - 39,944 people
Male - 14,064 people



Risk screening for
healthy lifestyle
20,073 people



Client referred after
screening 18,049 people

Source: Health Education Division, MOH

Image 4.10
Launching of Wellness Hub & Officiating of Wellness Truck



Source: Health Education Division, MOH

UPGRADING WORK OF WELLNESS HUB

The Wellness Hub upgrading project in 2020 involved five (5) Wellness Hub namely Wellness Hub Bagan Pinang, Wellness Hub Kuala Sawah, Wellness Hub Batu Pahat, Wellness Hub Alor Setar and Wellness Hub Sungai Petani (**Image 4.11**).

Image 4.11
Upgrading Work of Wellness Hubs, 2020

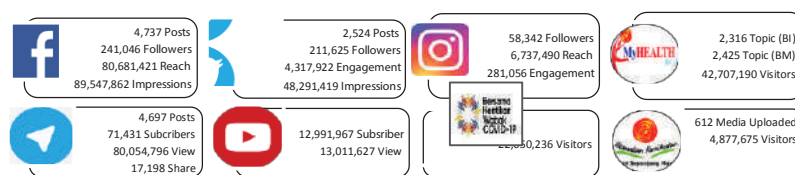


Source: Health Education Division, MOH

CREATIVE DEVELOPMENT, PRODUCTION, PUBLICATION AND DISSEMINATION

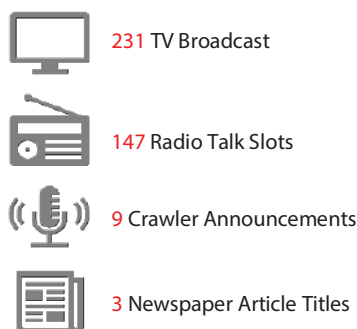
BPK with the cooperation of the Information Management Department (BPM) and the Corporate Communications Unit (UKK) has developed a www.covid19.gov.my portal to deliver messages related to COVID-19. Health messages are also widely distributed through www.infosihat.gov.my and www.myhealth.gov.my portals and also the usage of social media channels, conventional media, health E-Magazine publishing, printing and circulation of various health promotion materials, graphic design, proofreading and translation (Figure 4.31, Figure 4.32, Image 4.12, Figure 4.33, Table 4.16, Table 4.17 and Figure 4.34).

Figure 4.31
Achievements of Media social Usage, 2020



Source : Health Education Division, MOH

Figure 4.32
Achievements of Conventional Media Usage, 2020



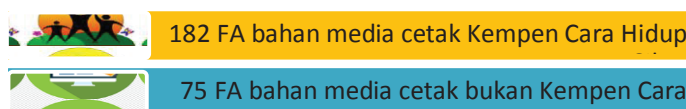
Source: Health Education Division, MOH

Image 4.12
Achievements of Conventional Media Usage, 2020



Source: Health Education Division, MOH

Figure 4.33
Graphic design Production, 2020



Source : Health Education Division, MOH

Table 4.16
Printing and Distribution of Materials, 2020

External Distribution	Internal Distribution
<ul style="list-style-type: none"> • 330 applications • 1,516,64 printed copies 	<ul style="list-style-type: none"> • 53 applications • 59,274 printed copies

Source: Health Education Division, MOH

Table 4.17
Stock Circulation Rate, 2020

Quaterly Report	Stock Circulation Rate
January – March	0.95
April – June	1.06
July– September	1.01
October – December	3.5
January - December	4.6

Source : Health Education Division, MOH

Figure 4.34
Services of Proofreading and Translation, 2020



Source: Health Education Division, MOH

EMPOWERING COMMUNITY THROUGH COMMUNITY MOBILIZATION

COMMUNICATION FOR BEHAVIOURAL IMPACT (COMBI)

COMBI is a social mobilization and communication strategy to influence individuals, families and communities towards healthier behavioral changes in particular addressing issues related to infectious diseases and environmental hygiene. As of 31 December 2020, there are 3,065 COMBI teams with 27,535 COMBI volunteers nationwide. The establishment of a new COMBI locality is 168 with 1,200 leaders and trained COMBI members. The implementation of search and destroyed activities was 1,160, health promotion activities through printed and electronic media were 86,072 while face-to-face communication activities were 124,888 sessions. The Honourable Minister of Health Malaysia also has launched the Embracing New Norms for COVID-19 Community Prevention Campaign on 4 October 2020 which was attended by 250 leaders and COMBI members nationwide. A total number of health promotion activities for the new relevant norm campaign was 1,090 ([Images 4.12](#) and [Images 4.13](#)).

Image 4.12
Town Hall Session on Embracing New Norm with COMBI Leaders, 2020



Source: Health Education Division, MOH

Image 4.13

New Norms Activities on Dengue Fever Prevention and Prevention of COVID-19, 2020



Source: Health Education Division, MOH

WOLBACHIA AEDES MOSQUITOES EXPANSION PROJECT WITH THE COMMUNITY

As of 16 January 2020, there were 19 localities involved in the Wolbachia project. A total of 14 localities achieved a frequency of more than 80 per cent and the release of the mosquitoes was discontinued. However, it was found that five (5) localities had declined by over 60 per cent of Wolbachia frequency and had implemented the re-release of mosquito (Table 4.18). In addition, various health promotion activities were carried out in Selangor, the Federal Territory of Kuala Lumpur and Penang (Table 4.19).

Table 4.18
Release of Wolbachia Mosquitoes,
2020

Locality	Date of release
Pelangi	10th September 2020
Lavender	28th September 2020
Gedung	24th November 2020
Subang	In planning (2021)
P14 Sub12	In planning (2021)

Source : Health Education Division, MOH

Table 4.19
Achievements of Wolbachia Health
Promotion Activities, 2020

Activities	Total
Public Announcement	20
Health Exhibition	5
House to house Visit	40
Demonstration	240
Individual Advice	250
External Media	7
Pamphlets Distribution	1,326

HIGHER EDUCATION INSTITUTIONS DENGUE-FREE COMPETITION

In 2020, contest briefing was held at five (5) zones, namely the Northern Zone, Central Zone, Southern Zone, Eastern Zone and Borneo Zone (Image 4.14).

Image 4.14

Briefing of Dengue Free Higher Education Institutions Competition, 2020



Source: Health Education Division, MOH

NATIONAL LEVEL CELEBRATION OF ASEAN DENGUE DAY AND #10 MINUTES ELIMINATE AEDES CHALLENGES

The national-level celebration of ASEAN Dengue Day was celebrated with the theme “10 Minutes Eliminate Aedes”. The challenge of producing a video of “10 Minutes Eliminate Aedes” was also be made through all social media channels to educate the community on the elimination of Aedes mosquito breeding spots inside and outside of the home (Image 4.15).

Image 4.15

10 Minutes Eliminate Aedes Challenge



Source: Health Education Division, MOH

SMOKE-FREE INITIATIVES AND BEHAVIOUR MODIFICATIONS

QUIT SMOKING CLINIC SERVICES AT THE HOSPITAL

Quit Smoking Clinic Services (PKBM) is a service to help smokers quit smoking with behavioural modification therapy techniques, pharmacotherapy therapy or a combination of both within a six (6) month cohort period and is open to referred patients as well as walk-in clients. In 2020, there was a decrease in the number of clients quitting smoking compared to 2019 due to the COVID-19 pandemic (Table 4.20 and Image 4.16).

Table 4.20
Achievements of Quit Smoking Clinics, 2020

Year	Total Registered Clients	Total Set Quit Date by Clients	Total Clients Quit Smoking	Percentage of Quit Smoking
2019	3,875	1,112	594	53.4%
2020	2,956	969	483	49.8%

Source : Health Education Division, MOH

Image 4.16
Quit Smoking Clinic Behavioural Modifications Sessions, 2020



Source : Health Education Division, MOH

STOP SMOKING QUITLINE

Stop Smoking Quitline serves as an alternative method of helping smokers to quit smoking online. The service operates for eight (8) hours a day and is operated by staff with extensive experience handling clients who wish to quit smoking using motivational interviewing techniques. In 2020, there was an increasing number of people quitting smoking compared to 2019 ([Table 4.21](#) and [Images 4.17](#)).

Table 4.21
Achievements of Quitline, 2020

Year	Total calls	Total Set Quit Date by Clients	Total Clients Quit Smoking	Percentage of Quit Smoking
2019	593	11	5	55
2020	1,026	28	18	50.4

Source : Health Education Division, MOH

Image 4.17
Quitline Behavioural Modifications Sessions, 2020



Source: Bahagian Pendidikan Kesihatan, KKM

SPEAK OUT CAMPAIGN

The campaign empowers non-smoker communities to voice out their rights to have clean air and be free of cigarette smoke. A feasibility survey of the Speak Out Campaign in October 2020 found 71.9 percent of 132 respondents agreed the campaign could empower the community to boldly reprimand smokers (Image 4.18).

Image 4.18
Speak Out Campaign, 2020



Source: Health Education Division

EMBRACING THE NEW NORM TO EMPOWER THE COMMUNITY TO PREVENT COVID-19 CAMPAIGN

The campaign has been launched by the Prime Minister on 8 August 2020. As of 31st December 2020, there were 130,971 engagement activities involving the Town Hall and Mobile Unit done with 650,787 people attended. Besides, there were 16,105 postings done on social media with 537,053,673 reaches. Promotion activities carried out via conventional media were 3,645 slots and promotion through printed media distributions were 329,012 (Image 4.19 and Image 4.20).

Image 4.19

Engagement Activities of Embracing the New Norm to Empower the Community to Prevent COVID-19, 2020



Source: Health Education Division

Image 4.20

Embracing the New Norm to Prevent COVID-19 Campaign, 2020



Source: Health Education Division

NATIONAL AGENDA FOR HEALTHY MALAYSIA (ANMS)

ANMS is a comprehensive health promotion initiative and strategies that cover various aspects of life to strengthen healthy lifestyles and achieving the health standards of the people. ANMS was agreed at the Cabinet Meeting on 7 August 2020 with an allocation of RM40 million for ANMS phase 1 from 2020 to 2022. The implementation of ANMS comprises four (4) core areas: strengthening the promotion of healthy lifestyle practices, strengthening health promotion services (wellness), empowering healthy self-control and strengthening environmental hygiene by engaging the participation of all ministries, volunteers, communities, NGOs and private sectors.

DISSOLUTION OF MALAYSIAN HEALTH PROMOTION BOARD (MYSIHAT) AND ABSORPTION OF FUNCTION UNDER THE HEALTH EDUCATION DIVISION

Dissolution of MySihat is an initiative under the Rationalization Plan of the Ministry of Health Malaysia that aims to optimize the use of resources. Therefore, 10 MySihat officers have been exchanged appointment to the Information Officer (Health Education) service scheme effective 1 April 2020.



05

MEDICAL



MEDICAL DEVELOPMENT DIVISION

HOSPITAL SERVICES DEVELOPMENT SECTION

Under the Medical Development Division, Medical Services Development Section is responsible for the management of health services in the MOH hospitals. This Section was involved in the management of the COVID-19 pandemic especially in terms of hospital services. This section consists of six units: Hospital Management Services Unit, Medical Services Unit, Surgical and Emergency Medical Services Unit, O&G and Paediatric Services Unit, Clinical Support Services Unit, and Medical Resource Unit.

HOSPITAL MANAGEMENT SERVICES UNIT

Cluster Hospital, one of the important transformation initiatives continues to be implemented so that more equitable, efficient and better-quality health services can be delivered to the public. In the year 2020, MOH has succeeded in establishing another 17 new Cluster Hospitals. This makes 42 Cluster Hospitals have been successfully formed since 2014 involving 141 MOH hospitals nationwide.

The establishment of Cluster Hospitals increases access to specialist services, especially in Non-Specialist Hospitals. More patients can be treated through improving the frequency of Specialist Clinics, relocation of part of specialist services to Non-Specialist Hospitals such as Rehabilitation services at Kuala Nerang Hospital, Nephrology Services at Pasir Mas Hospital and Infectious Disease Treatment Services at Tumpat Hospital. Selected surgical services are also performed in Non-Specialist Hospitals such as Cataract Surgery in Tampin and Jitra Hospitals.

The management of health services during the COVID-19 Pandemic is also planned and implemented through the mapping of Cluster Hospitals, where Non-Specialist hospitals either involved in managing non-COVID-19 cases or also served in treating COVID-19 cases. A total savings of RM1.3million for cluster-based procurement was realized in 2020.

Cluster Hospital has also brought a new paradigm for the management of medical records where the patient's medical condition record will be with the patient if moved to other hospitals within the cluster as required.

Integrated Hospital Information System was initiated that catalyse the delivery of services in a hospital to be more efficient and effective, in line with the latest technological advancement. HIS@KKM basic version has been used at the COVID-19 MAEPS Serdang Quarantine and Treatment Centre, Port Dickson Hospital and expanded to the AIMM Port Dickson COVID-19 Treatment Centre to facilitate the treatment of COVID-19 patients.

Guidelines for the Implementation of Virtual Clinics in MOH Hospitals have been developed to encourage the use of technology in the delivery of online services, provide easy access to customers, thereby reducing congestion in hospitals during the COVID-19 pandemic.

This unit has coordinated the development and publication of the Strategic Plan Document 2021-2025 for the Medical Program and was successfully published on 4 June 2020. A tribute video for the frontliners and a short documentary detailing the CPRC Hospital Service strategies in facing the COVID-19 pandemic were also coordinated by this unit.

This unit was also involved in the development of the CPRC Hospital System, an online reporting tool to monitor hospital preparedness in facing pandemic COVID-19. This platform facilitates data collection and analysis, including daily monitoring of hospital beds, ICU beds, ventilator utilization and specific hospital reconstitution index. This is to ensure an efficient response towards escalating outbreaks. This system has helped MOH to make quick and efficient decisions on the management of hospital facilities during the outbreak.

MEDICAL SERVICE UNIT

Community psychiatric services through the MENTARI community mental health centre also expanded over the years. In 2020, 3 MENTARI centres were identified by the MOH to ensure adequate access to patients suffering from mental illness. This sums up the total number of MENTARI Centres to 28 and is expected to grow each year throughout the 12th Malaysia Plan. Community Mental Health Centre (MENTARI, MOH) Implementation Guideline, 2nd edition has been published in October 2020 for guidance.

Cardiology Services has expanded with the additional three Invasive Cardiac Laboratories (ICL) in Serdang Hospital, Sultanah Bahiyah Hospital, Alor Setar Kedah and Queen Elizabeth II Hospital, Kota Kinabalu Sabah. This brings the total number of ICLs to 19 throughout Malaysia.

In 2020, officers from the Medical Services Unit served as core team members under the Clinical Data Team, Crisis Preparedness & Response Centre, Hospital Services (CPRC PH). The data produced daily for national reporting and analysis include COVID-19 recovered, critical care and dialysis patients. Involvement in COVID-19 studies including being the members of COVID-19 Epidemiology Study, under the lead of the Ministry of Science, Technology and Innovation (MOSTI).

All government hospitals have provided hemodialysis treatment services except Rajah Charles Brooke Memorial Hospital (RCMB), where services in Kuching are provided by General Hospital, Sarawak. This service is also channelled to health clinics near these hospitals. A total of 17 health clinics throughout Malaysia now provide this service compared to 14 clinics in 2019.

The Ministry of Health is now heading towards the Peritoneal Dialysis (PD) Preferred Policy where PD dialysis treatment will take precedence. In 2020, the Peritoneal Dialysis unit in MOH hospitals has been expanded to 33 units in MOH hospitals throughout Malaysia. In addition, a briefing on National Peritoneal Dialysis Quality Standards was organised with the Malaysian Society of Nephrology on 18 August 2020 to representatives from private dialysis centres.

In 2020, to provide hemodialysis services to patients suspected, probable or confirmed COVID-19, a total of 110 portable Renal Osmosis (RO) machines and 162 additional hemodialysis machines were obtained for use by MOH hospitals. In addition, a total of 28 Continuous Renal Replacement Therapy (CRRT) machines and 15 SLEDD machines were obtained for the use of acute patients.

Palliative treatment services continue despite the various challenges faced during the COVID-19 pandemic. Among the major developments in palliative care services in 2020 is a palliative physician who has been successfully placed at Tuanku Jaafar Hospital. Thus, there are now eight MOH hospitals with palliative physicians. To date, the number of health clinics that provide palliative domicile treatment services is 50 health clinics.

COVID-19 has transformed health care delivery of Oncology services where the number of patients seen in the oncology clinic, daycare for chemotherapy, radiotherapy treatment and in-patient admission reduced by 50-60 per cent. However, this service has been improved by outsourcing to private hospitals, especially in the states of Pulau Pinang, Melaka and the Federal Territory of Kuala Lumpur. As the MCO continued, the service gradually improved and by May 2020 all, six (6) designated Radiotherapy and Oncology Centres were operating at a maximum capacity of 80-90 per cent.

The year 2020 was an incredibly challenging year for all clinical services due to the COVID-19. For clinical hematology service, despite the initial restrictions, 254 hemopoietic stem cell transplants were successfully carried out in the four transplant centres in MOH hospitals. Hospital Sultanah Aminah Johor Bahru (HSAJB) performed her first allogeneic stem cell transplant in June 2020 and Hospital Pulau Pinang did her first haploidentical transplant in December 2020. With the support from Immigration Department, Hospital Ampang managed to continue with unrelated donor transplants, including seven from overseas donors. Hospital Ampang published a local guideline on “Stem Cell collection and Haematopoietic Stem Cell Transplantation (HSCT) during COVID-19 outbreak” with input from transplant experts from MOH as well as MOHE.

SURGICAL AND EMERGENCY SERVICES UNIT

Since the early phase of the COVID-19 pandemic, multiple initiatives have been carried out starting from the preparedness to response phase by the Surgical and Emergency Services Unit to increase the capacity and capability to face the pandemic such as:

- i. Asset procurement such as isopod, disaster tents, ventilators and establishing more isolation rooms in Emergency and Trauma Department.
- ii. Strengthening the ICU capacity. As of now (February 2021) the number of ICU beds for COVID-19 patients has been increased to 500 beds and the number of ventilators available is 1542.
- iii. Development of SOP and Guidelines.
- iv. Coordinating the mobilization of healthcare workers in collaboration with the Malaysia Armed Forces.
- v. Homecoming mission of Malaysians Emergency Physicians and members from other agencies such as NADMA.

Service Sustainability

To ensure the continuity of the usual services delivery, an outsourcing initiative to the private sector was initiated. Outsourcing of non-COVID-19 cases to private hospitals initiative helps reduce the waiting time for cardiothoracic, neurosurgery and paediatric surgery services. Outsourcing of non-COVID-19 cases initiative successfully reduces the waiting time for Coronary Artery Bypass Graft (CABG) at Hospital Serdang from 26 to 6 months.

Paediatric Congenital Heart Surgery Services

During the COVID-19 pandemic, paediatric heart patients in need of surgery were also affected. However, with the “Guidelines on Transfer of Paediatric Cardiology Patients from High-Risk COVID-19 Areas to Referral Hospitals across State Using Airplane”, the Paediatric Heart Surgery Services can continue smoothly where paediatric patients from Hospital Queen Elizabeth II can be referred to IJN or Hospital Serdang.

Day Care Services

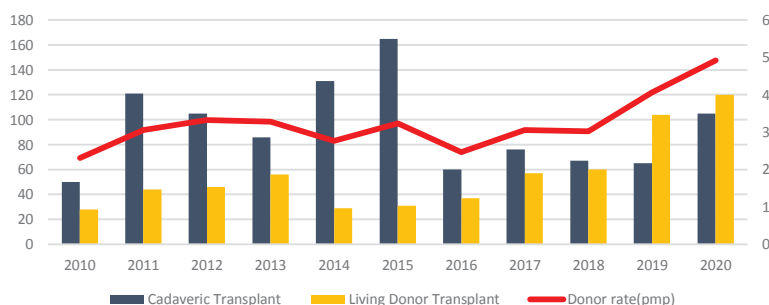
Total of 135 MOH facilities able to provide Day Care Services. One of the highlights for this year is the development of the new Ambulatory Care Centre (ACC) at Sultanah Aminah Hospital, Johor Bharu and Sarawak General Hospital.

In the year 2020, the Day Care Services succeeded in launching two (2) pilot projects to standardize the Registration Number of Day Care Services in MOH Hospitals for SMRP application. These pilot projects were conducted at Melaka and Selangor state aimed to expand to all MOH facilities. RN standardisation is important to prevent duplication and inaccuracy of data in SMRP and MyDRG applications. As a reference for the hospital personnel about the registration of Day Care patients, these projects will be accompanied by a published guide.

Transplant Service

Donation and transplantation outcomes in Malaysia have increased significantly in 2020. 225 lives were transformed, taking our donation rate to 4.92 per million populations (pmp), compared to 4.06 pmp in 2019 (22 per cent increment). While this is a small increment, it is the highest reached over the last decade. From 218 potential donors referred to National Transplant Resource Centre, 173 organs and tissues were procured from 41 actual donors. The COVID-19 pandemic did posture a significant challenge to our service delivery, where a temporary cessation of services for 81 days was placed at the peak of the second wave. Despite the reduction in the operating period, the number of transplants still showed an increment compared to the previous year. Nonetheless, the encouraging progress seen is also attributed to the addition of donor coordinators at 16 focus hospitals within MOH hospitals, following the restructuring of the service organisation implemented in 2019.

Figure 5.1
Organs or Tissues Donation and Transplant Rate in Malaysia from 2010 - 2020



Source: Medical Development Department, MOH

O&G AND PAEDIATRIC SERVICES UNIT

Paediatric Services

Although the COVID-19 infection did not cause serious infection in the paediatric group initially, however early preparations in terms of preparedness to receive paediatrics patients with COVID-19 infection were done although the priority was given to the adult patients who were COVID-19 positive for the hospital admission. The first case that involved a child was a 4 year old girl, a citizen of China

who was admitted to Hospital Sultanah Maliha, Langkawi in January 2020 when she was found to be COVID-19 positive. Subsequently, she recovered and was discharged in February 2020. The overall total of paediatric patients who were COVID-19 positive throughout the year 2020 was 13,817 patients from the age group of 0 to 18 years old.

Table 5.1
Number of COVID-19 Cases that Received Intensive Treatment in ICU for the Year 2020

AGE	BOY	GIRL	TOTAL
0-9	11	5	16
10-19	2	3	5

Source: CPMC Hospital Services, Medical Program, MOH

Table 5.2
Number of Cumulative Death of COVID-19 Patients for Year 2020

AGE	BOY	GIRL	TOTAL
0-9	1	3	4
10-19	1	2	3

Source: CPMC Hospital Services, Medical Program, MOH

Among the initiatives taken in the preparedness to face this pandemic and COVID-19 patient management among children in Malaysia is the development of the guideline with the title “Guidelines on the Paediatric Intensive Care Management of Children with COVID-19”. Apart from that, a guideline titled “Stem Cell Collection and Haematopoietic Stem Cell Transplantation in Malaysia during COVID-19 Outbreak” was also developed to handle the stem cell transplantation services during the pandemic.

In the year 2020 as well, MOH cooperated with APEC Rare Diseases Network and successfully organised the APEC Virtual Consultation on COVID-19 & Rare Diseases in Malaysia on 11 December 2020 and APEC Virtual Policy Dialogue on Rare Diseases in Malaysia & across Asia on 16-17 December 2020. The main objective was to share the development and latest activities conducted by the National Committee of Rare Diseases as well as the best practices through the National Framework for Rare Diseases in Malaysia. This event was attended virtually by participants from Malaysia and other APEC economies, i.e. People’s Republik of China, Philippines, Singapore, Thailand, Chinese Taipei and Vietnam.

As much as 568 units of equipment costing RM12,231,400 was procured for the Paediatric Department of MOH hospitals, which includes 4 & 6 Channel Cardiorespiratory Monitor, Neonatal Incubator, Colour Echocardiogram, Non-Invasive Ventilator, ABG Machine and many others throughout the year 2020.

CLINICAL SUPPORT SERVICES UNIT

In facing the COVID-19 pandemic, the MOH Pathology Services has implemented various strategies to increase capacity as well as improving turnaround time in obtaining COVID-19 test results. Among the strategies used is to collaborate with private laboratories to increase the capacity. Another strategy to increase the capacity is by using Rapid Testing Kit Antigen RTK-Ag. The first procurement of the RTK-Ag was conducted in May 2020 to increase the screening capacity.

The Medical Development Division has also been the secretariat for the COVID-19 Laboratory Special Committee, which was established on 14 July 2020. This committee is responsible for planning needs and strategies in improving the quality of service and capacity of the COVID-19 laboratory, as well as monitoring the quality of tests and data of those laboratories that are conducting COVID-19 testing.

Forensic Medicine Service preparedness and response in facing the country's challenge of COVID-19 pandemic has seen the service working side by side with the Medical Development Division and Disease Control Division of MOH promptly collaborated and engaged with other governmental stakeholders such as the Royal Malaysian Police and Department of Islamic Development Malaysia to produce the guidelines on COVID-19 body handling in the hospital as well as outside of hospital grounds. The service has also successfully procured a mobile body container as an asset in Hospital Sultanah Aminah, Johor Bahru and managed human resource mobilisation from Peninsular Malaysia to Sabah as steps in managing the waves of disease transmission.

In line with the government's direction towards Electronic Medical Record (EMR) and the needs of Industrial Revolution (IR) 4.4, the Clinical Support Services Unit participates towards the advancements of information technology. The Central Sterile Supply Services Information System (CenSSIS) has gone live in Hospital Tuanku Ja'afar Seremban in October 2020 and will be expanded to other MOH Hospitals in phases.

PET/CT services were successfully carried out for the Nuclear Medicine Department in Kuala Lumpur General Hospital in September 2020 through the Public-Private Partnership HKL with National Heart Institute. Around 500 patients have benefited from this collaboration. Besides that, the Replacement Through Maintenance (RTM) project for the replacement of PET/CT in National Cancer Centre and Pulau Pinang General Hospital have started its commencement in August 2020 and the new PET/CT has started its service in December 2020. Ministry of Health's cyclotron that is placed in the National Cancer Centre have also been upgraded in 2020 to optimize its radionuclide production.

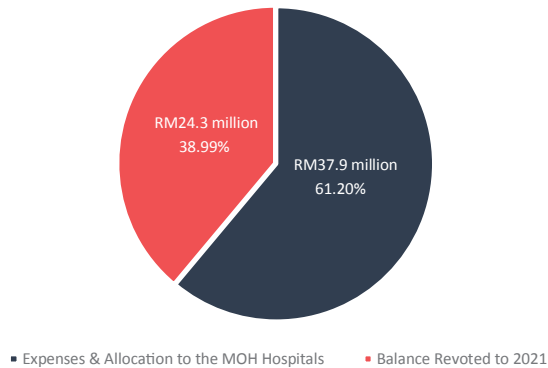
In the process of expanding the Nuclear Medicine Services in Malaysia, new activities are being planned and should be given attention to. Following that, new facilities projects like Sultan Ismail Hospital, Johor and also Northern Cancer Centre, Sungai Petani and also upgrading of the Radiopharmaceutical Preparation Lab in Kuala Lumpur General Hospital should commence following the initial planning for the service to progress further to serve our people.

MEDICAL RESOURCE UNIT (MRU)

Allocation and Budget

In 2020, the Development Division has approved RM62.250 million to the Medical Program for the procurement of medical devices. From the total, RM37,772,606 was allocated to USP, whilst RM24,477,394 was distributed directly to MOH hospitals. From the RM37,772,606 allocation, RM13,498,799 was spent by MRU. The balance of RM24,273,807 was reassigned to 2021 for those projects that could not be implemented in 2020. This allocation could not be used due to lock down and closure of international entrances in most countries producing medical equipment, hence the equipment could not be brought into the country. The breakdown of the allocation for the Medical Program for the year 2020 is shown in [Figure 5.2](#).

Figure 5.2
Allocations for Medical Program 2020



Source: Medical Development Department, MOH

Procurement

i) New Medical Devices

For the year 2020, the central procurement of new medical devices was for Full Field Digital Mammography (FFDM) Kulim (RM1,600,000) and Extracorporeal Shockwave Lithotripsy (ESWL) Hospital Raja Perempuan Zainab II (RM3,012,908).

ii) Upgrading of Existing Medical Devices

This unit also managed the procurement for existing medical devices upgrades in MOH hospitals as listed in [Table 5.3](#) below.

Table 5.3
Central Tender For Upgrading Medical Devices In MOH Hospitals In 2020

NO	PURPOSE	TOTAL EXPENDITURE (RM)
1	Direct Digital Radiography	3,577,499.90
2	Biplane Angiography System Hospital Sungai Buloh	5,490,000.00
3	Full Field Digital Mammography (FFDM) Hospital Tuanku Fauziah & Hospital Queen Elizabeth	4,180,000.00
4	General X-Ray Hospital Kulai	700,000.00
5	Extracorporeal Shockwave Lithotripsy (ESWL) Hospital Tuanku Ampuan Afzan	3,112,288.00
6	CT Sim Hospital Kuala Lumpur	3,100,000.00
TOTAL		20,159,789.90

Source: Medical Development Department, MOH

iii) Consumables, Reagents and Instrument Placement

In 2020, there were three (3) reagents with instrument placement tenders and one (1) consumable item tender, which were coordinated by Medical Resource Unit as listed in [Table 5.4](#).

Table 5.4
Central Tender For Consumables, Reagent And Instrument Placement In 2020

NO	TENDER	CONTRACT VALUE (RM)	CONTRACT PERIOD
1	Reagent Supply for Major BCR-ABL1 (P210) Quantitation test with Instrument Placement	2,920,448.00	2020 - 2024
2	Reagent Supply for Urinalysis – Urine Biochemical Test (Test Strip) and Urine Microscopy with Instrument Placement	12,759,835.00	2020 - 2024
3	Supply of Highflux, High-Efficiency Disposable Hollow Fibre Sterile Dialyser	29,760,000.00	2021 - 2023
4	Reagent Supply for Hematoxylin & Eosin (H&E) stain and Coverslipping with Instrument	3,594,990.00	2021 - 2025
5	Reagent Supply for Osmolality test with Instrument Placement	The contract will be finalised in 2021	
6	Reagent Supply of Monoclonal Antibody for CD4/ CD8 Leukemia Lymphoma Immunophenotyping by Flowcytometry with Instrument Placement		

Source: Medical Development Department, MOH

This unit also collaborated with the Procurement and Privatization Division (BPPs) for the procurement and monitoring of 387 disposable products/consumables, which are listed in the Approved Product Purchased List (APPL) 2017-2019 under the MOH Concession Agreement (MUS). Currently, APPL contracts are within the interim period until the concession arrangement is finalised. Following the COVID-19 pandemic, a total of six (6) Personal Protective Equipment (PPE) items will be listed as new products in the APPL interim period while one (1) of the existing PPE items will be re-tendered. This is as a precautionary measure by the Ministry to create PPE Stockpile locally.

MEDICAL PROFESSIONAL DEVELOPMENT SECTION

This branch is responsible for the development of policies, planning and regulations related to the housemanship training programme, medical specialists and subspecialists services in Ministry of Health (MOH) hospitals, the training and gazettement of medical specialists, Continuous Professional Development (CPD), MOH health facility utilisation planning by public and private institutions of higher learning as well as managing various committees with the Deans of the Faculty of Medicine of public and private institutions of higher learning, the Malaysian Medical Council (MMC), the Academy of Medicine Malaysia and so on. This is to ensure the quality of health service delivery and meet the stakeholders' expectations.

ACTIVITIES AND ACHIEVEMENT

1. Postgraduate Medical Specialisation & Subspecialisation Unit

Masters of Medicine

The Master of Medical Programme for basic specialities is conducted by eight local public universities in collaboration with the Ministry of Health (MOH), Malaysia. In 2020, there were 23 areas of speciality training in 36 MOH hospitals that have been accredited by universities as training centres for the Master of Medical Programme. The increase of scholarship slots for the Master of Medical Programme over the years has resulted in the rise of the number of specialists produced annually. 714 medical officers graduated from the programme compared to 657 in 2019.

The Specialty Training Programme - Parallel Pathway in MOH Malaysia (Membership and Fellowship from International Collegiate)

Medical officers in MOH also have the opportunity to pursue speciality training via Parallel Pathway Specialty Training Programmes in MOH Malaysia which are conducted locally or in combination with overseas attachment. Currently, there are 15 programmes for 14 specialities available in MOH Malaysia including 2 programmes for Family Medicine. As of 31st of December 2020, 189 medical officers have completed training from various parallel pathway programmes (Table 5.5).

Table 5.5
Number Of Graduates From Parallel Pathway Programme 2016 – 2020

DISCIPLINE	QUALIFICATION	2016	2017	2018	2019	2020
Internal Medicine	MRCP	112	78	172	170	164
Paediatric	MRCPCH	15	39	40	65	18
O&G	MRCOG	1	6	26	19	1
Ophthalmology	FRCOphth	0	0	0	0	0
Clinical Oncology	FRCR ONCOLOGY	4	0	0	0	0
Anesthesiology	FCAI	1	1	0	1	0
Radiology	FRCR	0	1	6	11	4
Psychiatry	MRCPsych	0	3	3	3	2
Forensic	PMJPath	0	0	0	1	0
TOTAL		133	128	247	270	189

Source: Medical Professional Development Section, Medical Development Division, MOH

Subspecialty Programme

MOH Subspecialty Training Programme is a structured programme conducted by MOH since 2002. The training program is done either fully local or combination local and overseas. In 2020, the number of HLP slots offered for this program was 367 compared to 250 slots in 2019.

2. Specialist Profession Unit

Gazettement of Specialists and Subspecialists

Every doctor with recognised post-graduate qualification has to be gazetted by the Special Gazettement Committee (Jawatankuasa Khas Perubatan) which is chaired by the Director-General of Health and 3 panel members; following Section 27, Chapter F of the Public Service's General Order. In 2020, 727 clinical specialists were gazetted as compared to 603 in 2019. (Table 5.6)

Table 5.6
Total Number of Gazetted Specialists (2016 – 2020)

Total Number of Gazetted Specialists				
2016	2017	2018	2019	2020
586	707	777	603	727

Note: Including Specialist on Contract Appointment

Source: Medical Professional Development Section, Medical Development Division, MOH

Clinical Specialists in MOH Hospitals

The number of specialists and subspecialists in MOH Hospitals are increasing in trend. In 2020, the total number of specialists from various specialities and subspecialties were 5,820. This number has increased as compared to 2019 when 5,649 specialists were working in the MOH. Even though there is an increase in the number of specialists every year, it is still not enough to cater for the need of the country as we are moving towards a developed country. **(Table 5.7)**

Table 5.7
Number of Clinical Specialists In MOH Hospitals (2016 - 2020)

Discipline	No. of Specialists (Including subspecialty trainee and specialists on contract basis)				
	2016	2017	2018	2019	2020
Anaesthesiology	514	533	573	558	591
Cardiology	46	68	76	99	99
Cardiothoracic Surgery	21	19	18	18	18
Dermatology	40	47	54	73	77
Emergency Medicine	246	271	324	331	376
Forensic	27	31	34	33	38
General Medicine	804	790	764	830	591
General Surgery	303	321	342	323	219
Hand and Microsurgery	1	0	0	0	0
Nephrology	67	75	94	113	106
Neurology	29	37	47	51	50
Neurosurgery	54	57	58	55	49
Nuclear Medicine	22	25	27	28	34
Obstetrics & Gynaecology	306	329	371	389	459
Ophthalmology	252	278	288	294	322
Orthopaedic	297	328	358	358	392
Otorhinolaryngology	162	162	187	183	201
Paediatric	459	478	500	498	620
Paediatric Surgery	27	32	36	35	37
Pathology	333	384	422	422	494
Plastic Surgery	30	31	36	36	41
Psychiatry	203	223	245	257	284

Radiology	324	339	379	388	426
Radiotherapy & Oncology	31	34	35	32	36
Rehabilitation Medicine	57	62	70	68	74
Respiratory Medicine	37	43	55	60	58
Sports Medicine	23	27	32	34	40
Urology	27	35	35	35	32
Transfusion Medicine	35	41	47	48	56
Total	4,777	5,100	5,507	5,649	5,820

Source: Medical Professional Development Section, Medical Development Division, MOH

Note: Excluding Family Medicine Specialists, Public Health Specialists and Dental Specialists

3. Housemanship Training Programme Unit

Housemanship program is a two (2) years training program to produce medical practitioners who are safe and competent before they are eligible for a Full Registration Certificate. Despite the increasing number of COVID-19 cases, Housemanship Program and new house officer intakes are continued to ensure the production of medical practitioners meet the demand. Overall, there are 4,934 new house officers were appointed in the year 2020.

Improvement in Housemanship Program that had been made in the year 2020:

1. Accreditation of Hospital Lahad Datu as the Housemanship Training Hospital. This makes the total number of Housemanship Training Hospitals in 50 hospitals (46 KKM hospitals, 3 university hospitals, 1 Hospital Angkatan Tentera Malaysia) with 12,153 training slots.
2. Housemanship training guideline during COVID-19 version 1.0 dated 3 April 2020.
3. Frequently Asked Questions on Housemanship training guideline during COVID-19 pandemic dated 20 April 2020.
4. Standard Operating Procedure for House Officer at Severe Acute Respiratory Infection (SARI) wards during COVID-19 pandemic dated 19 May 2020.

4. Continuing Professional Development Unit

Continuing Professional Development (CPD) is an expanded form of Continuing Medical Education (CME), which had been implemented in a more comprehensive nature. It is a systematic planned process of lifelong learning and professional development. It enables health professionals to maintain and enhance knowledge, skills and competency.

myCPD version 2.0 system that was launched in 2017 is currently being used by over 257,000 registered users from 52 various health professionals or health schemes in MOH, private sectors and universities. Various programs and workshops had carried out to increase user awareness.

CPD points will continue to be used for various purposes for different requirements such as for Annual Practising Certificate renewal for health Practitioners and also for National Specialist Register (NSR).

MEDICAL CARE QUALITY SECTION

Healthcare quality is one of the fundamental cornerstones of our healthcare service. Medical Care Quality Section is responsible for conducting activities to improve the quality aspect of service and to ensure healthcare service delivered is safe.

In 2020, Malaysia faced a tremendous challenge which is the COVID-19 pandemic. Medical Care Quality Section is one of the sections directly involved in managing the COVID-19 crisis. Along with that various quality and safety programmes are still continuously delivered.

ACTIVITIES RELATING TO COVID-19 PANDEMIC

Medical Care Quality Section is directly involved in the Crisis Preparedness and Response Centre (CPRC) Hospital Service and is responsible for the following:

1. Infection Prevention and Control

Infection Prevention and Control Unit has produced various policies, guidelines, and Standard Operating Procedures to ensure infection prevention and control at the healthcare facilities is at an optimum level. A series of training about infection control in collaboration with the World Health Organization (WHO), Association of Private Hospital Malaysia (APHM) and Malaysian Medical Association (MMA) have been conducted. Various educational materials including infographics, educational toolkits and videos related to infection control were produced as a reference to be used throughout the country. Along with this, IPC Unit was also part of the core team in the development of the Low-Risk COVID-19 Quarantine and Treatment Centres (PKRC). This unit also acts as a focal point in providing infection control input for the development of guidelines for external agencies such as Jabatan Penjara Malaysia, Lembaga Tabung Haji. From 20 to 22 July 2020, an After-Action Review (AAR) Workshop on Healthcare Facilities Preparedness and Response to COVID-19 Workshop was conducted to discuss the issues and challenges in the management of COVID-19 in healthcare facilities and recommends strategy in preparation of future pandemic.

2. Occupational Health and Safety for Hospital and Medical Programme Personnel

Occupational Safety and Health Unit is responsible for conducting surveillance for COVID-19 cases among hospital staff and the Medical Programme, MOH. As a result of the surveillance, several risk assessment and risk reduction strategies including the development of policies, guidelines and SOP, monitoring of SOP compliance and training were conducted. This unit acts as a focal point for MOH hospitals regarding the management of COVID-19 at the workplace. Guideline on Management of Healthcare Worker (HCW) During COVID-19 Pandemic (Annex 21) was also developed in collaboration with Disease Control Division, Public Health Program.

3. National COVID-19 Mortality Surveillance and Mortality Review

The Clinical Audit Unit is responsible for conducting National COVID-19 mortality surveillance and produce daily reports on COVID-19 mortality to National CPRC. The unit also plays a role as the technical secretariat for the National COVID-19 Mortality Review Committee which consists of clinicians from various disciplines. The main objective of this committee is to identify areas for improvements in COVID-19 clinical management and provide recommendations to reduce morbidity and mortality in COVID-19 patients. In 2020, the COVID-19 Mortality Rate was at 0.42 per cent.

4. COVID-19 Vaccination Program at MOH Hospital and Institution

The Medical Care Quality Section has been entrusted to lead the Medical Development Division COVID-19 Immunization Task Force for the planning and technical coordination of this program at MOH hospital which will be implemented in 2021.

5. Review and Coordination of COVID-19 Guidelines for Medical Program

This section is involved in reviewing, consolidating, and coordinating various policies and guidelines related to COVID-19 particularly produced by Medical Programme.

ACTIVITIES AND ACHIEVEMENT

INFECTION PREVENTION AND CONTROL UNIT

Infection Prevention and Control Unit has published 4 guidelines in 2020 namely Disinfection Guidelines, Management of Carbapenem Resistant Enterobacteriaceae Manual, Infection Prevention and Control Educational Toolkit and One Health Integrated Antimicrobial Resistance (AMR) Surveillance Manual. In addition, the 2019 Annual Report of Infection Prevention & Control and Antimicrobial Resistance Containment Program was successfully published and distributed to all hospitals involved in the survey program.

Antibiotic Fun Run with the theme of “Antibiotic: Handle with Care, Unnecessary Use Causes Harm” was held on 19 January 2020 at Goat2go Farm MAEPS, Serdang and was officiated by the Minister of Health and Minister of Agriculture and Agro-Based Industry. The aim was to increase awareness among the public on the importance of using antibiotics rationally to prevent antibiotic resistance.

To increase the knowledge and to update information on infection control and antimicrobial resistance among the healthcare workers, Policies and Procedures of the Infection Prevention and Control Workshop, 3rd Edition was held in Sarawak, East, Central and Southern Zone where 232 participants attended the workshop. In addition, 6 online training sessions for medical officers working in the Infection Control Unit of MOH Hospital, University Hospital and Malaysian Armed Forces Hospital were carried out.

This unit was also involved in the Hand Hygiene Campaign by ASEAN Health Ministers where the Minister of Health represents all healthcare workers in the public and private sectors to show Malaysia commitment. This was organized by the World Health Organization (WHO). The World Antibiotic Awareness Week (WAAW) celebration was also organized on 24 November 2020 in a webinar in collaboration with the Pharmaceutical Service Division and was officiated by the Director-General of Health. 1,000 participants comprising healthcare workers in the public and private sectors, as well as the general public participated in the webinar session.

PATIENT SAFETY UNIT

The Head of Patient Safety Unit was invited by WHO as panel expert in the WHO meeting on “A Decade of Patient Safety 2020 – 2030: Formulating Global Patient Safety Action Plan” from 24-26 January 2020 in Geneva Switzerland.

On 17 September 2020, in conjunction with the World Patient Safety Day 2020, the Ministry of Health Malaysia had organized a whole day event with the slogan ‘Safe Health Worker, Safe Patients’. During the day event, MOH Malaysia had conducted a webinar session involving 3000 health care providers throughout Malaysia. The webinar was officiated by the Minister of Health Malaysia accompanied by the Director-General of Health, Malaysia as a sign of commitment and solidarity for Patient Safety. During the event, “Quick Guide on Preventing Prescription Error” was launched following the WHO 3rd

Global Patient Safety Challenge: Medication Without Harm. On the night of 17 September, Malaysia joined the rest of the world to light up monuments and buildings in orange. This year Malaysia has created history by lighting up Putrajaya in orange from 17 to 20 September 2020 to show our gratitude to the healthcare workers for their commitment in ensuring patient safety. This event is a collaboration between MOH and Putrajaya Corporation.

Workshops were conducted to develop two guidelines -Unintended Retained Surgical Items and Informed Consent Guidelines. Four (4) training sessions were conducted for Malaysian Patient Safety Goals dan Incident Reporting & Learning System involving 150 healthcare workers from MOH hospital/institution. This unit has also conducted Patient Safety, Incident Reporting, Root Cause Analysis and Risk Reduction Strategies training session from 6 to 8 October 2020 for Patient Safety Champion from the State Health Department, HKL and IKN.

OCCUPATIONAL SAFETY UNIT

Cultivating occupational safety and health in the Ministry of Health Malaysia (MOH) has always been one of the focuses in 2020. It is one of the Key Performance Indicators (KPI) of the Secretary-General of the Ministry of Health Malaysia. Indicators under the KPI include displaying the Safety & Health Policy of the Ministry of Health Malaysia in hospitals and medical institutions, the establishment of the Safety and Health Committee (JKK), and the implementation of Hazard Identification, Risk Assessment and Risk Control (HIRARC).

Throughout 2020, this unit has collaborated in the form of research with other agencies including the Malaysian Institute of Road Safety Research (MIROS): Fatigue Risk Assessment (FRA) among Shift Workers in MOH Hospital, Institute of Public Health (IKU), National Health Institute (NIH): COVID-19 Infection Among Healthcare Workers in Malaysia and National Institute of Occupational Safety and Health (NIOSH): Facial Anthropometric Survey of Malaysian Public Healthcare Workers in Hospital.

CLINICAL PERFORMANCE SURVEILLANCE UNIT

The Clinical Performance Surveillance Unit functions as the technical expert and focal point for the Ministry of Health Malaysia, as well as planning and formulation of Top Management KPIs (328 indicators), Hospital Performance Indicator for Accountability (30 indicators) and KPI of Clinical Services (139 indicators). The unit is also responsible to ensure the selected indicators are relevant and of high impact and recommends interventions for KPI which does not achieve the target.

This unit has been actively engaging with various stakeholders within MOH to produce suitable KPI during the COVID-19 pandemic. On 14 December 2020, the KPI Steering Committee Chaired by the Director-General of Health Malaysia has agreed to include KPI related to COVID-19 management as part of his KPI in 2021.

ACCREDITATION, MS ISO 9001 AND INNOVATION UNIT

For the year 2020, this unit has managed to secure a financial allocation of RM 1.7 million for the MOH hospitals/institution accreditation survey. Till December 2020, 70 out of 145 hospitals have been accredited by the Malaysian Society for Quality in Health (MSQH) which consists of 3 State Hospitals, 10 Major Hospitals with Specialist, 10 Minor Hospitals with Specialist, 42 Hospitals without Specialists and 5 Institutions. The Accreditation Training of Trainers series was also conducted in Hospital Bintulu, Sarawak aiming to train the healthcare personnel on Accreditation Standards and their implementation

at the hospital and state level. Apart from that, this unit has also received an invitation from the Malaysian Armed Forces Hospital in sharing experiences regarding the coordination of the Accreditation Program.

This unit is also responsible for leading MS ISO 9001 for Medical Programme which has five (5) Divisions. For the continuation of MS ISO 9001 certification, this unit has conducted an internal audit, surveillance audit and closing quality loop session for further improvement. Several courses were also conducted such as Internal Auditor Courses, Risk-Based Thinking Courses and Management Review Meeting to strengthen the knowledge of Medical Programme personnel. Three (3) Medical Programme's Quality Documents were successfully published in year 2020 which are "Profile Program Perubatan", "Prosedur Umum Program Perubatan" and "Prosedur Pengurusan Risiko Sistem Pengurusan Kualiti, Program Perubatan". This unit also acts as a panel member in the evaluation of Anugerah Inovasi Perdana in the year 2020.

CLINICAL AUDIT UNIT

The main function of the Clinical Audit Unit (CAU) is to carry out the quality initiative programmes through clinical audit activities. The initiatives are Clinical Audit, Pain-Free Programme (PFP) (i.e., Pain as the 5th Vital Sign (P5VS) and Pain-Free Hospital (PFH)), Perioperative Mortality Review (POMR), Surgical Site Infection (SSI) and MENANG Programme. A guideline on the implementation of Clinical Audit has been established and will be launched in 2021. The implementation of P5VS at the MOH facilities involves Medical Programme (as the lead Programme), Public Health Programme, Oral Health Division and Pharmacy Services Division. To date, there are 32 certified PFH throughout Malaysia. The MENANG Programme, which focused on chronic pain patients, will be expanded in 2021. At the moment, the activity of the MENANG Programme is on a regional basis and is practised only in certain hospitals. POMR is a peer-review clinical audit that involves 71 MOH Specialist Hospitals throughout Malaysia. It is an essential component in Global Surgery 2030, whereby it is targeted that the reporting rate of POMR is 100 per cent by the year 2030. Despite the challenges faced during the COVID-19 pandemic, the POMR reporting rate has reached more than 87 per cent throughout Malaysia.

VALUE AND MEDICAL ETHICS UNIT

In the year 2020, this unit has managed a total of 147 complaints and 105 feedback in the form of enquiries, applications, and suggestions from the public. More than 85 per cent of complaints cases were solved and 90 per cent of feedback was given within the 15 days specified in the complaint handling procedure. Among issues that were often raised are in the aspects of communication, attitude and ethics, organizational issues and services. This unit also monitors the performance of one of the MOH Client Charter in MOH hospitals which was on the completion of the medical report. This unit also monitors the performance of one of the MOH Client Charter in MOH hospitals on the medical reports. In 2020, 91.96 per cent of medical reports were completed within the stipulated period. A meeting was also held between Medical Development Division and Integrity Unit MOH on 23 November 2020 to discuss complex complaints such as integrity and sexual harassment. A discussion with the Institute of Health Management was also conducted on 17 November 2020 to revise appropriate customer satisfaction survey methods such as the Patient Experience Survey to replace the SERVQUAL method.

WAY FORWARD

Medical Care Quality Section will continue to stay committed to lead various healthcare quality and safety programmes which include the development of policies, guidelines, programmes, monitoring and training according to the latest advancement and needs.

MALAYSIAN HEALTH TECHNOLOGY ASSESSMENT SECTION

Malaysian Health Technology Assessment Section, Medical Development Division, also known as MaHTAS produces health technology assessments, clinical practice guidelines and other synthesized research evidence which are transparent, relevant and easily accessible to serve as an input for decision and policy making with regards to health technologies such as procurement, adoption, implementation, disengagement, reimbursement and pricing.

ACTIVITIES AND ACHIEVEMENT

Throughout 2020, MaHTAS has been actively involved in joined efforts to combat the COVID-19 pandemic by conducting rapid assessments on health technologies that are used for prevention, detection, control as well as treatment of COVID-19 disease. A total of 62 MaHTAS COVID-19 Rapid Evidence Updates have been produced, and these reports can be accessed directly at the following link: <http://COVID-19.MOH.gov.my/kajian-dan-penyelidikan/mahtas-COVID-19-rapid-evidence-updates>.

In addition, MaHTAS has also produced two (2) Health Technology Assessment (HTA) reports, 10 Technology Review (TR) reports, of which nine (9) were recommended for routine or selective use, 38 Information Briefs (IB), five (5) TechBrief reports, 17 TechScan reports and five (5) Clinical Practice Guidelines (CPGs). Titles of these reports and guidelines are as listed in **Table 5.8** and **Table 5.9**.

Table 5.8
List of HTA Reports, TechBrief Reports and CPGs Produced in 2020

Health Technology Assessment (HTA)	Clinical Practice Guideline (CPG)
1) Pre-Dialysis Educational Program	1) Management of Non-ST Elevation Myocardial Infarction (Third Edition)
2) Diagnostic Approaches to Solitary Pulmonary Nodule (SPN)	2) Management of Type 2 Diabetes Mellitus (Sixth Edition)
TechBrief	3) Management of Dengue in Children (Second Edition)
1) Polypill for Cardiovascular Disease Prevention	4) Management of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents (Second Edition)
2) TDV-Takeda's Dengue Vaccine (TAK-003)	5) Management of Ischaemic Stroke (Third Edition)
3) Teprotumumab for Thyroid Eye Disease	
4) STÜHL	
5) Valoctocogene Roxaparvovec for Severe Haemophilia A	

Source: Malaysian Health Technology Assessment Section, Medical Development Division, MOH

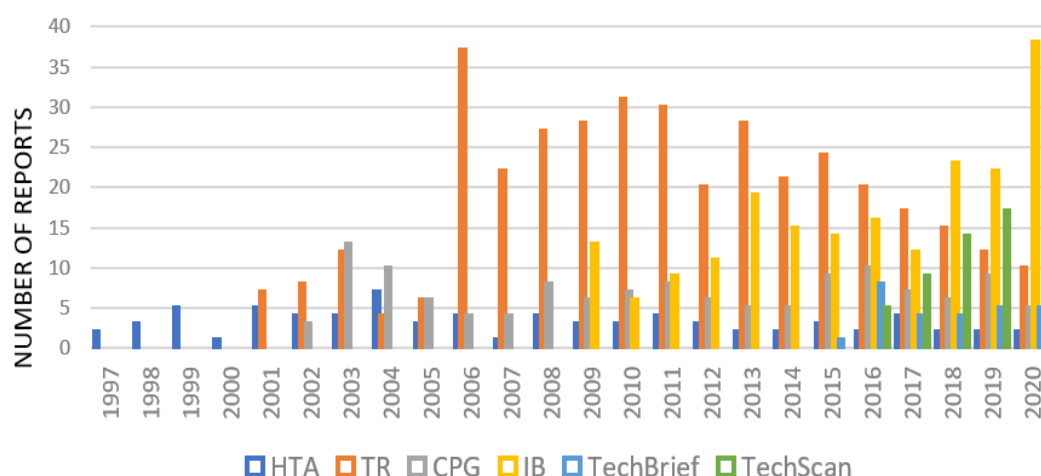
Overall, in 14 years, MaHTAS has produced a total of 75 HTA reports, 379 TR reports, 131 CPG, 198 IB, 27 TechBrief reports and 54 TechScan reports (**Figure 5.3**). All reports and CPG can be downloaded from the publication tab on the Official Portal of the Ministry of Health Malaysia at www.moh.gov.my.

Table 5.9
List of TR Produced in 2020 Based on Recommendation

Recommended (for routine or selective use)	
1) Influenza Vaccination for the Elderly and Economic Evaluation	6) Biocompatible Peritoneal Dialysis (PD) Solution
2) Intravenous Iron for Treatment of Iron Deficiency Anaemia	7) Prophylactic Anticoagulation in Ambulatory Cancer Patients
3) Programmatic Management of Latent Tuberculosis Infection (LTBI)	8) Antifibrotics for Treatment of Idiopathic Pulmonary Fibrosis (IPF)
4) Cinacalcet for Treatment of Secondary Hyperparathyroidism in Patients with End-stage Kidney Disease and Economic Evaluation	9) Needleless Vacutainer System for Blood Collection and Economic Evaluation
5) Digital Dental Impression	
Not Recommended	
1) Automatic Guided Vehicles (AGVs) for Transportation of Food and Materials in Hospital	

Source: Malaysian Health Technology Assessment Section, Medical Development Division, MOH

Figure 5.3
Number of MaHTAS Reports Produced from 1997 to 2020



Source: Malaysian Health Technology Assessment Section, Medical Development Division, MOH

WAY FORWARD

Moving forward, MaHTAS will continue to focus on building momentum as the main player in advocating informed decision making, not only in the government sector but also in the private sector to ensure safe, effective and cost-effective technologies are being used in Malaysia.

MEDICAL AID FUND TECHNICAL ASSESSMENT UNIT

Technical Assessment Unit of Medical Aid Fund is responsible for processing applications of Medical Aid Fund based on technical aspects of social and medical perspective. This unit is formerly known as the Technical Unit of Medical Aid which combines the Medicine Unit and Medical Aid Fund before being divided into two separate units on 28th September 2020 after the approval of the Human Resources Division of the Ministry of Health Malaysia.

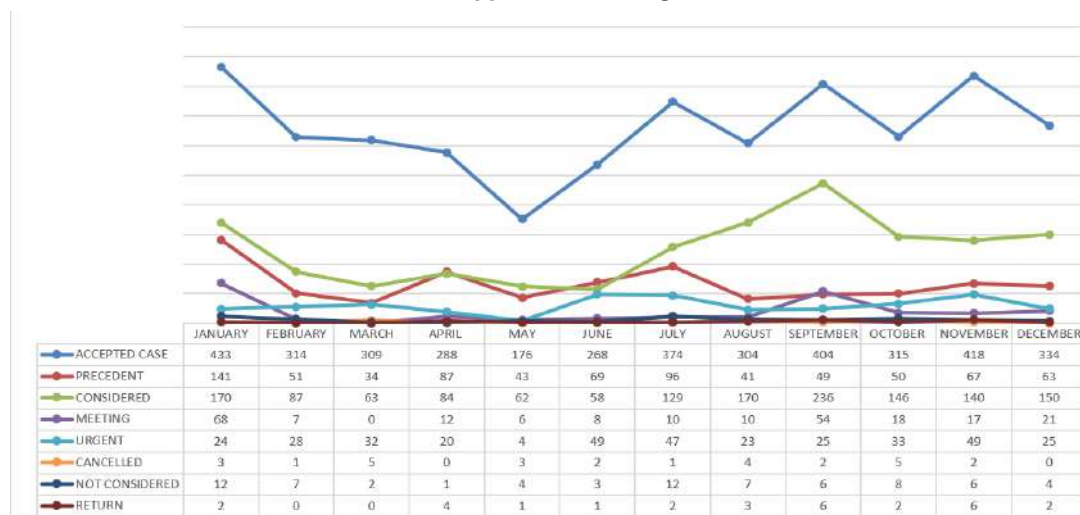
Medical Aid Trust Fund was established on 12th July 2005 under section 10 (4) Financial Procedure Act 1957 (Revision 1972). The application for the Medical Aid Fund is managed by two secretariats which consist of the Financial Department Secretariat and the Technical Secretariat at the Medical Development Department, known as the Medical Aid Fund Technical Assessment Unit.

The Medical Aid Fund Technical Assessment Unit functions to process and assess the technical aspect of a patient's socioeconomic status as well as the patient's need for treatment based on the Standard Operating Procedure granted by the Chief Secretary of the Ministry of Health Malaysia.

ACTIVITY AND ACHIEVEMENT

Any applications for the Medical Aid Fund are categorized into Precedent Case, Expert Opinion Case, Meeting Case, and Urgent Case. In 2020, the total number of applications received for the Medical Aid Fund was 3,937 cases that were referred from all hospitals under the Ministry of Health Malaysia. The following table displays the percentage of cases based on the category of application including the number of cases in which applications were rejected and cases that were not considered for approval.

Figure 5.4
Medical Aid Fund Application Management Statistics



Source: Medical Aid Fund Technical Assessment Unit

WAY FORWARD

This unit is in the process of cooperation with the Information Management Department, Ministry of Health Malaysia in preparing an online application platform. The commencement/implementation status of the First Phase has reached the User Acceptance Test stage, conducted by the Information Management Department, Ministry of Health Malaysia with Medical Social Work Officer (JKSP) whereas the implementation process for the second phase will be executed in 2021.

UNIT PENILAIAN TEKNIKAL SARAAN PERUBATAN

This unit is mainly responsible for processing claim applications for medical treatments and treatment facility expenses for civil servants. It is administered under the Clinical and Technical Diseases Assessment which refers to the followings;

- i. Perintah Am Bab 'F'
- ii. Pekeliling Perkhidmatan Bil. 21/2009 - Peraturan Permohonan Perbelanjaan Kemudahan Perubatan
- iii. Formulari ubat-ubatan Kementerian Kesihatan Malaysia

ACTIVITY AND ACHIEVEMENT

The activity that was carried out by this unit in the year 2020 is represented in the table below

Table 5.10
The Number of Applications for Medical Facility Expenses for 2020

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TOTAL	1,733	1,866	1,390	621	749	1,533	2,191	1,659	1,964	2,163	1,730	1,711

Source: Unit Penilaian Teknikal Saraan Perubatan

WAY FORWARD

Statistics have shown that the applications for medical facility expenses are increasing every year except for the year 2020, which showed a minor reduction in total applications. This trend is mainly due to the COVID-19 pandemic that has affected most states in Malaysia, especially during the beginning of the pandemic in April and May 2020.

This unit is hoping to increase its ability and capability to manage and process submitted applications more effectively and efficiently in the future. This will be achieved by using a digital system (e-SaraUbat) of which, currently 90 per cent has been completed and is expected to be ready in early 2021. The recommendation is also made for the staff to provide information effectively and also increase their skills and competencies.

MEDICAL PRACTICE DIVISION

PRIVATE MEDICAL PRACTICE CONTROL SECTION

The Private Medical Practice Control Section (CKAPS) under Medical Practice Division undertakes the role to implement and enforce the Private Healthcare Facilities and Services Act 1998 [Act 586] which has come to its fourteenth year of implementation in 2020. The regulation and control of private healthcare facilities and services all over Malaysia, under this Act, include registration, approval, licensing, handling of complaints, evaluation of quality, enforcement activities and matters relating to the private healthcare facilities and services (PHFS).

COVID-19 HANDLING

To assist the Ministry in handling the COVID-19 pandemic, CKAPS has published two (2) YB Minister of Health's Directives under Act 586, namely the Health's Directive 1/2020: Self-Declaration of Screening & Triaging (S&T) for COVID-19 at Private Medical Clinics, Private Ambulatory Care Centers and Private Hospitals under Act 586 and Health's Directive 2/2020: Self-Declaration for Providing Health Screening Booth (HSB) by Registered Private Medical Clinics under Act 586.

These instructions are intended as a reference and guide by the holder of a Certificate of Registration or License who wishes to provide S&T and HSB to submit self-declaration following the standards and requirements set by the MOH to ensure the safety and quality of patient health care. In addition, this directive also aims to facilitate the private healthcare sector to provide S&T facilities and services for COVID-19 safely through the self-declaration method. Both of these guidelines can be downloaded from the Medical Practice Division website at <http://www.medicalprac.moh.gov.my>.

As a result, until 31st December 2020, a total of 718 Private Medical Clinics, 11 Private Ambulatory Care Centers (ACC) and 130 Private Hospitals have made self-declaration providing on-premises screening services. Meanwhile, a total of 641 Private Medical Clinics have made self-declaration providing off-site screening services.

CKAPS is also responsible for monitoring activities related to the screening and triaging of COVID-19. As of 31 December 2020, CKAPS has received a total of 79 complaints from various parties related to the management of the COVID-19 pandemic.

Image 5.1

Monitoring of COVID-19 Screening Services Conducted by Private Healthcare Facilities



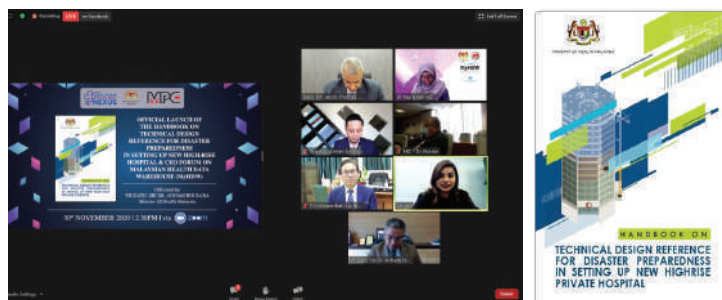
Source: CKAPS, MOH

COLLABORATION WITH MALAYSIAN PRODUCTIVITY CORPORATION (MPC)

CKAPS has collaborated with MPC to publish the Handbook on Technical Design Reference for Disaster Preparedness in Setting Up New High-Rise Private Hospital which was officially launched on 1 December 2020 by YB Dato' Sri Dr. Adham bin Baba through the Zoom Webinar platform. This book aims to guide high-rise hospitals that intend to provide healthcare services to the people without neglecting the safety aspects of patients, employees and visitors of the hospital.

Image 5.2

Launching of Handbook on Technical Design Reference for Disaster Preparedness in Setting up New High-rise Private Hospital



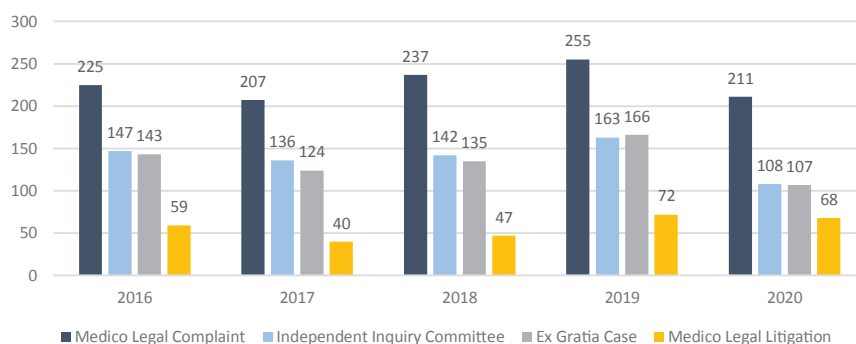
Source: CKAPS, MOH

MEDICO LEGAL SECTION

The Medico Legal Section is responsible for the management of Medico Legal cases involving healthcare facilities in the Ministry of Health Malaysia (MOH). Among its key roles are investigation of Medico Legal complaints, resolving of Medico Legal complaints by the method of ex gratia payment, coordinating with the Attorney General's Chambers in matters of medical malpractice litigation, organising programs consolidating competency in Medico Legal issues and performing monitoring and surveillance duties.

Figure 5.3

Medico Legal Statistics from the Year 2016 to 2020



Source: Medico Legal Section, MOH

MANAGEMENT OF MEDICO LEGAL COMPLAINTS

In the year 2020, a total of two hundred eleven (211) Medico Legal complaints were recorded in MOH healthcare facilities last year. Initial investigations are conducted at the facility level and the investigation reports are submitted to the Medico Legal Section for further deliberation. An Independent Inquiry Committees is formed when a case cannot be resolved and or has a request for compensation. In 2020, 107 cases were tabled in MOH and 69 of them (64.5%) were considered for ex gratia payment. The Key Performance Indicator (KPI) of Percentage of Resolved Medico Legal Cases with Compensation Claims in MOH Healthcare Facilities was selected as one of the KPIs for the Director-General of Health, Deputy Director-General of Health and Director of Medical Practice Division for the year 2020. In the year 2020, 70.09 per cent of cases were successfully resolved in the ex-gratia meetings within 365 days of the complaint.

MEDICO LEGAL LITIGATION

The Medico Legal Section provides technical input and plays an advisory role to the AGC in the management of medical malpractice litigation, coordinates the preparation of documents for out-of-court settlements, identifying witnesses in the case and appointment of Expert Witnesses to appear in court. In the year 2020, 68 medical malpractice litigation cases were files against MOH and its healthcare facilities.

DAMAGES AWARDED

Table 5.5 shows the amount of compensation paid for both ex-gratia and litigation from the year 2016 to 2020. In 2020, the total payment is RM18,336,872.26.

Table 5.5
Damages Awarded For Medico Legal Cases from the Year 2016 to 2020

YEAR	EX GRATIA		LITIGATION		TOTAL (RM)	
	AMOUNT (RM)	NO. OF CASES	AMOUNT (RM)	NO. OF CASES	AMOUNT (RM)	NO. OF CASES
2016	7,663,684.63	65	5,986,092.39	13	13,649,777.02	78
2017	2,540,876.90	59	13,404,713.88	26	15,945,590.78	85
2018	5,050,145.58	83	13,322,967.61	11	18,373,113.19	94
2019	4,471,603.29	70	18,449,560.91	36	22,921,164.20	106
2020	3,909,087.89	55	14,427,784.37	18	18,336,872.26	73

Source: Medico Legal Section, MOH

SURVEILLANCE

The Medico Legal Section oversees the recommendations outlined by the Independent Inquiry Committee. The relevant healthcare facility and State Health Department are required to submit a report describing the remedial measures implemented. In 2020, we held a Medico Legal Case Monitoring Meeting with the National Advisor for General Surgery followed by a Medico Legal Case Management Meeting with University Malaya Medical Centre.

MEDICO LEGAL COMPETENCY ADVANCEMENT

Table 5.6
Training and Courses Conducted by Medico Legal Section in 2020

TRAINING/ COURSES	DATE	PARTICIPANTS
Medico Legal Complaints Management Course	14 – 15 September 2020	40
Expert Witness Training 2020	7 – 9 October 2020	32

Source: Medico Legal Section, MOH

Image 5.3
Training and Courses Conducted by Medico Legal Section in 2020



Medico Legal Complaints Management Course
(Double Tree by Hilton, Johor Bahru)



Expert Witness Training 2020
(Pulse Grande Hotel, Putrajaya)

Source: Medico Legal Section, MOH

PUBLICATIONS

Garis Panduan Pelaksanaan Mesyuarat Kes Medico Legal Pasca Perintah Kawalan Pergerakan was published and enforced in mid-2020 as part of the efforts to continue the management of Medico Legal cases during the COVID-19 pandemic.

WAY FORWARD

The following are various initiatives and activities planned for the year 2021.

1. Meetings with stakeholders to discuss issues on medico legal case management.
2. Medico Legal Case Monitoring Meeting
3. Development of e-CML database (initiated in 2019)
4. Medico legal competency advancement
 - a. Expert Witness Training
 - b. Medico Legal Complaints Management Course
5. Proposed publications
 - a. Guidelines on the Management of Medical Malpractice Litigation in Ministry of Health
 - b. Medico Legal Bulletin

MEDICAL LEGISLATION SECTION

The year 2020 has proved to be a huge challenge not only in tackling the COVID-19 pandemic but also in overcoming the obstacles in delivering public service. Activities for 2020 were continued as planned with adjustments made to comply with Standard Operating Procedures during the COVID-19 pandemic. Virtual meetings and workshops had replaced the usual physical meetings. Adjusting with the new normal was tricky in the beginning but all personnel has adjusted well by embracing available technology and innovations.

DRAFTING SECTOR

Drafting works on the number of bills and regulations were progressing through at varying stages of completion. Regulatory Impact Analysis (RIA) on the feasibility of regulating private standalone ambulance services also continued with public consultation conducted via Malaysian Productivity Corporation's Unified Public Consultation portal. Meanwhile, the Regulatory Impact Statement for Private Aged Healthcare Facilities and Services Regulation was approved by the Malaysian Productivity Council in October 2020. Briefing sessions on Private Aged Healthcare Facilities and Services Regulation and discussion on matters about the implementation of the Act were held with both Minister of Health Malaysia and Minister of Women, Family and Community Development.

Image 5.4

Briefing On Private Aged Healthcare Facilities And Services Act 2018 And Regulations To YB Dato' Sri Dr. Adham Bin Baba, Minister Of Health Malaysia Via Video Conference



Source: Medical Legislation Section, MOH

AESTHETIC MEDICAL PRACTICE SECTOR

Despite various limitations due to the pandemic, this Sector, which is the secretariat for the award of Letter of Credentialing and Privileging (LCP) for Registered Medical Practitioners Practicing Aesthetic Medical Practice, managed to organize one round of MCQ and viva involving 67 candidates. The Guidelines on Aesthetic Medical Practice for Registered Medical Practitioner was revised and the second edition was published in November 2020.

GLOBALISATION SECTOR

Dr. Muhammad Yazuran Sallij b. Muhd Yasin represented the Ministry of Health Malaysia in the ASEAN Joint Coordinating Committee for Medical Practitioner (AJCCM), a platform that discusses the implementation of Mutual Recognition Arrangement on Medical Practitioner among the ASEAN Member States. The 26th AJCCM was hosted by Vietnam in March while the 27th AJCCM was held virtually in November 2020.

Image 5.5
27th ASEAN Joint Coordinating Committee on Medical Practitioner Meeting



Source: Medical Legislation Section, MOH

PRIVATE HEALTHCARE FACILITIES FEE SECTOR

The year 2020 has been an engaging year for this Sector. A total of 27 meetings with medical specialty associations which includes among others the Malaysian Society of Plastic and Reconstructive Surgery, the Malaysian Urological Association and the Association of Thoracic and Cardiovascular Surgery were conducted to finalise the revision of professional fees under the 13th Schedule of Private Healthcare Facilities and Services Act 1998 [Act 586].

Image 5.6
The Neurosurgical Association of Malaysia 20th Annual General Meeting



Source: Medical Legislation Section, MOH

In 2020, a total of 216 fees and Managed Care Organization (MCO) related queries and complaints were received, processed and resolved by the sector. Engagements with insurance companies, Bank Negara Malaysia, PEMUDAH and MPC were also held to discuss matters related to MCO and charges in private healthcare facilities. For the first time also, a meeting to approve the application for registration of MCO was successfully conducted virtually in December 2020.

Image 5.7

Meeting With Health Minister YB Dato' Sri Dr. Adham Bin Baba On MCO Related Matters



Source: Medical Legislation Section, MOH

COVID-19 RESPONSE

Medical Legislation Section was involved in various efforts as part of the Ministry of Health Crisis Preparedness and Response Centre (CPRC) team in response to the COVID-19 pandemic. Officers from this Section formed part of the CPRC Hospital Services team looking into the COVID-19 Public-Private Partnership initiative, the implementation of Home Surveillance Order (HSO), laboratory data analysis and medical supply inventory and distribution.

Image 5.8

Medical Supply Inventory And Distribution At The RMAF Subang Airbase



Source: Medical Legislation Section, MOH

Despite the challenges, Medical Legislation Section managed to get through the year with a changed outlook and renewed spirits. As we move into the new year, change is happening at a rapid pace; the way we approach and manage change becomes ever more important. Medical Legislation Section is ready to adapt and overcome whatever challenges may come in the future.

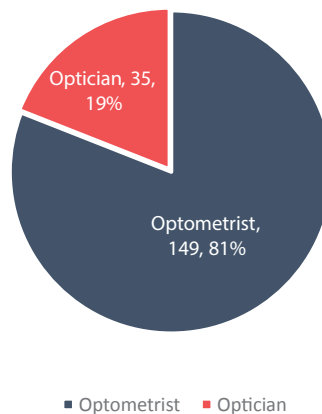
MALAYSIAN OPTICAL COUNCIL

The Malaysian Optical Council (MOC) is responsible for registering optometrists and opticians, monitoring optometry services and practices as well as evaluating and recognizing the Optometry and Opticianry Program conducted by Higher Education Providers (HEPs) in Malaysia. Throughout the implementation of the Movement Control Order (MCO), the MOC also ensures that Standard Operating Procedures (SOPs) are complied with and made a new norm in each of the optical premises. Guidelines for the practice of optometry in optical premises have been developed and are constantly updated according to current needs.

REGISTRATION SECTOR AND CERTIFICATE OF ANNUAL PRACTICE (APC) OF OPTOMETRY PRACTITIONERS

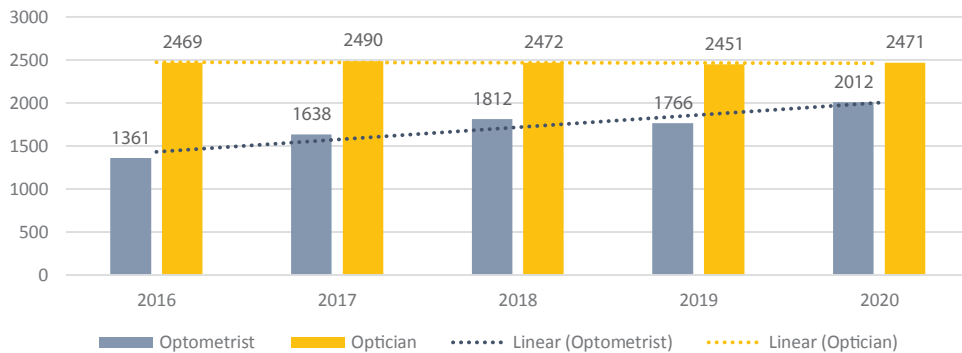
MOC Evaluation Committee is directly responsible for the registration and certification of the practice. A total of four (4) meetings were held which involved the evaluation of the new applications of optometry practitioners for registration. Figure 5.4 shows the number of optometry practitioners registered with the MOC in 2020. Figure 5.5 shows the Statistic of APC Renewal starting from 2016 up to 2020. This sector has also come out with a new initiative by organizing MOC Customers Day for the practitioners to renew their APC and obtain the APC on the same day. However, it was done only once in March before the government decided to implement MCO throughout the country.

Figure 5.4
Total Number of Optometry Practitioners in 2020



Source: MOC Activities Report 2020, MOC Registration Unit

Figure 5.5
Statistic of APC Renewal By the Year 2016 - 2020



Source: MOC Activities Report 2020, MOC APC Unit

RECOGNITION AND ADMINISTRATION SECTOR

There were two (2) meetings held by MOC Recognition Technical Committee (JTC) throughout 2020. A full accreditation evaluation visit and a full accreditation monitoring evaluation visit were done in the year 2020. Both sessions involved programs offered by BMIC and Vision College. This sector is also actively sending the proposal to MQA on the implementation of the “Accreditation of Prior Experiential Learning for Credit Award” [APEL (C)]. Among the activities carried out were “Portfolio for Recognition of Prior Learning” audit visits, APEL (C) seminars as well as “Challenge test” for APEL (C) Assessment.

ETHICS AND ACTS SECTOR

This sector is responsible for the implementation of the Optometry Bill and, the gazettment of Optical Act 1991 schedule and the Optical Regulations 1994 amendment. The draft of the Optometry Bill in replace of the current Optical Act 1991 is still under the reviewing process by the Medical-Legal Section. The Risk Impact Statement (RIS) for Risk Impact Analysis (RIA) was sent to Malaysian Productivity Corporation (MPC) on 15 September 2020 and still waiting for a reply from MPC.

Apart from that, this sector is also responsible for handling complaints regarding optometry practitioners. There were 37 complaints received in 2020. Among the highest number of complaints were related to the absence of registered practitioners at the optical premises (14 cases) and pre-complaints (13 cases were referred to the relevant agencies). A total of 16 complaints were successfully resolved.

The Optical Surveillance Audit was implemented for the first time in September 2020 involving optical premises in Putrajaya. A total of 19 optical premises were involved and 7 warning letters were issued to practitioners who did not renew their APC in 2020. Other than that, monitoring of compliance to COVID-19 SOP was also conducted. Feedbacks for the warning letters issued and corrective measures were received within one month after the audit was conducted.

COMPETENCY SECTOR

The Contact Lens Examination (Theory) for Registered Opticians under the Section 30 (5) of the Optical Act 1991 was conducted on 12 October 2020 in SEGi University, Kota Damansara. A total of 21 registered opticians sat for the examination. Candidates who passed the theory examination are eligible to sit for the practical examination that will be held in 2021. Each candidate and the secretariat involved complied with the COVID-19 SOP to ensure safety.

All optometry practitioners are advised to register as users in the myCPD system. In the year 2020, 26.5 percent (%) of optometry practitioners have registered, representing a total of 1198 optometrists and 348 opticians. MOC has received 108 CPD applications from CPD providers, in which 18 applications were applied manually and 90 applications were applied through myCPD system. Most of the organisers implemented the CPD program online aligned with the COVID-19 SOP compliance.

QUALITY OBJECTIVES

Two (2) quality objectives were achieved in 2020:

1. 98 per cent of APC was issued within 14 working days upon receiving the completed applications – achievement is 98.1 per cent.
2. 90 per cent of correspondence related to program accreditation that does not involve third parties was issued to MQA within two (2) weeks after the JTC Meeting – achievement is 74 per cent. This is because of the officer in charge is on medical leave for two (2) weeks.

CONCLUSION

Overall, there are a few MOC planned events for 2020 that cannot be conducted and postponed to comply with the SOP that was issued during the MCO implementation period.

ASSISTANT MEDICAL OFFICERS' SECTION

The Assistant Medical Officer Service Branch (CPPPP) governs Assistant Medical Officers (PPP) in Malaysia under the provision of Act 180 (registration) of Medical Assistant, 1977 and Estate Hospital Assistants under the Act 435 Estate Hospital Assistant Registration, 1965. As in addition, the Healthcare Assistant (*Pembantu Perawatan Kesihatan*) in the Ministry of Health Malaysia has been placed under the responsibility of the Branch since 2015.

REGISTRATION AND ANNUAL REGISTRATION CERTIFICATE (ARC) UNIT

Total of 85 per cent - Issuance of Certificate of Registration as Medical Assistant with the Malaysian Medical Assistant Board completed within three (3) months.

Table 5.7
Medical Assistant Registration Year 2020

MONTH	NO. OF REGISTRATION	COMPLIANCE	NON COMPLIANCE
January	347	347	0
February	143	143	0
March	34	34	0
April	9	9	0
May	0	0	0
June	0	0	0
July	21	21	0
August	0	0	0
September	25	25	0
October	60	60	0

Source: Assistant Medical Officers' Section, MOH

COMPULSORY PLACEMENT PROGRAM

The 6-month Compulsory Placement Program (CPW) in Emergency Department is a special program designed and implemented for all newly appointed Assistant Medical Officers in the Ministry of Health, the program is aimed to strengthen clinical skills, enhancing the ability to make decisions, and improving communication effectiveness.

Table 5.8
Total Participants in Compulsory Placement Program By States Year 2020

NO.	STATE	GROUP 1/2020	GROUP 2/2020	TOTAL
1.	Perlis	7	13	20
2.	Kedah	84	67	151
3.	Pulau Pinang	41	55	96
4.	Perak	61	65	126
5.	Selangor	101	95	196
6.	Hospital Kuala Lumpur	34	28	62
7.	W.P.Putrajaya	44	27	71
8.	Negeri Sembilan	41	32	73
9.	Melaka	31	32	63
10.	Johor	74	58	132
11.	Kelantan	35	40	75
12.	Terengganu	27	40	67
13.	Pahang	42	55	97
14.	Sabah	100	117	217
15.	Sarawak	92	99	191
16.	Labuan	7	6	13
	TOTAL	821	829	1650

Source: Assistant Medical Officers' Section, MOH

Table 5.9**Human Resource and Academic Qualification Of Assistant Medical Officers (AMO) Year 2020**

NO.	DETAILS	TOTAL
1.	Total numbers of Registered AMO's	26,841
2.	Total numbers of AMO's (Gov)	16,005
3.	Total numbers of AMO's (Private)	3,552
4.	AMO's with Post Basic	5,073
5.	AMO's with Bachelor Degree	693
7.	AMO's with Master Degree	25
8.	AMO's with PhD	8
9.	AMO's without Post Basic	9,727
10.	Post Basic Graduates per year (Average)	420

Source: Assistant Medical Officers' Section, MOH

Table 5.10**Total Number Of Healthcare Assistants 2020**

NO.	GRADE	FILLED POSTS	EMPTY POSTS	TOTAL POSTS
1.	U 16	71	29	100
2.	U 14	907	100	1,007
3.	U 11/14	24,622	2,390	27,012
	TOTAL	25,600	2,519	28,119

Source: Assistant Medical Officers' Section, MOH

Table 5.11**Estate Hospital Assistant's Board (LPHE) Year 2020**

NO.	STATE	TOTAL FARMS	TOTAL CLINICS	ESTATE HOSPITAL ASSISTANTS
1.	Perlis	4	1	1
2.	Kedah	109	36	30
3.	Pulau Pinang	9	1	2
4.	Perak	360	82	93
5.	Selangor	83	30	36
6.	Negeri Sembilan	103	50	47
7.	Melaka	65	14	13
8.	Johor	326	131	119
9.	Pahang	338	69	71
10.	Terengganu	104	21	24
11.	Kelantan	130	11	42
12.	Sarawak	539	38	26
13.	Sabah	1,960	200	177
	TOTAL	4,130	684	681

Source: Assistant Medical Officers' Section, MOH

WAY FORWARD

The direction of the section has been outlined in the Assistant Medical Officers' (AMO) Development Plan (2016 - 2030). This long-term plan is well supported by five years of strategic planning and an Annual Plan of action which spells various initiatives for the growth and development of the AMOs in Malaysia. Among those are, retention of technical expertise AMO's in their field of specialization. For that purpose, efforts are put to develop a Specialisation registry and create flexi grades for them.

In addition, AMO's educations are being upgraded at the level of undergraduate, master's and PhD. This is to ensure the AMOs are dynamic, knowledgeable and competent in delivering quality services to the community.

NURSING DIVISION

The Nursing Division (BKj) is located at Level 3, Blocks E1 and E7, Complex E, Putrajaya. This division leads 131,470 registered nurses and is responsible for the Development Planning of the nursing profession to be in line with the aspirations of the Ministry of Health (MOH) and to manage nursing matters constructively and productively in order to maintain quality standards of nursing services.

It consists of two (2) branches; Nursing Policies & Practices and Regulatory. They are further divided into five (5) sectors and a secretariat. These sectors are Nursing Practices (Hospital and Public Health), Quality & Training, Registration & Enforcement, Standards & Accreditations, Corporate Management and The Secretariat for Malaysian Nursing Board & Malaysia Midwifery Board.

PUBLICATION

GUIDELINES ON CONTINUING PROFESSIONAL DEVELOPMENT (CPD) FOR NURSES, SECOND EDITION, 2020

This Guideline is published by the Continuing Professional Development Unit (CPD), Nursing Practice sector. It provides information on the activities of registered nurses in continuous professional development where it outlines CPD points for nursing staff based on the assessment of training needs and the evaluation of outcomes.

It was first published in 2018. However, due to current needs, health environment changes and changes in learning delivery techniques, the CPD Committee has reviewed these guidelines and updated them. The change made is that the number of CPD points has been adjusted to all categories of nurses where they need to achieve a minimum of 20 accumulated credit points from the CPD category A1 to A8 to qualify to renew the Annual Practicing Certificate (APC). The changes can be accessed on the website <https://nursing.moh.gov.my>.

NURSING GUIDELINE, FIRST EDITION, 2020

This guideline is the first edition published by the Nursing Division in collaboration with the state. It aims to guide all nurses in carrying out their duties as nurses and civil servants. This guideline applies to all nurses in MOH. The former Director of Nursing, Hajah Tumble bt Ngadiran @ Tomblow, launched it on 19 June 2019. It was distributed to all State Matrons and Division (MOH, IPKKM) on 20 November 2020 and is available at the Enforcement Unit, Nursing Division.

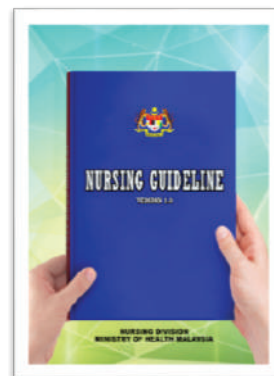
NURSING DIVISION BULLETIN

The Research Unit, Quality and Training Sector published the Nursing Division Bulletin twice a year. The first edition was released in December 2020 featuring activities throughout 2020. The second edition of the bulletin focused to appreciate the sacrifices and contributions of nurses as front liners in dealing with the COVID-19 pandemic in waves one (1) and two (2). The contents of this Special Edition were a combination of ideas by the Nursing Division together with the State Matrons. As an appreciation, this Special Edition has been distributed to each Division at the Headquarters of the Ministry of Health Malaysia (IPKKM) and the state.

Image 5.9
Nursing Division Publication 2020



Guidelines Continuing Professional Development (CPD) for Nurses



Nursing Guideline



Nursing Division Bulletin, First Division, 2020



Nursing Division Bulletin, COVID-19 Special Edition, 2020

Source: Nursing Division, MOH

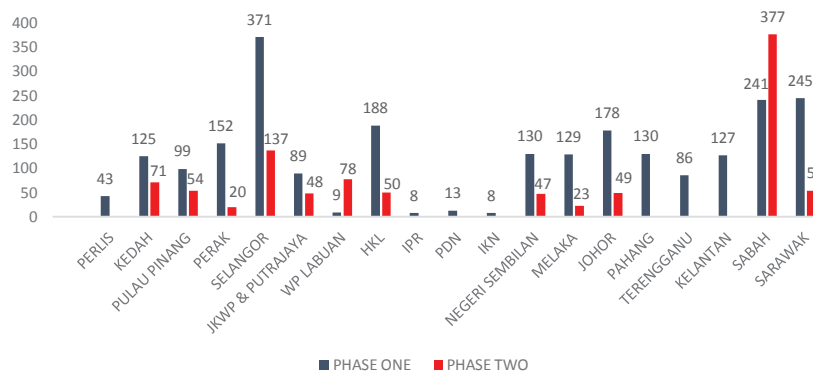
APPOINTMENT OF CONTRACT NURSE

Nurses play a vital role in the Ministry of Health Malaysia and currently, 99.3 per cent of nurse posts (Permanent) in Malaysia have been filled but this percentage is found to be insufficient to address the growing COVID-19 pandemic in Malaysia. The lack of staffing for U29 Nurses (Permanent) and the absence of an increase in the number of nurses due to the tenure of this position has caused the Ministry of Health Malaysia (MOH) to make appointments by Contract of Service (COS) starting March 2020.

The recruitment processes were done in two phases (Figure 5.6). The first phase was in March and April 2020, where 2,271 nurses were appointed on a contract basis (1 year). They were trainees who completed their nursing training from various government training institutes (ILKKM) and were unemployed due to a lack of permanent posts. 2,192 nurses accepted the offer while 79 nurses rejected it (Figure 5.7).

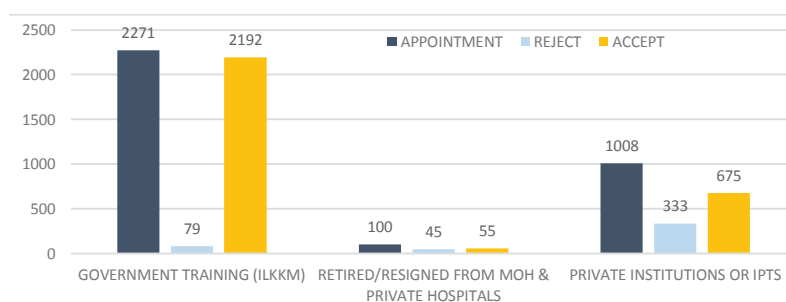
100 nurses who have retired and resigned from the MOH as well as nurses from private hospitals were appointed on a contract basis in April 2020. A good majority of them had crucial post-basic qualifications required by MOH facilities. Alas, only 55 of them accepted the offer while 45 rejected it. For the second phase, 1,008 nurses who graduated from Private Institutions of Higher Learning (IPTS) were offered six (6) months of COS. Of these, only 675 nurses accepted the offer while 333 of them rejected it (Figure 5.7).

Figure 5.6
Distribution of Contract Nursing Appointments by Phase



Source: Nursing Division, MOH

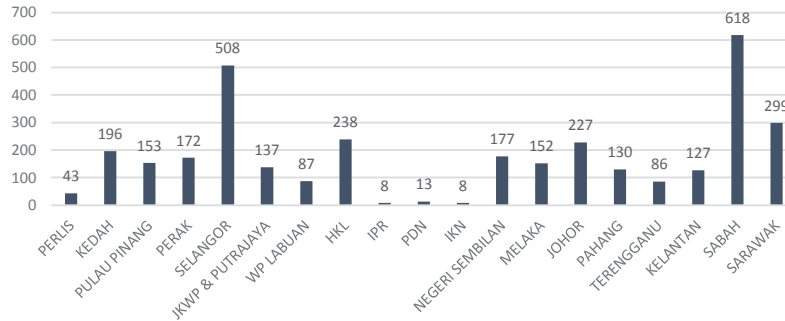
Figure 5.7
Appointment of New Nurses



Source: Nursing Division, MOH

In total, the year 2020 a total of 3,279 contract nurses were appointed to work in the hospitals and Public Health facilities throughout Peninsular Malaysia, Sabah and Sarawak. Sabah received 618 nurses, which amounts to the state with the highest contract nurses (Figure 5.8).

Figure 5.8
Number of Contract Nurse Appointments by State

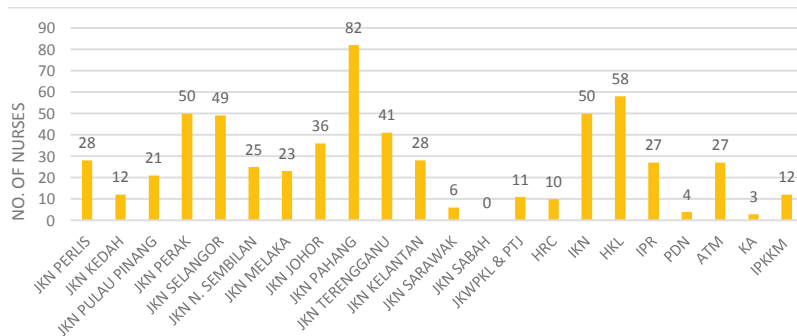


Source: Nursing Division, MOH

EXTERNAL MOBILIZATION OF NURSES IN DEALING WITH COVID-19 PANDEMICS

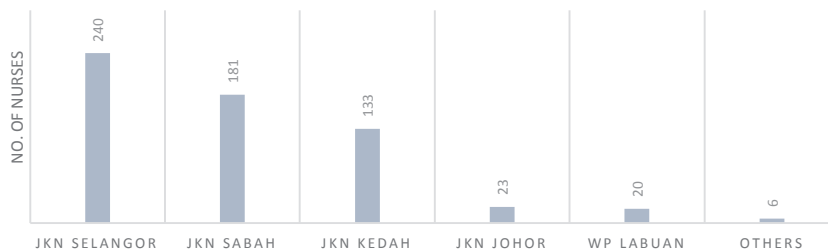
The external mobilization of nurses was done from March to December 2020 involving 603 nurses to address the spread of the COVID-19 epidemic in Malaysia and to meet the urgent needs of human resources throughout the year. Pahang was the state with the highest nurses (82) mobilized out to help others (Figure 5.9), while Selangor, which received 240 nurses, was the state with the most help (Figure 5.10).

Figure 5.9
Mobilization of Nurses in Dealing with COVID-19



Source: Nursing Division, MOH

Figure 5.10
Accepted Nurses by State



Source: Nursing Division, MOH

UNIT ACHIEVEMENTS IN NEW NORMS

NURSING CURRICULUM ASSESSMENT UNIT

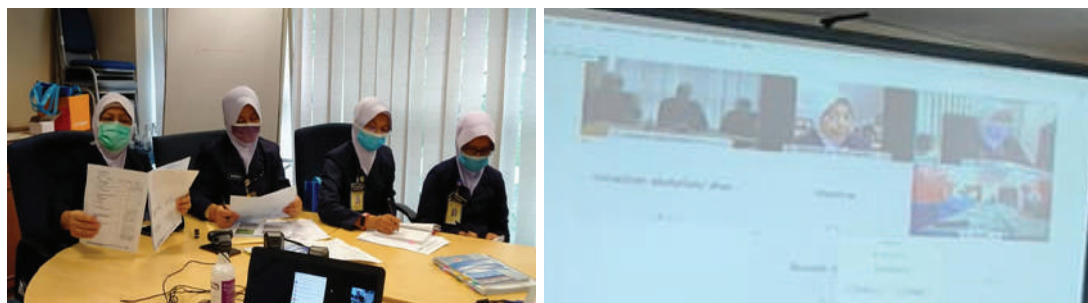
This unit is responsible for handling and managing the application process for evaluation of nursing programs and resources from the Training Institute of the Ministry of Health Malaysia (ILKKM), Public University (UA) or Private Institution of Higher Learning (IPTS) for accreditation. Following the MCO, the Curriculum Assessment Unit has issued one copy of Pandemic Movement Control Order COVID-19 which touches on the use of facilities, clinical placement, tutorial classes, handling training in skill lab, examination management of the Malaysian Nurses Board (LJM), Malaysian Midwifery Board (LBM) and the movement of instructors, clinical instructors, students and trainees during the COVID-19 Pandemic to the Basic Program, Post Basic and Advanced Diploma in Nursing. The new norm is recommended to all MOH students and distributed to all Higher Education Institutions (IPT) in Malaysia.

MOH FACILITY MANAGEMENT UNIT FOR IPT

This unit is responsible for conducting 12 monitoring visits to ensure the compliance of facilities and Institutions of Higher Learning (IPT) to the Memorandum of Agreement (MoA) as well as current instructions and circulars. Four (4) states were visited, namely Melaka (Hospital Jasin and KK Jasin), Pahang (Hospital Sultan Haji Ahmad Shah Temerloh), Terengganu (KK Bukit Payung and Hospital Hulu Terengganu) and Kelantan (KK Gunung Bachok and Hospital Tengku Anis)

Taking into account the COVID-19 pandemic, the visit method was changed to where the trained coordinator for placement of students at the state level conducted monitoring at the facility following the same method as informed in the State Level session and using the checklist provided. After that audit was done and a report was sent to the MOH Facility Management Unit, followed by a video conferencing session ([Image 5.10](#)).

Image 5.10
Video Conference Session



Source: Nursing Division, MOH

EXAMINATION UNIT OF THE MALAYSIAN NURSING BOARD & MALAYSIA MIDWIFERY BOARD

Examination Unit of the Malaysian Nursing Board & Malaysia Midwifery Board, MOH is responsible for conducting seven (7) examinations a year for four (4) Nursing Programs namely Bachelor of Nursing, Diploma in Nursing, Promotion by Appointment (PSL), Advanced Diploma in Midwifery Part One and Assistant Nurse Certificate. All nurses must pass the Malaysian Nursing Board & Malaysia Midwifery Board Examination as stipulated in the Nurses Act 1950 and the Midwives Act 1966.

Following the COVID-19 outbreak, only two (2) examinations were conducted, namely the Bachelor of Nursing/Diploma in Nursing/Peningkatan Secara Lantikan (PSL) in March 2020 and the Advanced Diploma in Midwifery Part One in September 2020. A total of five (5) planned examination sessions had to be postponed. Results for two (2) examination sessions that have been conducted in 2020 as in [Table 5.12](#).

Table 5.12
Examination Results of Nursing Programs Conducted by Nursing Board and Midwifery Board of Malaysia, 2020

NO.	PROGRAM	COLLEGE/INSTITUTION				CANDIDATES	
		MOH	PUBLIC HIGHER EDUCATION INSTITUTIONS	PRIVATE HIGHER EDUCATION INSTITUTIONS	TOTAL	PASSED (%)	PASSED (%)
1.	Pre-Registration Degree/ Diploma/ Conversion Diploma	364	9	341	714	707 (99%)	7 (1%)
2.	Advanced Diploma in Midwifery	506	2	1	509	491 (96.46%)	18 (3.54%)
3.	Assistant Nurse	Examination withhold Regarding MCO (COVID-19)					
Total		870	11	342	1,223	1,198 (98%)	25 (2%)

Source: Nursing Division, MOH

OPENING OF QUARANTINE CENTER AND COVID-19 LOW-RISK TREATMENT CENTRE (PKRC)

The COVID-19 Quarantine and Low-Risk Treatment Centre (PKRC) at the Malaysia Agro Exposition Park Serdang (MAEPS), can accommodate up to 600 patients, coordinated by The National Disaster Management Agency (NADMA) in collaboration with MOH, the Malaysian Armed Forces (ATM), Fire and Rescue Department, Civil Defense Forces, Social Welfare Department and Public Works Department. The nursing team, which was a combination of the Ministry of Health Malaysia and the Malaysian Armed Forces, was responsible for coordinating care to COVID-19 patients, which included assessing the patient's health status, conducting treatment planning, implementing nursing care interventions and conducting treatment assessments as well as providing health education to patients and families as well as discharge preparations. The service started on 1 April 2020 and ended on 31 July 2020, consisting of nurses, medical assistants and paramedics. ([Image 5.10](#))

Image 5.10
PKRC Staff



Source: Nursing Division, MOH

APPRECIATION

The Jasamu Dikenang Award was awarded to Mrs. Devi a/p K Saravana Muthu (Director of Nursing) on 25 August 2020 during the 6th International & 8th International Table Top Exercise and Communication in Disaster Medicine 2020 (TOPCOM 2020) course. This course was held at UiTM Selayang Campus and was officiated by the Minister of Health, YB Dato' Sri Dr. Adham bin Baba ([Image 5.11](#)).

Image 5.11
Anugerah Jasamu Dikenang



Source: Nursing Division, MOH

TOPCOM is a course organised by the Emergency and Trauma Department of Selayang Hospital as training to deal with natural disasters such as landslides, floods, collapsed buildings and so on. This is the 8th course that has been held since 2012.

This five (5) days course starts from 24 to 28 August 2020 involving various government departments and agencies involved in dealing with disasters in the country such as the National Disaster Management Agency (NADMA), Ministry of Health Malaysia (MOH), Royal Malaysian Police (PDRM), Fire and Rescue Department of Malaysia (JBPM), Malaysian Defense Force (APM), Department of Chemistry Malaysia, Atomic Energy Licensing Board (AELB), The Red Crescent Society (PBSM) including non-governmental organisations (NGOs). During the ceremony, 31 people received the Jasamu Dikenang Award. This award is very meaningful as an appreciation for the contribution of nurses in Malaysia.

THE 31ST ASEAN JOINT COORDINATING COMMITTEE OF NURSING (AJCCN)

The 31st AJCCN Meeting was held on 26 November 2020 via video conference at the Policy and International Relations Division, MOH. Nine (9) ASEAN countries participated in this meeting except for Vietnam. Indonesia played secretariat while Madam Tan Soh Chin from the Singapore Nursing Board was the chairperson.

During the virtual meeting, Malaysia, Myanmar, Singapore and the Philippines shared experiences concerning the management of COVID-19 and the curriculum modifications made during this pandemic. The meeting was attended by Devi a/p K Saravana Muthu (Director of Nursing), Anny Mary a/p S. Joseph @ Soosai (Deputy Director of Nursing), Kartina binti Mohamad Manan (Head of Regulatory Sector), Rozita binti Bujang (Head of International Relations Unit and Temporary Practicing Certificate (TPC) and Rukiah binti Osman (Head of Curriculum Assessment Unit) ([Image 5.12](#)).

Image 5.12
Video Conference Session in AJCCN



Source: Nursing Division, MOH

NURSE DAY CELEBRATION

Nurses' Day in 2020 was celebrated on 12 May 2020 via video conference held at the Crisis Preparedness and Response Center (CPRC), MOH. The theme for Nurses Day 2020 was Nurses: A Voice to Lead Nursing the World to Health. The day was celebrated with the Honorable Guest, the Honorable Minister of Health Dato' Sri Dr. Adham bin Baba, Director General of Health YB. Tan Sri Dato' Seri Dr. Noor Hisham bin Abdullah, Deputy Director-General of Health (Medical) YB Datuk Dr. Hj Rohaizat bin Hj Yon, Director of Nursing and several representatives from the Nursing Division. Although the method of celebration this year was different, it was still held to celebrate and appreciate the services of nurses.

This video conference session was also joined by the State Matrons, Hospital Chief Matrons, Chief Matrons of National Cancer Institute, Institute of Respiratory Medicine, National Blood Center, Malaysian Armed Forces, MAEPS, Malaysian Nurses Association, Malaysian Nurses Union, Association of Nurse Tutors (ANT), other related bodies and nurses from clinical areas. (Image 5.13).

Image 5.13
Nurses Day Celebration 2020



Source: Nursing Division, MOH

SUMMARY

The COVID-19 pandemic has had an impact on the practice and has brought changes to the norms of daily life. The biggest challenge for Nursing Management was the urgent need to increase the number of nursing staff in hospitals and in Public Health, facilities and thus the appointment of contract nurses was made for the first time in Malaysia.

The new norms introduced by the Ministry of Health Malaysia (MOH) which is to avoid 3C (Crowded place, Confined space, Close conservation) and practice 3W (Wash, Wear, Warn) in daily life to control the transmission of COVID-19 is being urged continuously to be practiced among all nurses in Malaysia.

ALLIED HEALTH SCIENCES DIVISION

The Allied Health Sciences Division (AHSD) is responsible for the governance and professional development of Allied Health Professionals (AHP) within the MOH, from clinical, laboratory and public health services. The AHSD establishes and implements strategies, policies, guidelines and recommendations related to allied health service delivery and development of AHP in MOH. The purpose is to ensure that allied health practitioners, with the best use of resources and technology; provide safe, effective, efficient and high-quality care.

PREPARATIONS FOR THE ENFORCEMENT OF THE ALLIED HEALTH PROFESSION ACT 2016 (ACT 774) AND REGULATIONS

A series of meetings and discussions were held between AHSD, Legal Advisor of the MOH and Drafting Division, Attorney General's Chambers to finalise the Allied Health Profession Regulations draft document as preparations to enforce the Act.

On 24 February 2020, the representative of MOH's Legal Advisor, AHSD, and representative of Attorney General's Chambers met to finalise the amount and type of fees in the Allied Health Professions Regulations (Fees). On 2 March 2020, the Allied Health Professions Regulations (Fees) were approved by Attorney General Chamber's Office. Subsequently, on 18 May 2020, the draft was presented to YBhg. Tan Sri Dato' Seri Dr. Noor Hisham Abdullah, the Director-General of Health, MOH for endorsement.

On 10 June 2020, the Honourable Dato' Sri Dr. Adham bin Baba, Minister of Health consented to 1 July 2020 as the date for the commencement of the Allied Health Professions Act 2016 along with the Allied Health Professions Regulations (Fees) 2020.

Image 5.14

Presentation of Draft Allied Health Profession Regulations (Fees) 2020 to Dato' Sri Dr. Adham bin Baba, Minister of Health Malaysia



Source: Secretariat, Malaysian Allied Health Professions Council

ESTABLISHMENT OF THE FIRST MALAYSIAN ALLIED HEALTH PROFESSIONAL COUNCIL (MAHPC) AND RELATED COMMITTEES (PRO-TEM)

The first Malaysian Allied Health Profession Council (MAHPC) was established on the nine of July 2020. The Honourable Minister of Health officially appointed 23 representatives from each allied health profession as a Member of the Council, and the appointment is effective for three (3) years. The Council member shall function as the Council during the tenure in:

- a. Determining guidelines and procedures for application and issuance or revocation of certificates for registration, practising certificates (Malaysian) and temporary practising certificates (Non-Malaysian).
- b. Determining guidelines and procedures for the application and issuance of registration for registered practitioners as an expert in recognising practitioner's expertise under section 21 of the Allied Health Professions Act 2016 (Act 774).
- c. Determining guidelines and procedures for complaints against registered practitioners and management of complaints of misconduct as well as regulate the ethics, practices and conducts of the Allied Health Professions.

The Allied Malaysian Health Professions Council Meeting was held for the first time on 6 August 2020 followed by second meeting on 21 December 2020. Outcomes of the meetings, several issues and matters were raised and discussed and several decisions were made, among others:

- a. Amendment to the Second Schedule of Act 774,
- b. Establishing clear policies and standards on registration and related matters,
- c. Establishment of relevant Committees to assist the Council. Nine (9) committees will be appointed administratively as Pro-Tem as follows:
 - i. Joint Technical Committee (JTC)
 - ii. Qualification Evaluation Committee
 - iii. Expert Assessment Committee
 - iv. Ethics and Practice Committee
 - v. Fitness to Practice Committee
 - vi. Legislation Review Committee
 - vii. Investigating Committee
 - viii. Disciplinary Authority
 - ix. CPD Committee
- d. Proposal on allowances and accommodations for Council Members, committee members and any person attending the meeting under MAHPC jurisdictions,

Image 5.15

Malaysia Allied Health Professional Council (AHPC) Meeting 01/2020



Source: Secretariat, Malaysian Allied Health Professions Council

- e. To seek a legal opinion from the Ministry's Legal Advisor on the proposal to postpone the start of practitioner registration until 1 July 2021,
- f. Appointment of Council Member as Chairman in the absence of Chairman and Deputy Chairman at any meeting (Article 5 [3], First Schedule of Act 774), and
- g. To review and update the frequently asked questions (FAQs) related to the Act 774 and practitioners.

MEETING OF JOINT TECHNICAL COMMITTEE (JTC) MAHPC

The Joint Technical Committee (JTC) for MAHPC was established with representatives of Health Sciences Dean's Council, Higher Education Department for public and private, Institute of Higher Learning for public and private, MAHPC and AHSD. This JTC appointment's tenure is effective from 16 October 2020 until 15 October 2023.

The first meeting of JTC was held on 9 December 2020 in hybrid mode (physical and online), and the main discussion was towards the preparation of implementation and management the accreditation scheme for allied health programs by the Malaysian Qualifying Agency (MQA) in collaboration with Council. In addition, a briefing on the functions and roles of the JTC was presented by the MQA.

KEY PERFORMANCE INDICATOR (KPI) OF THE DEPUTY DIRECTOR-GENERAL HEALTH (MEDICAL), MOH 2020 FOR ALLIED HEALTH PROFESSIONAL

In 2020, six (6) KPIs of Allied Health Professions (AHP) were selected as the KPI of the Deputy Director of General Health (Medical) with a different target. The achievement of these six (6) KPIs is as in [Table 5.13](#).

Table 5.13
Achievement of KPI Deputy Director of General Health (Medical), Ministry of Health for the services of Allied Health Professions in 2020

SERVICES	NUMERATOR	DENOMINATOR	TARGET (PER CENT)	ACHIEVEMENT (PER CENT)
Dietetic	23,777	25,000	≥ 90	95.11
Optometry	195	197	≥ 85	98.98
Physiotherapy	24,795	25,894	≥ 80	95.76
Occupational Therapy	1,853	1,928	≥ 85	96.11
Speech-Language Therapy	1,091	1,122	≥ 85	97.24
Audiology	1,243	1,322	≥ 85	94.02

Source: Allied Health Sciences Division

SUBJECT MATTER EXPERT (SME) CAREER ADVANCEMENT

Following the advertisement for the Second Series of Career Advancement Path for Public Servant as the Subject Matter Expert (SME) in the Ministry of Health Malaysia, AHSD had received 21 applications. The Working Committee (SME Search Committee) shall assess these applications.

On 11 March 2020, the Subject Matter Expert (SME) Proposal papers from 13 AHP (Group II) were submitted to the MOH Human Resources Division, which was later brought to the Public Service Department of Malaysia. The proposal papers will be brought into the Public Services Promotion Boards meeting (LKPPA) for approval. 13 AHP groups are:

- i. Science Officer (Entomology),
- ii. Science Officer (Embryology),
- iii. Science Officer (Forensic),
- iv. Science Officer (Biomedical),
- v. Environmental Health Officer,
- vi. Psychology Officer (Counselling),
- vii. Psychology Officer (Clinical),
- viii. Medical Rehabilitation Officer (Physiotherapy),
- ix. Psychology Officer (Occupational Therapy),
- x. Health Education Officer,
- xi. Food Service Officer,
- xii. Food Technology Officer, and
- xiii. Science Officer (Physic) - the additional new application

The promotion of 19 AHP from the SME Group I (appointed in 2019), was approved by the Public Service Promotion Board (LKPPA), as SME officers in the Ministry of Health Malaysia, effective 20 March 2020.

PUBLICATION AND LAUNCHING OF TECHNICAL REPORT: ALLIED HEALTH PROFESSIONS IN MINISTRY OF HEALTH MALAYSIA – A CONSULTATION REPORT BY WORLD HEALTH ORGANIZATION (WHO).

AHSD published and launched the Technical Report: Allied Health Professions in Ministry of Health Malaysia – A Consultation Report by the World Health Organization (WHO) in 2020. This report is the result of a project under the WHO Budget Program 2018 – 2019 entitled Establishment of Workforce Profile for Allied Health Professions in Malaysia. This report is a comprehensive profile for allied health practitioners in MOH and is the first report of its kind produced by AHSD in Malaysia. It is hoped that this document will become one of the main references in the setting of direction related to the Allied Health Profession within and outside the MOH.

Image 5.16

Launching of the Technical Report: AHP in MOH by YBhg. Datuk Dr Hj Rohaizat bin Hj Yon, the Deputy General of Health (Medical)



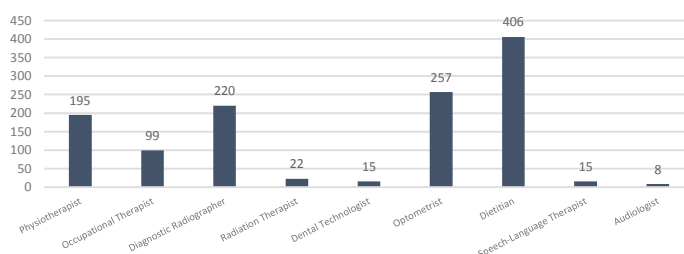
Source: Allied Health Sciences Division, MOH

CREDENTIALING FOR ALLIED HEALTH PROFESSIONALS

AHSD conducted credentialing activities for nine (9) Allied Health Professions (AHP) which includes Diagnostic Imaging Officer, Radiation Therapy Officer, Medical Rehabilitation Officer (Physiotherapy), Medical Rehabilitation Officer (Occupational Therapy), Dental Technologist, Dietitian, Optometrist, Medical Rehabilitation Officer (Speech) and Medical Rehabilitation Officer (Audiology). The Sub-Specialty Committee (SSC) meeting, National Credentialing meeting (NCC) and the Credentialing Log Book Review meeting held and a total of 1,237 AHP have been credentialed as shown in [Figure 5.11](#).

Figure 5.11

Numbers of AHP Awarded Credentialing in 2020



Source: Allied Health Sciences Division, MOH

STANDARD OPERATING PROCEDURES (SOP)

Two (2) Standard Operating Procedure (SOP) workshops for the Allied Health Professional were held during the Movement Control Order (PKP) period. A total of 22 Standard Operating Procedures (SOPs) and Operations Management Planning (PPO) have been refined and finalised for the use of five (5) Allied Health Professions in 2020. The five (5) AHP groups are Psychology Officer (Clinical), Science Officer (Embryology), Science Officer (Physic), Science Officer (Genetic) and Science Officer (Entomology).

LOGBOOK FOR THE NEWLY APPOINTED ALLIED HEALTH PERSONNEL'S COMPETENCY

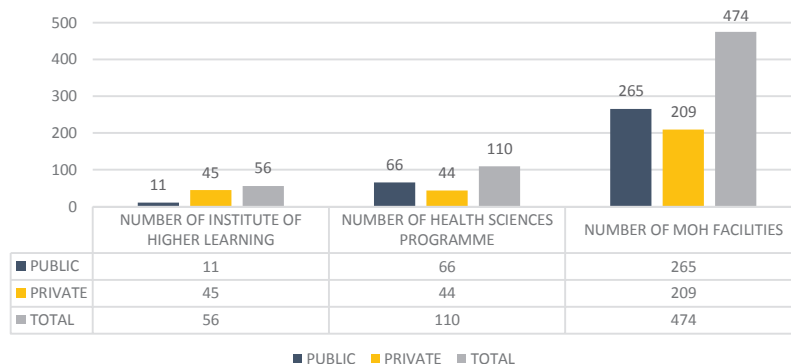
A total of 10 Logbooks for the Newly Appointed Allied Health Personnel's Competency were reviewed and refined for the use of six (6) Allied Health Professional groups in 2020. The six (6) professional groups are Medical Rehabilitation Officer (Physiotherapy), Medical Rehabilitation Officer (Occupational Therapy), Medical Rehabilitation Officer (Speech), Optometrist, Diagnostic Imaging Officer and Radiation Therapy Officer.

STUDENTS TRAINING AT MINISTRY OF HEALTH FACILITIES

In the year 2020, 15 completed applications (Principal/Supplementary) were received from the Institutes of higher learning for processing. All these applications have been tabled to MOH Facility Usage Meeting Committee for certification and approval. The committee had seated four (4) times in 2020.

More than four hundred facilities have been approved for internship practise for the Institute of higher learning that covers all states in Malaysia. A total payment of RM560,550.00 was received from the institutes of higher learning for the usage of MOH facilities in training involving 3,224 students ([Figure 5.12](#)).

Figure 5.12
Number of Facilities Approved for Institute of Higher Learning Training



Source: Allied Health Sciences Division, MOH

A total of 15 Memorandum of Agreement (MoA) documents have been prepared in the year 2020. It involves five (5) Public Institutes of Higher Learning and 10 for Private Institutes of Higher Learning. Of these, 13 were Principal Agreements while the remaining were for Supplementary Agreements.

In total, 56 active MoAs between Institutes of higher learning and MOH issued, which includes 110 various programs of allied health sciences. 66 are from the Public Institute of Higher Learning whereas 44 are from the Private Institute of Higher Learning.

WHO PROGRAM BUDGET (2020-2021)

BSKB obtained allocation under WHO Program Budget 2020 – 2021 to carry out two (2) projects entitled Establishing Effective Regulatory Framework for Allied Health Professional in Malaysia and Developing Criteria for A Profession to Be Considered as Profession of Allied Health in Malaysia.

The main objective of the Establishing Effective Regulatory Framework for Allied Health Professionals in Malaysia project is to develop a regulatory framework for the implementation of the Allied Health Professions Act 2016 (Act 774). The project is supported by Dr Anne-Louise Carlton, a consultant appointed by WHO from RMIT Australia.

The project entitled Developing Criteria for A Profession to be Considered as Profession of Allied Health in Malaysia, it aims to identify health practitioners who are eligible to be categorised as allied health practitioners and performing activities related to allied health practices in Malaysia.

ABSTRACT COMPILATION 2016 UNTIL 2020

A total of 18 AHP professions have submitted research abstracts that have been presented orally/poster and/or published in journals and as case studies. About 500 abstracts were received, a total of 397 from the clinical group, 47 from the laboratory group and 53 from the public health group. The abstracts will be uploaded to the AHSD website according to the profession. This abstract compilation aims to provide benefits and guidance to the profession to improve the quality of evidence-based services as well as encourage the profession to conduct more research in the future.

REGULATORY

In preparation for the enforcement of Act 774, AHSD has carried out courses for the AHP Enforcement Team i.e. Investigation Paper Preparation Course, Advanced Intelligence Course (Group II) and Pre-Trial Course and Prosecution Techniques for AHP Enforcement Officers.

AHSD also has conducted educational enforcement of Act 774 by visiting premises that provide allied health services. Those visits were to give awareness to practitioners and their workers on enforcement of Act 774, especially on Part VI(Offences) and Part VII (Enforcement) of Act 774. AHSD also conducted Intelligence Training where it provides exposure to prospective State Enforcement Members to conduct quality intelligence. Participants were given practical training assignments in the field, namely in commercial premises related to the associated health professionals.

Image 5.17

Investigation Paper Preparation Course



Source: Allied Health Sciences Division, MOH

Additionally, Trial and Prosecution Practices were conducted at *Institut Latihan Kehakiman dan Perundangan* (ILKAP). During this activity, the candidates for State Enforcement Members are exposed to proceedings to conduct trials and prosecutions in the courts. Numbers of awareness talks and briefings also was performed on Act 774. The sessions were held to various Allied Health Professions and were mostly touched on Part VI (Offences) and Part VII (Enforcement).

Seven (7) guidelines and four (4) work procedures have been developed as a guide in implementing the enforcement of Act 774 as below:

- i. Guideline for the Handling of Offense Complaints under Act 774,
- ii. Guideline for Periodic Inspection Visit,
- iii. Guideline for Conducting Intelligence,
- iv. Guideline for Raid,
- v. Guideline for Prosecution in Court,
- vi. Guideline for Submission of Summons to *Orang Kena Saman* (OKS),
- vii. Work Procedure for Handling of Exhibits and Its Storage,
- viii. Work Procedure for Sapina Delivery
- ix. Work Procedure for Case Goods Disposal Application, and
- x. Work Procedure for Statement Recording

THE ALLIED HEALTH PROFESSIONALS TRAINING

AHSD has implemented courses throughout 2020 based on the Professional Training Plan. Nine (9) orientation courses were conducted for the newly appointed officers to add value to AHP services development. A total of 682 officers have been trained in this course.

Because of the COVID-19 pandemic, the MOH has limited events, including training activities. Therefore, during the year 2020, AHSD managed to coordinate 13 courses, which only involved 348 officers from the Management and Professional Group and 256 officers from the Implementing Group were trained. Therefore, a total of RM38,920.00 were spent on capacity building/training for the year 2020.

WAY FORWARD

AHSD is no exception in dealing with the issue of the COVID-19 pandemic. The delivery of health services to patients needs to be reviewed and refined by focusing on innovation, the use of digital technology and alternative methods. Based on the Strategic Framework of the Medical Program, AHSD has developed the AHSD Strategic Plan 2021 - 2025 and AHP, which includes a strategic plan for AHSD and Allied Health Professions. An operational action plan will be developed to monitor and evaluate all planned activities for five (5) years. AHSD and AHP need to translate the action plan into yearly activities to bring the AHP and its services to the next level in the 12th Malaysia Plan.

Registration as a qualified allied health practitioner will be implemented soon. This is to ensure that the services provided to patients are quality, professional, ethical, and safe. However, ongoing research needs to be carried out to ensure effective enforcement of that Act 774.

TRADITIONAL & COMPLEMENTARY MEDICINE DIVISION

Since its establishment in 2014, the Traditional and Complementary Medicine Division (T&CMD), Ministry of Health (MOH) has been involved in planning, developing and regulating Traditional and Complementary Medicine (T&CM) in Malaysia. T&CMD consists of:

- i. Policy and Development Section
- ii. Traditional and Complementary Medicine Council Section
- iii. Inspectorate and Enforcement Section
- iv. Professional Development Section
- v. Traditional and Complementary Medicine Practice Section
- vi. Administration and Finance Unit

ACTIVITIES AND ACHIEVEMENT

DESIGNATION OF TRADITIONAL AND COMPLEMENTARY MEDICINE DIVISION AS THE WORLD HEALTH ORGANISATION (WHO) COLLABORATING CENTRE FOR TRADITIONAL, COMPLEMENTARY AND INTEGRATIVE MEDICINE

World Health Organization (WHO) officially designated T&CMD as a WHO Collaborating Centre (CC) for Traditional, Complementary and Integrative Medicine for four (4) years starting from 29 June 2020. A number of 23 WHO CCs are specifically in the field of traditional and complementary medicine worldwide, and 16 out of 23 WHO CCs are located in the western pacific region. The CC will support WHO in education and capacity-building activities, provide technical assistance to member states, and collaborate with WHO on regulation and policy associated with T&CM practice.

INTERNATIONAL COLLABORATION

Collaboration With ASEAN

A total of three (3) online meetings were held throughout 2020 among ASEAN member states (AMS) focal points of Traditional Medicine and the ASEAN Secretariat on 28 May, 25 June and 8 July. On behalf of T&CMD, this meeting was attended by the Director of T&CMD and the Head of the Policy and Development Section. The purpose of this meeting is to discuss and finalise the report for the baseline survey on T&CM in ASEAN developed by Thailand.

The meetings decided that a “Joint Technical Report on Situational Analysis of ASEAN Quality Healthcare for Primary Health Care (PHC) and T&CM on Human Resource, Health Facilities and Service Packages” will be published in 2021 once it is finalised and endorsed. This joint report will comprise the T&CM component developed by Thailand and the PHC component (focus on modern medicine only) developed by Malaysia.

6th China-ASEAN Forum On Traditional Medicine

The 6th China-ASEAN Forum on Traditional Medicine (TM) was conducted both on-site and virtually from 24 to 26 of November 2020 in Guilin, China with the theme of “The Development of Traditional Medicine and Building a Community with a Shared Future for Mankind”. This Forum was organised by the China-ASEAN Forum on TM Secretariat and co-sponsored by the National Health Commission of China, the National Administration of Traditional Chinese Medicine (NATCM) of China and the People’s

Government of Guangxi Zhuang Autonomous Region of China. This forum is important for China to promote Belt and Road Initiative (BRI) and to deepen the cooperation between China and ASEAN countries on traditional medicine.

Image 5.18

Opening Ceremony of the 6th China-ASEAN Forum on Traditional Medicine on 24 November 2020



Source: Traditional & Complimentary Medicine Division, MOH

More than 120 participants attended this Forum, including leaders from China and representatives from the Ministry of Health in ASEAN countries, as well as representatives of the TM field. Dr. Goh Cheng Soon, the Director of T&CMD, MOH had been invited to attend the online opening ceremony and deliver a speech on 24 November 2020.

Meeting Between The Ministry Of Health, Malaysia With A Team Of Medical Expert From China On Managing COVID-19 Using Traditional Chinese Medicine (TCM)

In China, TCM is widely used in the management of COVID-19. MOH believes that the PTC services available in Malaysia have the potential to be utilized in handling the COVID-19 epidemic in the country. Hereby, a meeting between MOH representatives which were T&CMD, National Pharmaceutical Regulatory Division, and Medical Research Institute with a team of medical experts from Guangdong Province, China was held on 24 April 2020 virtually.

Image 5.19

Meeting With The Medical Expert Team From China



Source: Traditional & Complimentary Medicine Division, MOH

The focus of this meeting was to understand the handling of COVID-19 cases in China using TCM, especially the strategic cooperation between modern medical practitioners and TCM practitioners as well as research conducted. The meeting took note the integration of TCM treatment on managing COVID-19 is immensely subject to the healthcare and regulatory system in a country. The medical

expert team from China advised the TCM approach needs to be tailored to the patient's situation and factors such as geographical location, local climate, seasonal changes, as well as local community living habits. Therefore, it is necessary to conduct high-quality clinical research in the local healthcare setting to ensure that TCM can be used safely and effectively in Malaysia. The China delegates expressed interest to collaborate with MOH in the future.

Live Dialogue Session With The Delegation Of Medical Experts From China On Managing COVID-19 Using Traditional Chinese Medicine (TCM)

The Traditional and Complementary Medicine Division, Ministry of Health Malaysia conducted a live dialogue session via the Facebook platform with a team of medical experts from Guangdong Province, China on 24 April 2020. This dialogue session was chaired by YBhg. Datuk Dr. Hj. Rohaizat Bin Hj. Yon, Deputy Director-General of Health (Medical), MOH. The team of physicians is led by Professor Dr. Li Jun, Chief Physician of TCM Internal Medicine, Guangdong Provincial Hospital of TCM. The aim of this session is to explain to the public the role of TCM in the management of COVID-19 cases in China. As of December 10, 2020, this session has been well received and has been viewed 30.4 thousand times.

Image 5.20

Dialogue Session With The Delegation Of Medical Experts From People's Republic of China (PRC)



Photo Session: Deputy Director- General of Health (Medical) (front row, middle), Director of Traditional and Complementary Medicine Division (front row, forth from left), and medical experts from China

Source: Traditional & Complimentary Medicine Division, MOH

GUIDELINE ON THE IMPLEMENTATION OF SHORT-TERM ELECTIVE TRAINING AT MINISTRY OF HEALTH MALAYSIA (MOH) HOSPITALS PROVIDING TRADITIONAL AND COMPLEMENTARY MEDICINE (T&CM) SERVICES [FIRST EDITION 2020]

The Guideline was published by T&CMD and launched by Datuk Dr. Hj. Rohaizat Bin Hj. Yon, Deputy Director-General of Health (Medical), on 2 June 2020.

The implementation of T&CM elective training will provide opportunities for students and trainees of T&CM education programs to obtain exposure on T&CM services offered at 15 MOH hospitals offering T&CM services in Malaysia as well as work procedures involved in the delivery of these services.

The objectives of this guideline are to:

- i. Provide the opportunity for students/trainers to undergo T&CM elective training at MOH hospitals to nurture a generation of safe and high quality T&CM practitioners;
- ii. Ensure smooth implementation of elective training at MOH hospitals without affecting the T&CM services offered to patients and adherence to existing rules and regulations by the Higher Education Institutions (HEIs); and
- iii. Serve as a reference for MOH and HEIs that offer T&CM education programs on the implementation of T&CM elective training for students/trainers at MOH hospitals.



Image 5.21

Launching Ceremony of Guidelines on The Implementation of Short Term Elective Training at MOH Hospitals Providing T&CM Services by Deputy Director-General of Health (Medical), Datuk Dr. Hj. Rohaizat bin Hj. Yon



Source: Traditional & Complimentary Medicine Division, MOH

IMPLEMENTATION OF TWO-WAY COMMUNICATION MECHANISM BETWEEN TRADITIONAL AND COMPLEMENTARY MEDICINE (T&CM) PRACTITIONER AND REGISTERED MEDICAL PRACTITIONER (RMP) AT MINISTRY OF HEALTH MALAYSIA (MOH) HEALTH CARE FACILITIES

A two-way communication mechanism between T&CM practitioners and Registered Medical Practitioners was introduced in MOH health care facilities in June 2020 to improve the provision of T&CM at MOH hospitals and to enhance the integration of T&CM into the national health care system to improve the health care service delivery and quality of life of all Malaysians.

The objectives of this mechanism are:

- i. To enable effective communication between T&CM practitioners and Registered Medical Practitioners for patients receiving T&CM services at MOH hospitals by establishing a communication pathway; and
- ii. To outline and standardise the work processes and forms used while (a) extending T&CM services to patients, and (b) after the patient completed the prescribed T&CM regime.

The implementation of this mechanism can increase the mutual understanding between T&CM practitioners and registered medical practitioners in providing services to patients holistically.

GUIDELINE ON THE MANAGEMENT OF TRADITIONAL AND COMPLEMENTARY MEDICINE (T&CM) SERVICES FOR THE PRIVATE SECTOR IN THE PREVENTION OF THE COVID-19

This guideline is developed to guide the management of T&CM services for the private sector in the prevention of COVID-19. This is to ensure the suspension of COVID-19 spread with the practice of social distancing, limited movement and reduce interaction between individuals involved.

All T&CM premises operators, T&CM practitioners or any individuals who want to provide or receive T&CM services are advised to follow preventive measures as recommended in this guideline, including before, during and after providing or receiving the T&CM services.

PUBLIC-PRIVATE PARTNERSHIP PILOT PROJECT ON THE PROVISION OF TRADITIONAL AND COMPLEMENTARY MEDICINE (T&CM) SERVICES BY THE MALAYSIA HOLISTIC AND HERBAL ORGANISATION (MHHO) AT JINJANG HEALTH CLINIC (JHC)

MHHO is a non-governmental organisation that provides T&CM services at KKJ since 2007. This activity is conducted by the *Kelab Warga Emas* (KWE), JHC where the MHHO association will provide free T&CM services to KWE, KKJ members once a week.

The collaboration between MHHO and JHC has the potential and provides an opportunity to develop a Public-Private Partnership (PPP) model for the integration of T&CM services into the primary health care (PHC) level. Therefore, MOH has developed a Public-Private Partnership Pilot Project on The Provision of T&CM services by MHHO at JHC. This pilot project shall be conducted to develop, implement, and evaluate the proposed PPP model. The proposed model shall be adopted nationwide for similar collaboration in the future if the outcomes are shown to be beneficial to the Rakyat.

A designated task force was established on 5 August 2020, with representatives from T&CMD, Family Health Development Division, Health Department of Federal Territory Kuala Lumpur and Putrajaya, Kepong District Health Office, and JHC. The task force will monitor and evaluate the implementation of this pilot project, and subsequently, make recommendations to the higher management for policy decision making. Among the matters finalised by the Task Force are the Memorandum of Agreement (MoA), pilot project guidelines, as well as standard operating procedures.

On 28 November 2020, a MoA Signing Ceremony for this pilot project was held with the attendance of Dato' Dr. Chong Chee Kheong, Deputy Director-General of Health (Public Health). T&CMD (on behalf of MOH) and MHHO signed the MoA to conduct a pilot project for a period of 2 years, from January 2021 to December 2022.

An online workshop was conducted on 23 December 2020 to provide training to personnel who are involved directly or indirectly in the implementation of this pilot project. This includes training on work processes, documentation and record-keeping, infection control, and other relevant matters related to the provision of T&CM services in JHC.

Image 5.22

Signing Ceremony of the Memorandum of Agreement between MOH and MHHO



From left: Dr. Goh Cheng Soon, Director of Traditional and Complementary Medicine Division, MOH; Dato' Dr. Chong Chee Kheong, Deputy Director-General of Health (Public Health), MOH; Madam Wendy Tan Gan Gan, Chairman of MHHO

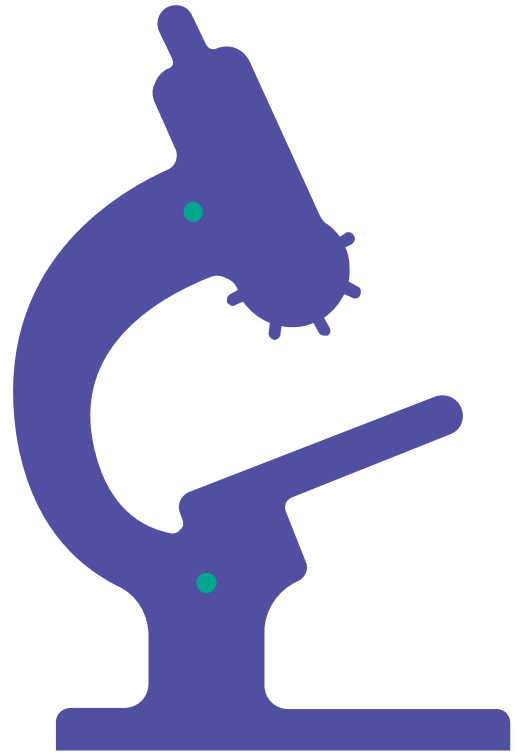


Source: Traditional & Complimentary Medicine Division, MOH

WAY FORWARD

The general direction of T&CMD is to continuously facilitate the development of Traditional and Complementary Medicine in Malaysia so that it can contribute optimally to the National Healthcare System, reach towards Universal Health Coverage, and enhance the total well-being of all Malaysians.

This direction is guided by the National Policy of T&CM and T&CM Blueprint 2018-2027 (Healthcare). It will be tailored to meet the emerging healthcare needs and to address the issues and challenges of the T&CM industry in Malaysia.



06

RESEARCH & TECHNICAL SUPPORT



RESEARCH & TECHNICAL SUPPORT

INTRODUCTION

The Research and Technical Support (R&TS) Program is responsible to provide technical and support services to other programs within the Ministry of Health (MOH). This program consists of the Planning Division, Engineering Services Division, The Medical Radiation Surveillance Division and six (6) research institutes under the National Institutes of Health (NIH).

PLANNING DIVISION

The Planning Division focuses on several crucial activities such as the formulation of the Health Sector Transformation Plan, improving the quality of health data, implementation of health informatic standards in Malaysia as well as plan, develop and evaluate the programs or projects as planned in Twelfth Malaysia Plan (12MP). The Planning Division consists of six (6) sections:

- i. Health Plan and Policy Planning
- ii. National Health Financing (NHF)
- iii. Malaysia National Health Accounts (MNHA)
- iv. Health Informatic Center (HIC)
- v. Health Facility Planning
- vi. eHealth Planning

HEALTH PLAN AND POLICY PLANNING SECTION

12TH MALAYSIA PLAN

The Health Plan and Policy Planning Section is involved in formulating and improving the action plan and health-related strategy under Twelfth Malaysia Plan, 2021-2025 (12MP) which comprises focal points from each division with collaboration from Economic Planning Unit (EPU).

A session involving the YB Minister in the Prime Minister's Department (Economy), with the YB Minister of Health was held on 30 November 2020 to discuss further on the document. The 12MP document is expected to be tabled for approval from the government in April 2021.

THE DEVELOPMENT OF THE MOH STRATEGIC PLAN 2021-2025

The development of the MOH Strategic Plan 2021-2025 started in early 2020 based on the input from the Technical Working Group Strategy Paper for Health of the 12th Malaysia Plan (12MP). Members of the technical committee representing the main program in the Ministry of Health were appointed in May 2020 as preliminary preparations while awaiting for the 12th Malaysia Plan document to be approved. However, following the Covid-19 pandemic, the presentation of the 12th Malaysia Plan scheduled for August 6, 2020, has been postponed to early 2021.

A Technical Committee Meeting No. 1/2020 was conducted on November 17, 2020, to discuss the achievement, issues and challenges of MoH Strategic Plan 2016-2020 as well as the proposed framework for MOH Strategic Plan 2021-2025 initiatives. Subsequently, the MOH Strategic Plan Framework 2021-2025 was presented in the *Jawatankuasa Dasar Perancangan Kementerian Kesihatan Malaysia* (JPPKK) on 4 December 2020, following the presentation of the 12th Malaysia Plan document during the Involvement of the YB Minister in the Prime Minister's Department (Economy), with YB Minister Health which was held on 30 November 2020. The development of the MOH Strategic Plan 2021-2025 will continue and is expected to be completed in the second quarter of 2021 subject to the approval of the 12MP document.

DEVELOPMENT OF STRATEGIC PLAN FOR RESEARCH AND TECHNICAL SUPPORT (R&TS) PROGRAM 2021-2025

In June 2020, the Deputy Director-General of Health for Research and Technical Support (R&TS) Program has proposed the development of a 5-year Strategic Plan for the R&TS Program. A committee represented by each Division under the R&TS program led by the Planning Division has been established to make this document a success.

A series of engagement sessions were held to develop this document. Among them is The R&TS Strategic Plan 2021-2025 Workshop which was held on 1-3 October 2020 at the Lexis Hotel Port Dickson, Negeri Sembilan. This workshop was officiated by the Deputy Director-General of Health (R&TS) and was attended by 58 participants representing each division and institute under the R&TS program. Subsequently, this document draft has been presented to the R&TS meeting and Director-General special meeting on 26th January 2021 for approval.

Image 6.1

R&TS Strategic Plan 2021-2025 Workshop on 1-3 October 2020 at Lexis Hotel Port Dickson, Negeri Sembilan



Source: Planning Division, MOH

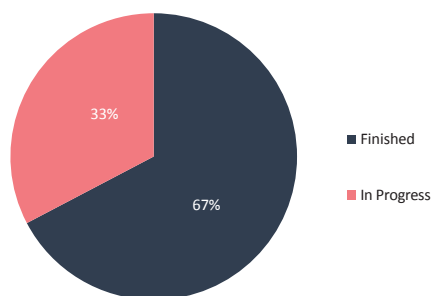
MONITORING OF THE MID-TERM REVIEW OF THE ELEVENTH MALAYSIA PLAN (11MP)

Monitoring of the Mid-Term Review of the Eleventh Malaysia Plan (11MP) was conducted to review and evaluate the achievements as well as adjusting the policies, strategies, and action plans of the 11MP. The Ministry of Health Malaysia (MOH) acts as the coordinator of Initiatives and implementers of the Policy Implementation Plan (PPD) in Pillars II, III, V and VI which includes 30 initiatives and 52 PPDs and supports 3 selected targets (National KPIs) namely:

- i. The ratio of 2 hospital beds per 1000 population
- ii. Increase the ratio of doctors to the population to 1: 450
- iii. Emergency response time optimization to 8 minutes

MOH's achievement in 2020, 67% of the indicators were successfully achieved ([Figure 6.1](#)).

Figure 6.1
MOH Overall Achievement 2020



Source: Planning Division, MOH

MINISTRY OF HEALTH PLANNING STEERING COMMITTEE (JPPKK)

The Ministry of Health Planning Steering Committee (JPPKK) is the highest body in the Ministry of Health Malaysia in making key policy decisions and planning in MOH holistically and in line with national policies and vision.

JPPKK Meeting was held twice during the year 2020 and a total of 7 papers were presented as in [Table 6.1](#). JPPKK Meeting No.2/2020 was held virtually as Putrajaya is still under the Conditional Movement Control Order (CMCO) due to the spread of the Covid-19 pandemic. At the meeting, JPPKK was rebranded as the Ministry of Health Policy Planning Committee (JDPKK) with some improvements in terms of reference.

Table 6.1
JPPKK Meetings in 2020

No.	Paperwork	Status	Program/ Division
1.	JPPKK NO. 1/2020 (26 th February 2020)		
1.1.	Proposal on Implementation of Centralized Nuclear Pharmacy in Nuclear Medical Facilities	Approved	Pharmacy Practice and Development Division
1.2.	"Health in The Sustainable Development Goals and Universal Health Coverage: Progress Report for Malaysia"	Approved with minor correction	Planning Division
1.3.	Proposal on Preparation of Post 2020 Development Plan (12 th Malaysia Plan)	Approved	Planning Division
2.	JPPKK NO. 2/2020 (4 th December 2020)		
2.1.	National Strategic Plan for Mental Health 2020-2025	Approved	Disease Control Division
2.2.	Regulatory Framework for Private Online Healthcare Services in Malaysia	Approved	Planning Division
2.3.	Ministry of Health Strategic Plan 2021-2025	Approved	Planning Division
2.4.	Activation of Ministry of Health Policy Committee (JDKK)	Rebrand into MOH Policy Planning Committee (JDPKK)	Planning Division

Source: Planning Division, MOH

SUSTAINABLE DEVELOPMENT GOALS 2030

In the year 2020, Malaysia has achieved an SDG index score of 71.8 as compared to 69.6 in 2019. The Planning Division is the UHC SDG Secretariat for the Health sector level in Malaysia. On 11 August 2020, a seminar entitled Health in the SDG & UHC was successfully held at the National Institute of Health, Setia Alam. The objective of the seminar is to gather input from agencies and outside government bodies on the status of the latest achievements of the UHC Health SDG in Malaysia for the year 2015-2019. A total of 115 participants from various agencies including WHO, World Bank, and other ministries and agencies also attended the seminar. The seminar was also successfully reported as proceedings.

The Planning Division also acts as a focal point to collect data for Health-related indicators from all Divisions involved in the MOH. This division is required to report data to the Department of Statistics Malaysia regularly and the World Health Organisation (WHO) through the DHIS 2 (District Health Information Software) platform. In addition, the Secretariat with the Division is also involved in "country consultation" activities for selected indicators and this activity is a collaboration between WHO, UNICEF and World Bank.

HUMAN RESOURCE FOR HEALTH

In 2020, the Planning Division published another Human Resources for Health Country Profiles Malaysia (2015-2018) report. This publication reports on the distribution of human resources for health until 2018 comprising both the public and private sectors, especially those registered with the relevant Councils/Boards. Also reported is information on training for several professions obtained from the Ministry of Higher Education and related Divisions. This publication aims to be a reference source in planning and monitoring human resources' status for Malaysia's health sector.

Apart from that, related to human resources is establishing the new definition of the total number of doctors in Malaysia in the MOH's official reporting. Discussion in the *Mesyuarat Khas Ketua Pengarah Kesihatan* No. 4/2020 concurred that the number of doctors in Malaysia refers to medical practitioners with Annual Practice Certificate and new Full Registration, and House Officers in the current year. This definition will take effect from 2021.

NATIONAL HEALTH FINANCING SECTION

National Health Financing (NHF) is a section under the Planning Division, which is responsible for studying, designing, implementing and monitoring health system transformation plans for Malaysia in particularly related to health financing. In 2020, NHF conducted many activities via an online platform, including participating in a series of webinars on health financing and collaborating with the Joint Learning Network (JLN). Furthermore, NHF continued to monitor the implementation of the *Skim Peduli Kesihatan* untuk *Kumpulan* B40 (PeKa B40) by ProtectHealth Corporation Sdn Bhd (PHCorp) via the Governance, Monitoring and Evaluation Committee (GMEC).

GOVERNANCE, MONITORING AND EVALUATION COMMITTEE (GMEC)

The Governance, Monitoring and Evaluation Committee (GMEC) was established in 2019 to monitor and evaluate the performance of ProtectHealth Malaysia (PHM) and its subsidiary PHCorp, as well as the implementation of PeKa B40.

GMEC is chaired by the Deputy Director-General of Health from the Research & Technical Support Program. The committee members comprise the Deputy Accountant General, the MOH Legal Advisor, the Head of MOH Integrity Unit, an academician and representative from the office of the Minister of Health.

NHF as the secretariat coordinated three (3) meetings on 13 January 2020, 16 June 2020 and 1 October 2020 to ensure the governance of PHCorp-PeKa B40 is implemented according to its focus and objectives. Among the suggestions proposed by the committee include reducing the minimum age for PeKa B40 beneficiaries, the improvement of PHCorp internal operations and increasing the public awareness of PeKa B40.

COLLABORATION WITH JOINT LEARNING NETWORK (JLN)

The Joint Learning Network for Universal Health Coverage (JLN) has spearheaded its ethos of country-led and country-driven joint learning and mutual problem solving—bringing together policymakers and practitioners from 34 countries to systematically share their knowledge.

Malaysia has been involved in JLN activities since 2010. The Planning Division through the NHF coordinates the JLN Country-Core Group (CCG) for Malaysia. JLN CCG is chaired by the Director of the Planning Division. The participation of both government officials and non-government participants is coordinated through JLN CCG Malaysia.

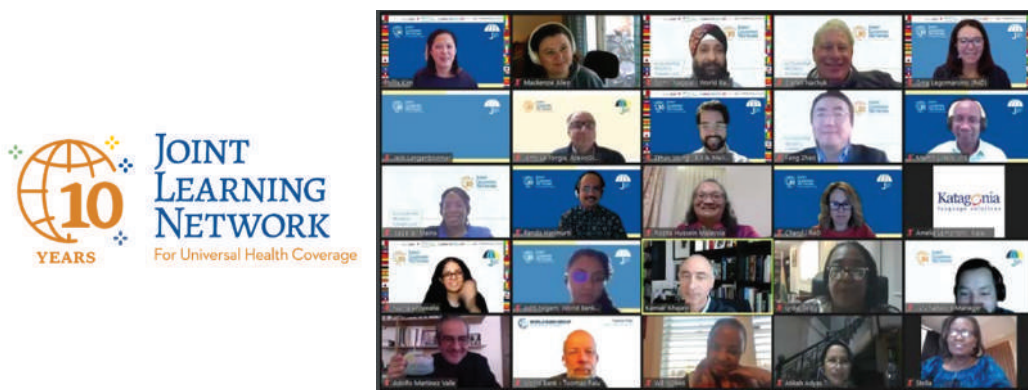
Among the activities that Malaysia had participated in were the Domestic Resource Mobilization Collaborative, Private Sector Engagement Collaborative, Efficiency Collaborative and Provider Payment Mechanism Collaborative, which also produced several knowledge products that help in improving the quality of healthcare services.

NHF officers were specifically involved in JLN international activities, such as:

- i. JLN Efficiency Collaborative Phase 2 Launch Meeting on 8 September and 3 December 2020;
- ii. JLN Ghana- Country Pairing on 18 November 2020; and
- iii. JLN Private Sector Engagement Collaborative on 17, 19 September 2020 and 28 October 2020.

On 10 December 2020, practitioners from JLN countries joined JLN partner organisations in celebrating 10 years of accomplishments and progress. Dr. Rozita Halina binti Tun Hussein, Senior Deputy Director of the Planning Division, who was a member of the founding JLN Steering Group and then served as Convener from 2016-2018, was invited to the virtual session. She presented her perspective on the evolution and growth of the network, and the progress Malaysia has made towards universal health coverage and a stronger health system.

Image 6.2
Joint Learning Network (JLN) 10 Years Accomplishments Session



Source: Planning Division, MOH

MALAYSIA NATIONAL HEALTH ACCOUNTS (MNHA)

Malaysia National Health Accounts (MNHA) started as a project by the Ministry of Health (MOH) with strong support from the Economic Planning Unit (EPU) of the Prime Minister's Department. In 2005, MNHA was institutionalized under the Planning & Development Division of MOH. MNHA produces macro-level health expenditure estimates using the internationally accepted methodology. The annual time-series health expenditure estimates are generated based on classifications as detailed in the MNHA Framework (national) and also based on System of Health Accounts (SHA) 2011 classifications (international). There are multiple public and private sources of funding for health care services, of which the total health expenditure encompasses the expenditure by the Ministry of Health, Malaysia as part of the public sources of funding.

Since its establishment, this section has been extensively analysing and providing data such as the national Total Expenditure on Health (TEH), Total Health Expenditure as a percentage of Gross Domestic Product (GDP), the burden of Out-of-pocket (OOP) expenditure on health and various other health expenditure related data. These data are generated not only to assist policy makers but also for the use of researchers and other stakeholders. Every year, MNHA also publishes health expenditure reports in an endeavor to better understand Malaysia's health spending trends. The report aims to provide a clearer picture of the national health expenditure from the sources to the various providers and finally to the types of services obtained (Figure 6.2).

Figure 6.2
The Flow of Health Funds



Source: Planning Division, MOH

HEALTH EXPENDITURE 1997-2019

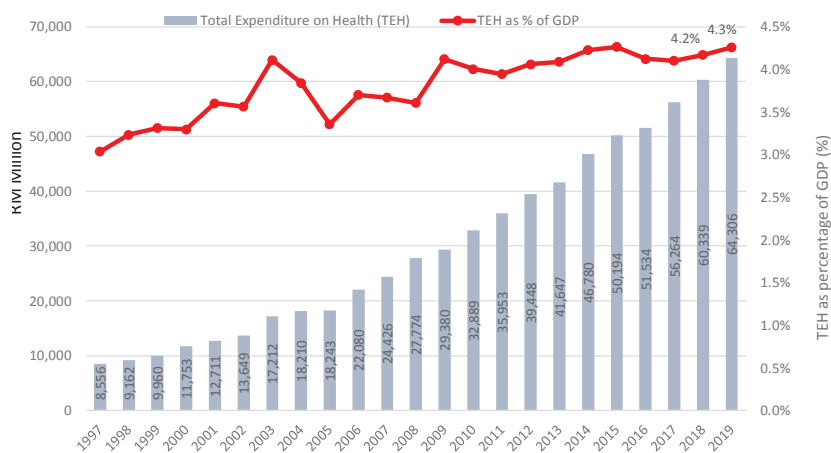
In 2020, as a result of the COVID-19 pandemic, MNHA faced various challenges in obtaining feedback from both the public and private agencies during the data collection process. However, MNHA managed to successfully generate the Malaysian Health Expenditure time-series data for 1997 to 2019 (23 years data) with a response rate of 85 per cent. This was made possible via the extension of the set time frame to receive responses and also by sending friendly reminders to all involved agencies.

The latest time-series data shows that Malaysia's total expenditure on health (TEH) in 2019 was RM64,306 million which was an increase of 6.6 per cent compared to the total expenditure of RM60,339 million in 2018. The total expenditure on health as a percentage of Gross Domestic Product (GDP) in 2019 was around 4.3 percent (Figure 6.3). Various sources of financing for health care services and products are identified and categorised as either public sector or private sector agencies. Throughout the 1997 to 2019 time series, both the public and private sector spending shows an upward trend with the public sector health spending remaining higher than the private (Figure 6.4). In 2019, health expenditure borne by all public agencies was RM33,731 million or 52.5 per cent of TEH, while health expenditure by the private sector agencies was RM30,575 million or 47.5 per cent.

In 2019, RM35,544 million or 55 per cent of TEH was spent on services at both public and private hospitals. A total of RM13,678 million or 21 per cent was spent on services at Ambulatory Healthcare Providers. During the same year, expenditure based on functions of health care showed that services for curative care amounted to RM43,553 million which was an increase of 6 per cent compared to RM41,072 million spent for similar services in 2018. Among the other functions of healthcare that showed an increase in expenditure compared to 2018, was prevention and public health services with an increase of 19 per cent.

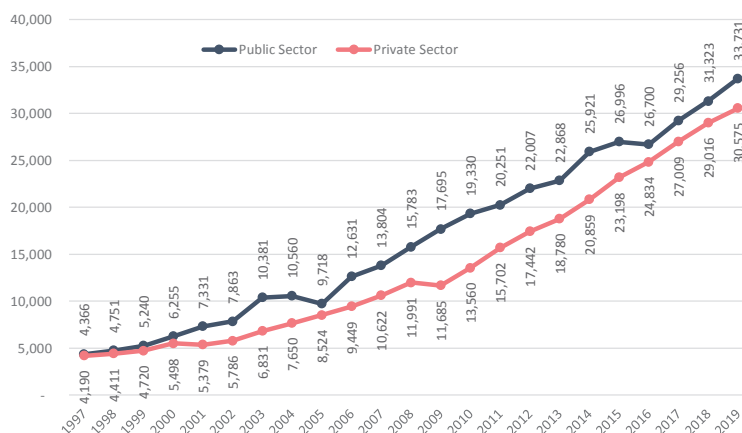
MNHA analyses and generates various aspects of national health expenditure data to assist in several national projects such as Health Facts, data requests in preparation for Healthcare Sector Transformation activities. Data were also extracted for ad hoc requests from national agencies and local universities as well as in preparation for top level management speeches. The section was also involved in international cooperation and collaboration with agencies such as WHO Geneva for World Health Statistics, Global Health Expenditure Database (GHED) and Health at a Glance (HAG). This involved sharing health expenditure estimates tailored to the requests. MNHA's evidence-based work and contributions are valuable in the development of local health policies.

Figure 6.3
Total Expenditure on Health (TEH) 1997-2019



Source: Section MNHA, Planning Division, MOH

Figure 6.4
Total Expenditure on Health by Sources of Financing, 1997-2019



Source: Section MNHA, Planning Division, MOH

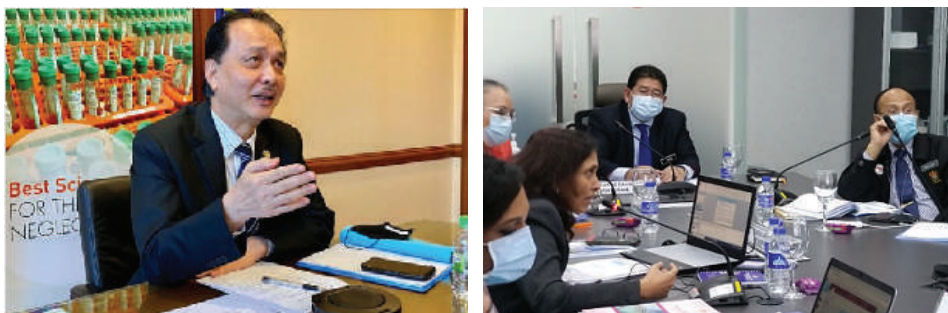
MNHA STEERING COMMITTEE MEETING

The MNHA Steering Committee consists of top management representatives from various public and private sector agencies. MNHA Steering Committee meeting is held at least once a year. This meeting is usually co-chaired by the Secretary-General of the Ministry of Health Malaysia and the Director-General of Health Malaysia. The main purpose of this steering committee is to validate the national health expenditure data produced by MNHA Section.

The national health expenditure time-series data for 1997-2019 was presented by MNHA Section and validated during the MNHA Steering Committee Meeting on 8th December 2020 that was chaired by the Director-General of Health. This meeting was conducted both physically and virtually. The data presented was later made available on the MOH website for all stakeholders.

Image 6.3

MNHA Steering Committee Meeting 2020



Source: Section MNHA, Planning Division, MOH

Image 6.4

MNHA Meeting with SOCSO



Source: Section MNHA, Planning Division, MOH

HEALTH INFORMATICS CENTER SECTION

THE INTERNATIONAL CLASSIFICATION OF DISEASES 11TH VERSION (ICD-11) VIRTUAL TRAINING

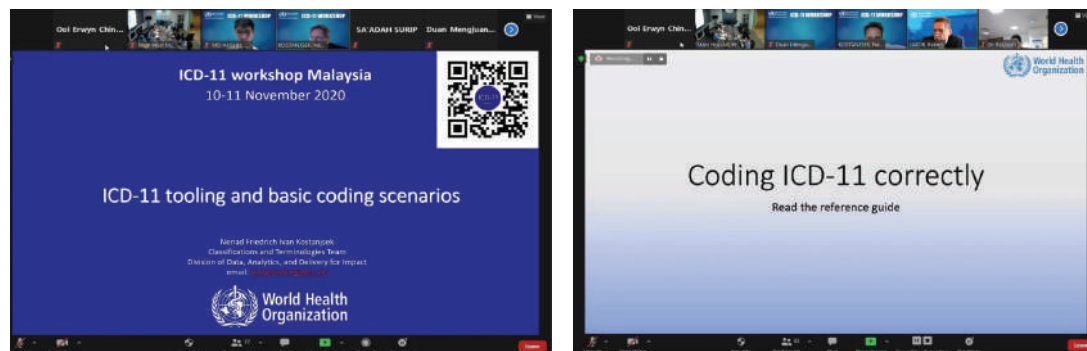
The Ministry of Health, Malaysia and Classifications, Terminologies and Standards team from WHO Geneva has organised this Virtual Training session on the 10th-11th November 2020. The WHO Western Pacific Region (WHO WPRO) and the WHO Representative Office in Malaysia, Singapore and Brunei Darussalam have facilitated organising this workshop.

This Virtual Training aims to introduce ICD-11 to the relevant stakeholders at MOH, Malaysia, to implement the ICD-11 classification standard in Malaysia. This workshop also aims to improve the understanding and introduce the improvements between the 10th and 11th versions. The attendees of this workshop will be the core group that will spearhead the implementation of ICD-11 in Malaysia.

The attendees of this workshop consist of the ICD-11 Implementation Committee members made up of Medical Specialists, Medical Officers, Medical Record Officers, Assistant Medical Record Officers, Pharmacists from State Health Departments, hospitals and the MOH HQ. From the technical group, the IT officers from the Information Management Division, MOH, and representatives from the IT vendor companies were involved in developing the EMR systems at MOH facilities.

We achieved the aim of this workshop, as the participants were exposed to ICD-11. Recommendations from the technical, policy and human resources were identified and discussed to make this implementation exercise a success.

Image 6.5
ICD-11 Training with WHO WPRO



Source: HIC Section, Planning Division, MOH

HEALTH FACILITY PLANNING SECTION

Malaysian Ministry of Health is committed to providing quality healthcare services for the public. Health Facility Planning Section (SPFK) plays a vital role to ensure health facility planning and development is in line with government policies. This includes the identification of projects required to provide more accessibility to healthcare services, especially in rural areas. Besides that, SPFK is actively involved in medical equipment planning and mechanical & electrical engineering systems throughout the design phase to set up healthcare facilities that are safe, efficient and cost-effective. SPFK also coordinates the provision of ICT in healthcare facilities to establish Electronic Medical Records (EMR) in all health facilities, which is in line with the policy of the Ministry of Health.

HANDOVER OF PROJECTS IN 2020

In 2020, there are a total of 15 projects, consisting of six (6) hospital upgrading projects, eight (8) health clinics, and one (1) psychiatric block, which have been built and successfully hand over to end-users for operation. Some of these projects are:

- i. Surgery and Hemodialysis Hall upgrades of Hospital Papar, Sabah
- ii. Development of Psychiatric Block in Hospital Sultanah Nur Zahirah, Kuala Terengganu
- iii. Development of Health Clinics (Type 3) with Quarters in Kuala Kangsar, Perak
- iv. Development of Health Clinics (Type 3) in Bukit Indah, Johor

PROJECTS APPROVED FOR IMPLEMENTATION IN 2020

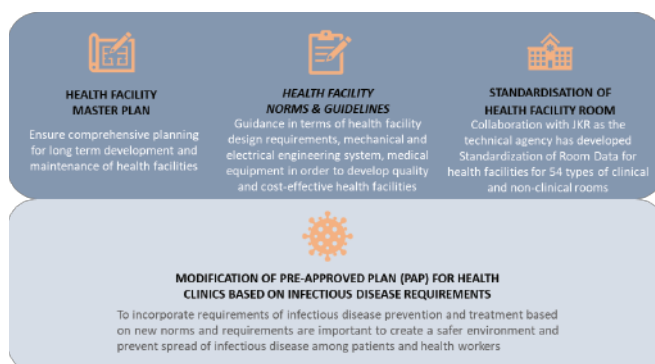
A total of 39 projects have been approved for implementation in 2020. The approved projects consist of eight (8) hospitals and additional blocks, nine (9) hospital upgrading projects, 20 health clinics, one (1) health office and one (1) laboratory. Some of these projects are:

- i. Hospital Kapar
- ii. Hospital Maran
- iii. Women and Children Block, Hospital Melaka
- iv. *Blok Patologi Tambahan* Hospital Raja Perempuan Zainab II
- v. *Blok Sajjan* Hospital Bahagia Ulu Kinta
- vi. *Makmal Sarawak (Keselamatan dan Kualiti Makanan bersekali dengan Kesihatan Awam)*
- vii. *Kompleks Farmasi* Hospital Tuanku Jaafar
- viii. *Membina Blok Baharu Kompleks Farmasi Steril (Bilik Bersih)*, Hospital Tengku Ampuan Rahimah, Klang

RENOVATION OF HEALTHCARE AND COMMUNITY FACILITY AND DEVELOPMENT OF COVID-19 QUARANTINE AND LOW-RISK TREATMENT CENTRE (PKRC)

Malaysian Ministry of Health has identified several specialised hospitals to function as COVID-19 treatment centres in preparation to curb the upcoming third wave of the COVID-19 pandemic. The special allocation has been provided to modify and upgrade healthcare facilities to treat COVID-19 patients. This includes space renovations, ventilation systems, mechanical & electrical engineering systems and additional medical equipment. Renovations have been carried out in certain community facilities such as training colleges and nurse dormitories to be used as treatment centres. Apart from that, the Malaysian Ministry of Health in collaboration with other agencies such as NADMA, Malaysian Armed Forces (ATM) and Malaysian Public Work Department (JKR) successfully renovated the exhibition hall at MAEPS Serdang within 4 days into a treatment centre with a capacity of 600 beds. Similar collaboration can be done nationwide if required to meet the burden of patients throughout the pandemic.

Figure 6.5
PFK Section Way Forward



Source: PFK Section, Planning Division, MOH

eHEALTH PLANNING SECTION

THE IMPLEMENTATION OF ELECTRONIC MEDICAL RECORD (EMR) PROJECT THE MINISTRY OF HEALTH MALAYSIA HOSPITALS AND CLINICS IN NEGERI SEMBILAN

The National EMR Initiative was introduced to spearhead the use of EMR in all the MOH's healthcare facilities which will be implemented in a few phases. The National EMR initiative is part of MOH's strategy to ensure an integrated healthcare system and delivery of health services is more efficiently, quickly and transparently given to the people. To date, 37 of 146 hospitals (25%), 96 of 1,090 health clinics (9%) and 31 of 642 dental clinics (5%) have been provided with Electronic Medical Record (EMR) system.

A total of four (4) series of workshops were conducted in preparation of the documents for The Implementation of Electronic Medical Record (EMR) Project at The Ministry of Health Malaysia Hospitals and Clinics in Negeri Sembilan. These workshops were then followed by discussions with the Economic Planning Unit, Prime Ministers Department (EPU) from 12 to 15 October 2020 to finalise the cost. EPU has approved an allocation of RM140 million with a project implementation period of 36 months beginning 1 September 2021 to 31 August 2024 which include one year warranty period.

The objectives of the project are:

- i. To establish an integrated health record system to facilitate access to information at any health facility visited (point of care) in Negeri Sembilan;
- ii. Improving the continuity and quality of care in all health facilities in Negeri Sembilan; and
- iii. To upgrade population health data (population health) to be used comprehensively in the planning of the health system in Malaysia.

Image 6.6

Discussion Session with the Economic Planning Unit, Prime Ministers Department (EPU)



Source: eHealth Section, Planning Division, MOH

ESTABLISHMENT OF REGULATORY FRAMEWORK FOR PRIVATE ONLINE HEALTHCARE SERVICES IN MALAYSIA

There are various private companies offering services such as telemedicine and mobile medicine through online digital platforms. As such services do not yet have a specific registration and regulatory mechanism, the Ministry of Health (MOH) has taken the initiative to establish a regulatory framework for private Online Healthcare Services (OHS) to ensure its safety and quality.

Planning Division with Alpha Catalyst Consulting Sdn. Bhd. has conducted a study on the Establishment of Regulatory Framework for Private OHS in Malaysia from 6 March 2020 to 5 January 2021. A recommendation from this study is the setting up of a Regulatory Lab to test OHS in a controlled environment under proper monitoring by MOH. Next, appropriate regulatory instruments can be identified and the need for the development of new laws or amendments of existing laws and regulations can be determined.

Voluntary Registration for Private OHS in the National Regulatory Sandbox (NRS) will be implemented starting quarter three of the year 2021 in collaboration with Futurise Sdn. Bhd.

Image 6.7

**Establishment of Regulatory Framework for Private Online Healthcare Services in Malaysia
Technical Committee Meeting**



Source: eHealth Section, Planning Division, MOH

AWARENESS COURSES FOR MALAYSIA HEALTH INFORMATION EXCHANGE SYSTEM 2.0 (MyHIX) FOR MINISTRY OF HEALTH MALAYSIA FACILITIES

Awareness Courses for Malaysia Health Information Exchange System 2.0 (MyHIX) for Ministry of Health Malaysia Facilities was held at Shah Alam Hospital from 22 to 23 July 2020 and at Tunku Azizah Hospital from 18 to 19 August 2020. This course is one of the Change Management activities attended by representatives of the Ministry of Health facilities. They are change agents and responsible for their respective facilities.

The objectives of this course are as follows:

- i. To provide exposure and awareness to MOH staff on the implementation of MyHIX 2.0 at the MOH facilities.
- ii. To strengthen skills of using MyHIX 2.0 system among hospital staff.
- iii. To strengthen Change Management planning to be organised by MOH staff at the facility level.

Image 6.8

Awareness Course for Malaysia Health Information Exchange System 2.0 (MyHIX) for Ministry of Health Malaysia Facilities



Source: eHealth Section, Planning Division, MOH

ENGINEERING SERVICES DIVISION

Healthcare Engineering services is certainly the fundamental foundation that is a pre-requisite to a quality healthcare facility that in return is expected to promote and enhance quality patient care services, up the value chain, raising the capacity for knowledge, innovation and nurturing first-class mentality in healthcare engineering through the application of new technology. Thus, empowering Healthcare Engineering is the most relevant and transformative strategy in improving healthcare services continually.

Engineering Services Division (ESD) comprises of:

- i. Service Branch (Project Implementation Sector, Hospital Support Services Sector, Clinic Operation Sector and Sustainability Program Sector)
- ii. Regulatory Branch (Water and Sanitation Engineering Sector, Environmental Health Risk Sector and Waste and Hygiene Sector),
- iii. Planning Branch (Engineering Development & Asset Management Sector and Technical and Corporate Sector)
- iv. Biomedical Sector

COVID-19 PANDEMIC CONTROL AND PREVENTION ACTIVITIES

1. Plan, monitor and coordinate the engineering service action plan and participate in the National CPRC Coordination Meeting as well as the COVID-19 Management Executive Committee Meeting.
2. Involved in the management of COVID-19 pandemic data in the National CPRC Operations Room.
3. Manage the provision of facilities and patient isolation systems, infection control through Indoor Air Quality (IAQ) monitoring, special tent facilities, water supply, sanitation and other engineering services at all MOH health facilities, including PKRC MAEPS 2.0.
4. Develop guidelines and work processes to assist the state, health facilities, other agencies and concessionaires/contractors.
5. Implement technical assessments and provide technical advisory services and expertise involving medical equipment, engineering services and support to MOH health facilities, other agencies and concession companies/contractors.
6. Monitor HSS activities at quarantine stations (QS) and COVID-19 Low-Risk Quarantine and Treatment Center (PKRC) - HSC AKEPT and HSC AAN during the Humanitarian & Disaster Relief Mission (HADR), QS Malbatt Village, PKRC MAEPS 1.0 and PKRC Integrated MAEPS 2.0 ([Image 6.9](#)).

Image 6.9

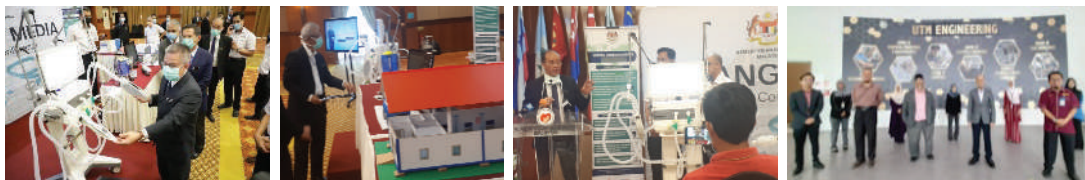
Engineering Technical Advice and HSS Monitoring Services



Source: Engineering Services Division, MOH

7. Collaborate with Universities and Industries in Research & Development (R&D) as well as COVID-19 related technology sharing such as Field Hybrid Intensive Care Unit (FHy ICU), 3D technology Ventilator, Splitter kit, PAPR and more ([Image 6.10](#)).

Image 6.10
Collaboration with other agencies in R&D projects related to COVID-19

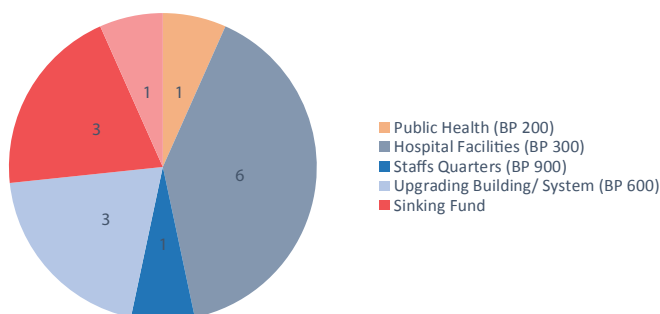


Source: Engineering Services Division, MOH

PROJECT IMPLEMENTATION SECTOR

Projects are implemented under RMK-10 and RMK-11, involving the construction of new facilities (hospitals, clinics and quarters), upgrading, renovation and refurbishment and replacement of engineering systems and buildings in healthcare facilities. As of 2020, a total of 230 projects were implemented, with 16 new projects in place. 160 projects have been completed. 51 projects are in the planning phase whilst 19 projects are in the construction phase. **Figure 6.6** shows projects that have been managed and completed by ESD.

Figure 6.6
Total Projects Completed in 2020



Source: Engineering Services Division, MOH

There are also some exceptional projects completed by ESD namely *Klinik Kesihatan* Kuala Lumpur (KKKL), National Institutes of Health (NIH) and *Kuarters* Jalan Bangsar while *Klinik Kesihatan* Bangsar, *Projek Anjung Kasih* Hospital Kuala Lumpur and Redevelopment *Klinik Kesihatan* Dato' Keramat in planning phase.

ESD through 212 consultancy firms of various engineering, architecture and surveyor fields to carry all the design and supervision works. A total of RM2.764 billion has been spent in implementing these projects under 10MP and 11MP. **Image 6.10** shown a visit by KKM top management to a project implemented by ESD and some of the projects completed in 2020.

Image 6.10
Project Implemented and Completed in 2020



Source: Engineering Services Division, MOH

HOSPITAL SUPPORT SERVICES SECTOR

HOSPITAL SUPPORT SERVICES

This sector is responsible for the monitoring and supervision of privatized Hospital Support Services (HSS) through 5 concessionaires and 6 outsourced non-concessionaires contracts in ensuring compliance to requirements. Scope of the concessionaires' contract are as [Table 6.2](#) below:

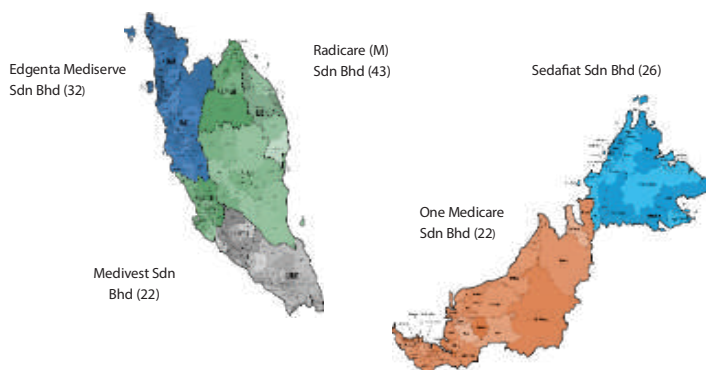
Table 6.2
Scope of the Concessionaires Contract

Facility Management Services (FMS)	Coordination of services in ensuring hospitals/institutions were operated properly and safely
Facility Engineering Management Services (FEMS)	Operate and maintain all installed plants and systems, maintain all assets (non-biomedical), pest control activities and ground maintenances.
Healthcare Waste Management Services (HWMS)	Collection, storage, transportation, treatment and disposal of Healthcare Waste produced by the Contract Hospital.
Cleansing Services (CLS)	Provide cleansing services in medical, specialized, and general areas by using proper and effective procedures.
Linen and Laundry Services (LLS)	Delivery of adequate clean linen to the Contract Hospital, removal of soiled linen and laundry services.

Source: Engineering Services Division, MOH

In the year 2020, the number of contract hospitals and institutions involved with the HSS Contract is 145 amounting to RM143 million. [Figure 6.7](#) shows the current contract. [Table 6.3](#) shows the increased number of assets involved in the HSS Contract between 2018 till 2020.

Figure 6.7
Number of Hospital /Institutions by Concession Companies



Source: Engineering Services Division, MOH

Table 6.3
Number of Assets for HSS 2018 to 2020

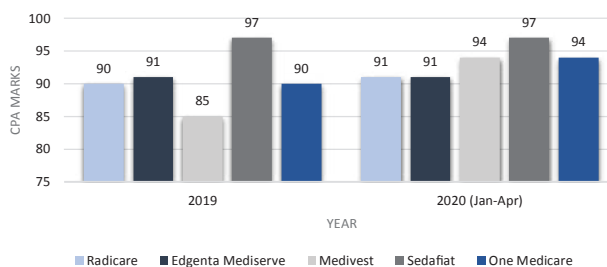
Item	2018	2019	2020
Number of Hospital / Institution	148	148	145
Floor Areas (m ²)	18,278,987	17,400,388	20,905,892
FEMS Assets	701,841	831,666	573,366

Source: Engineering Services Division, MOH

HSS PROJECT MONITORING COMMITTEE (PMC)

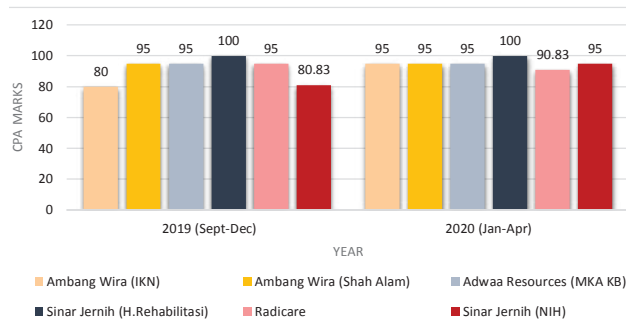
HSS PMC meetings chaired by the Director-General of Health Malaysia is a platform to strategically discuss policies, issues and performance of the companies to continually improve the provision of hospital support services. Performance assessment through this meeting highlights the importance of the service provider to deliver the best facility management for all stakeholders. The Company's Performance Assessment (CPA) is shown in [Figure 6.8](#) and [Figure 6.9](#).

Figure 6.8
CPA Marks (Concessionaires Company)



Source: Engineering Services Division, MOH

Figure 6.9
CPA Marks (Non-Concessionaires Company)

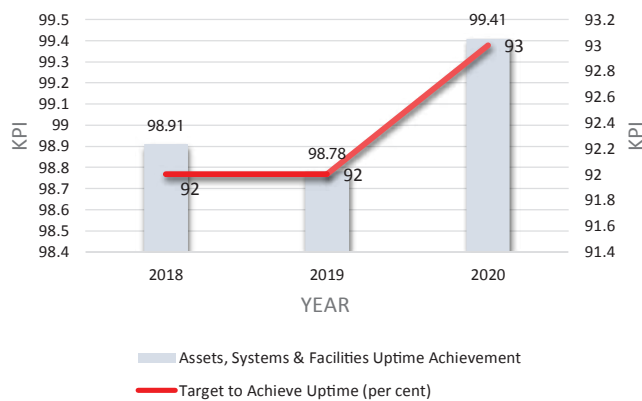


Source: Engineering Services Division, MOH

KEY PERFORMANCE INDICATOR (KPI)

A KPI which is the uptime of equipment, systems and facilities for Facility Engineering Management Services (FEMS) is set to meet the target of at least 93 per cent. The uptime of equipment, systems and facilities for FEMS recorded for the year 2020 is 99.41 per cent where it exceeds the KPI target which is 93.00 per cent. [Figure 6.10](#) shows the achievement of the KPI from 2018 to 2020.

Figure 6.10
KPI Achievement for 2018 to 2020



Source: Engineering Services Division, MOH

EMERGENCY WORKS IN HOSPITALS AND FACILITIES FOR PREPARATION OF COVID-19 INFECTION ISSUES IN MALAYSIA

This sector is involved with emergency works done in hospitals and facilities for the preparation of Covid-19 infection issues such as rental of 8 units of Mobile UV Disinfection Tower at selected COVID-19 hospitals (Sungai Buloh, Raja Perempuan Zainab II Kota Bharu, Enche' Besar Hajjah Khalsom Kluang, Sultanah Aminah Johor Bahru, Umum Sarawak Kuching, Sibul, Queen Elizabeth I Kota Kinabalu and Tawau) as [Image 6.11](#). Besides that, this sector is also involved with Isolation Room upgrading works for 5 Hospitals (Sultanah Maliha Langkawi, Sungai Buloh, Permai, Umum Sarawak Kuching and Bintulu) as shown in [Image 6.12](#). Plus, [Image 6.13](#) shown the activity of Supplying 299 units of Portable & Mobile Disinfection (e.g. Portable UVGI and Portable Air Decontamination and Cleanliness).

Image 6.11
Mobile UV Disinfection Tower



Source: Engineering Services Division, MOH

Image 6.12
Isolation Room Upgrading Works



Source: Engineering Services Division, MOH

Image 6.13
Supplying Portable & Mobile Disinfection



Source: Engineering Services Division, MOH

CLINIC OPERATION SECTOR

CLINICS SUPPORT SERVICES (CSS)

This sector monitored and supervised the implementation of the CSS program at 228 selected health clinics throughout the country with an annual cost of RM137 million, involving four (4) services namely, Facility Engineering Maintenance, Biomedical Engineering Maintenance, Cleansing Services (CLS) and Clinical Waste Management. The main activities involve Planned Preventive Maintenance (PPM) and Corrective Maintenance (CM) works of the service provider. The contractor's performance is determined through the performance Contractor Performance Assessment (CPA) at six months intervals.

UPGRADE AND REPAIR ENGINEERING SYSTEM AND STAFF QUARTERS IN HEALTH CLINICS

These activities carried out nationwide involve a total of RM20 million to enhance the safety and functionality of mainly aging health clinics to ensure better healthcare services to the public. In addition, a sum of RM10 million was allocated to repair 895 units of dilapidated staff quarters (Image 6.14).

Image 6.14

Repair and Maintenance at Staff Quarters



Source: Engineering Services Division, MOH

SUSTAINABILITY PROGRAM (SP) SECTOR

This sector is responsible for implementing various initiatives to achieve green building status towards a sustainable healthcare facility. In reducing carbon emissions and limiting impacts of climate change, the Ministry has embarked on a comprehensive program to efficiently manage the energy, water and waste as well as improving indoor air quality through green practices in all government hospitals. These initiatives support the government's commitment to reduce CO₂ emissions per unit of GDP by 45 per cent by 2030.

2020 ACHIEVEMENTS

MOH became a role model for other government agencies and the private sector in spearheading sustainable development in this country with strong collaboration with various agencies such as KETSA, SEDA, KASA, ST and concessionaires company. These initiatives improve energy usage, reduce utility costs and enhance operational efficiency through the replacement of aging assets with green and environmentally friendly technology. It will inevitably ensure that the best healthcare services can be provided for the nation.

WORLD RECOGNISED GREEN HOSPITAL

Leading by example, Hospital Sultanah Maliha, Langkawi was accorded with the international Leadership in Energy and Environmental Design (LEED) green building certification ([Image 6.15](#)). The hospital became the first hospital in the world and also the first government building in Malaysia to be certified with Gold level status under the category of Existing Building Operation and Maintenance version 4.

Image 6.15

Achievement of Hospital Sultanah Maliha, Langkawi



Source: Engineering Services Division, MOH

ASEAN & NATIONAL ENERGY AWARDS

Hospital Sungai Buloh has won the National Energy Award (NEA) runner-up for the renewable energy of grid (thermal) category while Hospital Jelebu has won the first runner-up ASEAN Energy Awards 2020 for the building category (Small & Medium Building) ([Image 6.16](#)).

Image 6.16
Energy Awards Recognition for MOH Hospitals



Source: Engineering Services Division, MOH

ENERGY REDUCTION

Since 2015 and up till December 2020, MOH has successfully achieved energy savings of 360 GigaWatt-Hours (GWh), equivalent to utility cost savings of RM150 million compared to the baselines of 2015 and 2016 as well as a reduction in carbon emissions exceeding 280 thousand tonnes of CO₂. Besides, 64 hospitals and institutions had scored 2-star and 3-star ratings in the Energy Management Gold Standard (EMGS) certificate under the ASEAN Energy Management Scheme (AEMAS) (Figure 6.11).

Figure 6.11
Number of AEMAS Certified Hospital



Source: Engineering Services Division, MOH

HIGH IMPACT ENERGY PROJECTS

MOH was also successful in implementing high-impact energy projects through the conventional method and Energy Performance Contracting (EPC). These projects involved the replacement of chiller, LED lighting and installation of the solar thermal hot water system to continuously reduce energy consumption (Image 6.17).

Image 6.17
High Impact Energy Projects Implemented by MOH



Source: Engineering Services Division, MOH

BIOMEDICAL SECTOR

The Biomedical Sector's role is to coordinate, monitor and supervise the Biomedical Engineering Maintenance Services (BEMS) at MOH healthcare facilities within the Hospital Support Service (HSS) Concession Agreement, Medical Equipment Enhancement Tenure (MEET) Program and other contracts (non-concession and PFI). [Table 6.4](#) provides the summary of BEMS.

Table 6.4
Summary of BEMS

Title	HSS Concession	Non-Concession	MEET Program
No. of Facilities	148 Hospitals/ Institutions	7 Hospitals/ Institutions	3,190 Clinics
No. of Equipment	201,153	6,990	79,611

Source: Engineering Service Division, MOH

The MEET contract was signed with Quantum Medical Solutions Sdn. Bhd. on 17 April 2014 for 13 years with the scope involved as the following:

- i. Perform comprehensive maintenance of biomedical equipment at 2,071 Health Clinics and 1,119 Dental Clinics involved (Selangor, Malacca, Negeri Sembilan, Johor, Perak, Penang, Sabah, Sarawak, WP Kuala Lumpur & Putrajaya, WP Labuan and ILPKKM(Georgetown)).
- ii. Supply new biomedical equipment categorised as Gap equipment.
- iii. Perform construction and renovation work (CW) for the supply of equipment involved.

The Key Performance Indicator (KPI) monitored for BEMS is the uptime percentage of biomedical equipment. The achievement for the year 2020 is shown in [Table 6.5](#).

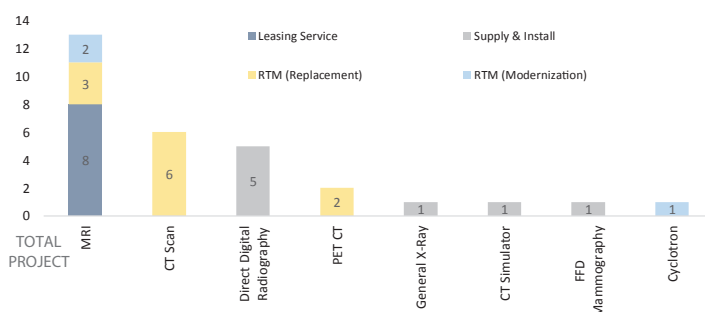
Table 6.5
KPI Uptime Achievement for the Year 2020

Indicator	No. of Equipment		Achievement	Target
	Monitored	Achieved uptime	Per cent	Per cent
Uptime for total BEMS equipment for HSS Concession Agreement	136,360	132,632	97.27	≥ 93.0
Uptime for total biomedical equipment for MEET contract	79,611	78,522	98.63	≥ 92.0

Source: Engineering Service Division, MOH

Biomedical Sector is also involved in the implementation of the supply, upgrade, modernization and replacement of medical equipment in MOH facilities through a various methods such as Supply & Install, Leasing Service and Replacement Through Maintenance (RTM) Program. Activities carried out by this sector involves the preparation of technical specifications as well as monitoring and coordinating the implementation of site work. The summary of biomedical equipment projects implemented in the year 2020 is shown in [Figure 6.12](#).

Figure 6.12
Biomedical Equipment Projects in 2020



Source: Engineering Service Division, MOH

RTM Program is introduced as an alternative in the management of medical equipment that has exceeded the life span and is still being used in hospitals/institutions ([Image 6.18](#)). Through this program, the overall cost of procuring the medical equipment is borne by the concessionaire and the Government is not burdened with the cost of capital expenditure. In 2020, an estimated cost saving of RM22.5 million was achieved.

Image 6.18

RTM Project Launch in Hospital Sultanah Bahiyah, Sungai Petani

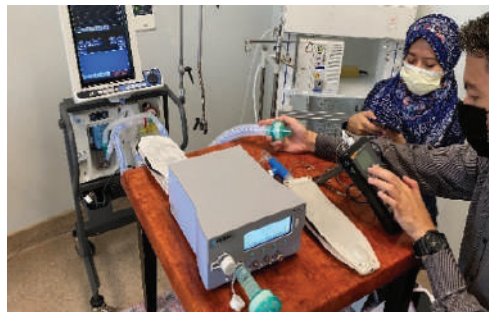


Source: Engineering Service Division, MOH

Biomedical Sector is responsible for preparing MOH guidelines, providing technology & technical advice, and executing incident & forensic investigation related to biomedical engineering. In 2020, this Sector explored the application of 3D printing technology in two innovative R&D projects related to ventilator development and the use of ventilator splitter for dual patient ventilation ([Image 6.19](#)).

Image 6.19

Testing of Ventilator Splitter



Source: Engineering Service Division, MOH

WATER AND SANITATION ENGINEERING SECTOR

RURAL ENVIRONMENTAL SANITATION PROGRAM (RESP)

The implementation of RESP or *Program Bekalan Air dan Kebersihan Alam Sekeliling* (BAKAS) is based on five-year Malaysian Plans with an annual allocation of RM9.25 million in 2020. The basic amenities provided to the rural areas involve water supply systems such as gravity feed systems, sanitary wells with/without home connections, rainwater harvesting systems and connections to the public water supply systems (if available). As for basic sanitation amenities, sanitary latrines, solid waste management systems and sullage disposal management systems are provided ([Image 6.20](#)).

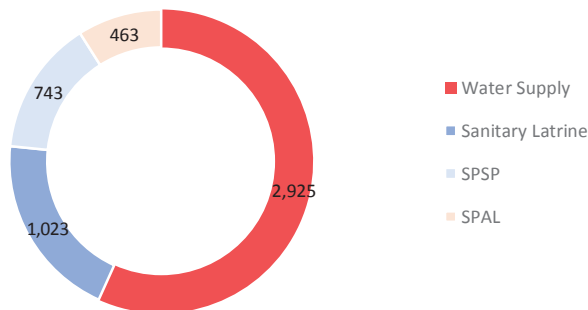
Image 6.20
Water Supply Through Gravity Feed System



Source: Engineering Service Division, MOH

In 2020, a total of 955 water supply systems were built where clean water is supplied to 2,925 households. As for sanitation facilities, a total of 1,023 households were provided with sanitary latrines, 743 households with solid waste management systems (SPSP) and 463 households with sullage disposal management systems (SPAL) (Figure 6.13).

Figure 6.13
BAKAS Program Coverage by Number of Houses for the Year 2020



Source: Engineering Services Division, MOH

NATIONAL DRINKING WATER QUALITY SURVEILLANCE PROGRAM (NDWQS)

The main objective of NDWQSP is to improve public health standards by ensuring the safety and acceptance of drinking water provided to consumers, thus reducing the incidence of water-borne diseases or other effects associated with contamination to public water supplies through effective surveillance activities. Relevant governmental agencies and water supply purveyors will be notified immediately if the quality of drinking water is declining, to allow precautionary or recovery measures to be taken before any epidemic or poisoning can occur.

This involves taking and analyzing water samples of more than 469 water treatment plants and 563 water supply networks nationwide. A total of 190,228 water samples were taken for testing which included physical, microbiological, chemical, heavy metals and pesticide parameters in 2020 (Image 6.21). In addition, KMAM has implemented Quality Assurance Program (QAP) throughout the country since 1993 to increase the effectiveness of this program.

Image 6.21
Water Sampling Activities



Source: Engineering Services Division, MOH

SANITATION MONITORING OF TOURISM CENTRE

Sanitation monitoring at tourist centers is based on four (4) scopes of sanitation facilities provided by the operators of the tourism center, namely solid waste management facilities, water drainage, sewage management and bathroom/toilet cleanliness. Grading is given to the facility based on the conditions and requirements as set by the MOH. In 2020, monitoring has been successfully implemented on 196 tourist centers nationwide. There has been a decrease in the monitoring of the number of tourist centers compared to the previous year due to the closure of tourist centers because of the COVID-19 pandemic and maintenance work.

ENVIRONMENT HEALTH RISK SECTOR

NATIONAL ENVIRONMENTAL HEALTH ACTION PLAN (NEHAP)

Engineering Services Division (ESD) as the Secretariat for the National Environmental Health Action Plan (NEHAP) to monitor NEHAP Action Plans by eleven (11) Thematic Working Group (TWG) as the strategies on how to improve national environmental health issues and problems. In 2020, NEHAP Malaysia Steering Committee meeting No.1/2020 chaired by the Director-General of Health Malaysia was held on 10 December 2020. While the NEHAP Malaysia Technical Committee Meeting was chaired by the Director of ESD, MOH was held in March and August. NEHAP Malaysia deliverables in 2020 are as shown in [Figure 6.14](#).

Figure 6.14
NEHAP Malaysia Deliverables in 2020

Garis Panduan Pengurusan Pembuangan Sisa Pepejal Tidak Sempurna Di Negeri-Negeri Yang Tidak Menerima Akta Pengurusan Sisa Pepejal Dan Pembersihan Awam (Akta 672) by TWG 3: Solid Waste
A Quick Reference Databases of Toxic Chemicals by Environmental Health Expert Advisory Committee - Pasir Gudang.
Kompilasi Pelan Tindakan TWG NEHAP Malaysia 2016-2020 by NEHAP Secretariat.

Source: Engineering Services Division, MOH

NEHAP Malaysia 2020 Conference was held on 24 September 2020 with a themed “Water and Health: Collaborative Efforts on Health and the Environment” officiated by the DG of Health. Four (4) oral presentations by Akademi Sains Malaysia, Pengurusan Air Selangor Sdn. Bhd., ALS Technichem (M) Sdn. Bhd. and Universiti Sains Malaysia were also presented ([Image 6.22](#)).

Image 6.22
NEHAP Conference 2020



Source: Engineering Services Division, MOH

ENVIRONMENTAL HEALTH PROTECTION UNIT (PEKA)

Throughout 2020, PEKA activities focused on developing of EHRI System applications, Train of Trainers (TOT) and implementation of EHRI Assessment for Cameron Highlands Basin and Semenyih River Basin ([Figure 6.15](#)).

Figure 6.15
Status of Development of EHRI Systems in 2020

Eight (8) series of Technical Meeting & Discussion and Internal Test on Modules 1 & 2 were conducted for Modules 1 & 2 - 100% completed

Six (6) series of Technical Meetings & Discussions has been conducted in developing Modules 3 – 85% completed



Source: Engineering Services Division, MOH

Two (2) Train of Trainers (TOT) Briefing sessions were held to provide understanding on the method of using EHRI System Module 1 & 2 with the selected Health State Department (JKN) in July. Cameron Highlands Basin and the Semenyih River Basin EHRI assessment reports have been completed for related Health State (JKN) further action. Several Working and Technical Committee Meetings were held based on Cooperation Note Between ESD & MYSA ([Image 6.23](#)).

Image 6.23
Working & Technical Committee Meeting



Source: Engineering Services Division, MOH

23 EIA Reports were received by PEKA for technical reviews to the requirements of the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015 and submitted to the Department of Environment (DOE) for approval.

AIR QUALITY UNIT

Indoor Air Quality (IAQ) surveillance and monitoring activities at 18 Ministry of Health Malaysia (MOH) premises were conducted since 2014. This includes the MOH headquarters building and State Health Department (JKN) offices. IAQ activities ensure that IAQ parameters in 18 selected MOH premises comply with the Industry Code of Practice in Indoor Air Quality (IAQ), 2010 under Department of Occupational Safety and Health (DOSH), Malaysia. In 2020, these activities have been completed at 3 MOH Headquarters (IPKKM) blocks and 9 State Health Departments (JKN) (Image 6.24).

Image 6.24
IAQ Monitoring and Surveillance Activities in MOH Premises



Source: Engineering Services Division, MOH

In addition, COVID-19 related product technical evaluation and advisory activities for reuse using Ultraviolet Germicidal Irradiation (UVGI) and Hydrogen Peroxide Vapor (HPV) have been conducted throughout 2020.

WASTE AND HYGIENE SECTOR

Through the Resolution WHA72.7 on “Water, sanitation and hygiene in health care facilities”, The Joint Monitoring Program of the WHO/UNICEF for Water Supply, Sanitation and Hygiene has categorised WASH indicators for healthcare facilities into five (5) provisions namely water, sanitation, hygiene, healthcare waste management and environment cleansing and in line with the Sustainable Development Goals (SDG 3 on health and SDG 6 on safe water and sanitation).

Waste and Hygiene (SH) Sector activities focused on strengthening monitoring and supervising WASH in MOH healthcare facilities through the formulation of a National Strategic Plan for WASH developing a national roadmap and target setting, improving infrastructure and human resources for a sustainable WASH program. WASH program shall be an important activity in the RMK-12.

Borang Maklumat Asas Fasilitas Penjagaan Kesihatan di Bawah Kementerian Kesihatan Malaysia has been formulated, aimed at obtaining basic WASH information at trial run locations in Pahang and Johor based on the criteria and sub-criteria as per [Table 6.6](#) before upscaling and implementation throughout the nation. The results of the analysis are generated based on the service ladder for each WASH provision in healthcare facilities in the context of the SDGs. Due to the COVID-19, the planned activities had to be postponed or the activity scaled down. The basic information acquisition at healthcare facilities activities will be rescheduled as early as 2021.

Table 6.6

WASH Basic Information Acquisition Criteria and Sub-Criteria In Healthcare Facilities Under MOH

Criteria	Sub-Criteria
Location	i) Urban; ii) Rural; iii) Remote Area
Type of facilities	i) State Hospital; ii) Major Specialist Hospital; iii) Minor Specialist Hospital; iii) Non-Specialist Hospital; iv) Hospitals and Special Institutions; v) Health Clinics (HC) (includes HC Type 1-7, Maternal and Child Health Clinics, Community Clinics and Rural Clinics); vi) Stand Alone Dental Clinics
Privatization Status	i) Hospital Support Services (HSS) – Concession; ii) HSS – Contract; iii) HSS – Private Finance Initiative (PFI); iv) Clinic Support Services (CSS) – Contract and v) Non CSS

Source: Engineering Service Division, MOH

In addition, this Sector is also involved in inter-and intra-agency collaboration throughout 2020 as shown in [Table 6.7](#).

Table 6.7

Involvement Of The SH Sector With Inter- And Intra-Agency Collaboration

No.	Project	Deliverables
1.	SOP for COVID-19 Disease Prevention and Control	SOP was developed as a guide in implementing support services at Quarantine Stations.
2.	Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT)	Submission of questionnaire on COVID-19 waste management.
3.	The National Sustainable Consumption and Production Blueprint 2020-2030 (SCP) and Development of GGP guideline.	Provide input to the Economic Planning Unit (UPE), Prime Minister's Department on holistic waste management.
4.	AIPA-ERIA (Economic Research Institute for ASEAN and East Asia)	Online Joint Dialogue held on 16 July 2020, on waste management in the context of the COVID-19.
5.	Malaysian Standards on Good Healthcare Waste Management	Working Group Meetings chaired by Head of SH Sector

Source: Engineering Service Division, MOH

PLANNING BRANCH

TECHNICAL AND CORPORATE SECTOR

Technical and Engineering Technology Unit provides needed technical advice and support related to engineering technologies and project monitoring under the Public-Private Partnership (PPP)/ Private Finance Initiative (PFI) projects. Among the current project is the Proposed Development of Cyberjaya Hospital 288 Beds (Design & Build). Monitoring of physical construction work is ongoing for the Cyberjaya Hospital, due to be completed by 15 June 2021 ([Image 6.25](#)).

Image 6.25

Main Block Cyberjaya Hospital (9 storeys) and CT Scanner Machine

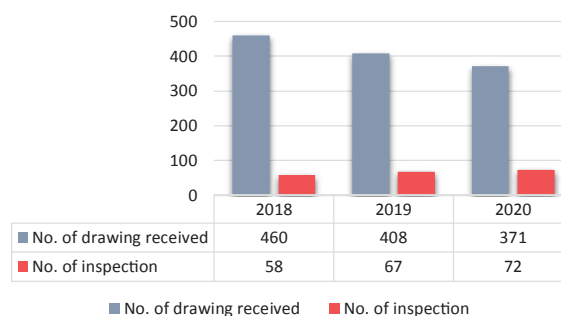


Source: Engineering Services Division, MOH

Private Healthcare Facilities and Services Unit provides technical engineering expertise to CKAPS in checking drawings and conduct inspections on private healthcare facilities for their compliance to Private Healthcare Facilities Services Act 1998 (Act 586) and its regulations. Due to the pandemic COVID-19, consequently, 2020 has seen a decrease in application numbers. A total of 371 technical drawings were received for new and renewal license applications as compared to 408 technical drawings in 2019. In addition, 72 verification inspections were undertaken after the completion of construction and renovation of private healthcare facilities ([Figure 6.16](#)).

Figure 6.16

Received Technical Drawings and Inspection 2018 to 2020



Source: Engineering Services Division, MOH

ENGINEERING DEVELOPMENT & ASSET MANAGEMENT SECTOR

Unit Pengurusan Aset Tak Alih (PATA) role is to implement total life cycle asset management for Ministry of Health in accordance to the *Pekeliling Am Bil.2 Tahun 2012: Tatacara Pengurusan Aset Tak Alih Kerajaan*.

The main activities of this unit are the premise and asset registration (DPA), disposal and loss/write-off assets. DPA is an identity registration for existing and new premises. For a new premise, DPA registration is done after the Completion Practical Certificate (CPC) of a building is approved. [Table 6.8](#) shows asset management activities in 2020.

Table 6.8
Activities of PATA in 2020

Items	Activities	Number of Activities
1.	Registration of Daftar Premis Aset (DPA)	6 DPA
2.	Condition Assessment Reporting	141 Reports
3.	Disposal Reporting	134 Reports
4.	Loss / Write-Off Reporting	12 Reports

Source: Engineering Service Division, MOH

MOH has seen many benefits in its asset management strategy in the form of ensuring compliance to regulations and improved budgeting decisions for future procurements.

WAY FORWARD

The prominent roles and responsibilities of engineers in the Engineering Services Division synergized with the medical teams, scientists and expertise eventually catalysing the vision of the Ministry of Health, to provide healthcare services to the patients and protecting the public in all involved. There is a need for continuously long-term apprenticeships for the personnel to improve and upgrade their knowledge, skills and competencies under global standards and practices. Efficient and effective delivery and processing system for information and services are obligatory for the Division to fully optimised available infrastructure, equipment and technology in its daily work processes.

As a major provider of Engineering and Technical Services to the Medical and Health Programs of the Ministry of Health, the Engineering Service Division (ESD) will continue to plan, implement, monitor and coordinate preventive healthcare engineering programs through the application of public health engineering principles and methods. ESD is committed to provide engineering support for the effective and proper functioning of buildings, equipment and systems, ensure reliability and efficiency of engineering installations and ensure all healthcare facilities are well maintained at appropriate standards.

In line with the COVID-19 pandemic, Research & Development Unit was formed within ESD and stationed at the National Health Institute (NIH). On the issue of aging MOH hospitals (>50years), Special Steering and Technical Committee were formed to address the issue with the special fund was initiated for condition assessment 21 hospitals in 2021 and 26 hospitals planned in 2022. This exercise will determine the master plan to refurbish or replace aging hospitals, ensuring the safe and continuous operation of its facilities.

MEDICAL RADIATION SURVEILLANCE DIVISION (MRSD)

The Medical Radiation Surveillance Division (MRSD) is mandated by the Director-General of Health for regulating the use of ionising radiation in medicine under the Atomic Energy Licensing Act 1984 (Act 304). The main role of MRSD involves a wide range of regulatory activities including licensing, monitoring, enforcement and development of legal and non-legal documents. MRSD also acts as the Secretariat for Radiological Advisory Committee (RAC). The RAC meeting is scheduled and chaired by the Director-General of Health. In addition, MRSD plays a role in providing medical physics services, particularly to the hospitals and clinics under the Ministry of Health (MOH). MRSD is also involved in managing the Radiation Protection Program (RPP), Quality Assurance Program (QAP) and Radiation Quality Audit Management in radiology, radiotherapy and nuclear medicine at the national level. Besides, MRSD also addresses public health issues resulted from the use of non-ionising radiation in telecommunication systems, high voltage cables, electrical substations and home appliances.

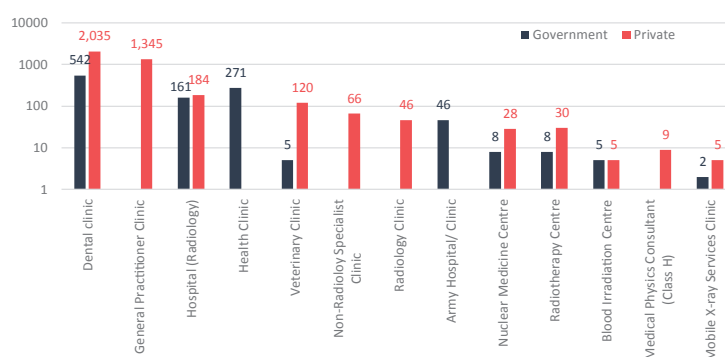
ACTIVITIES AND ACHIEVEMENTS

LICENSING UNDER THE ATOMIC ENERGY LICENSING ACT (ACT 304)

A total of 917 licenses were issued to private medical institutions in 2020. These include 290 new licenses and 627 renewals of the license. Overall, 4,921 public and private medical institutions have irradiating apparatus as shown in [Figure 6.17](#). It consists of 1,048 public hospitals/clinics and 3,873 private medical institutions respectively.

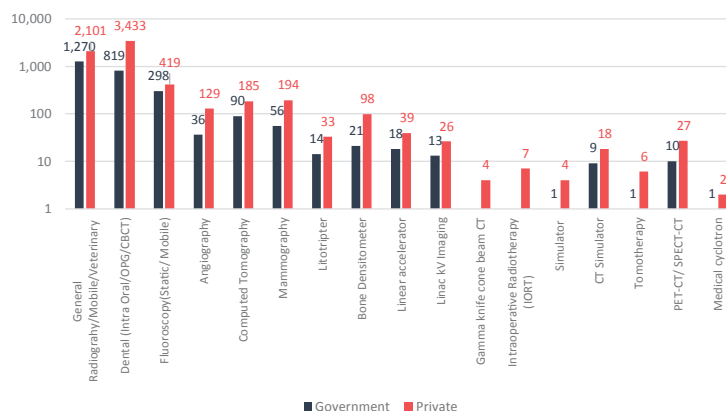
Meanwhile, there were a total of 9,382 registered or licensed irradiating apparatus in both government and private sectors. The number of irradiating apparatus by type of modality is shown in [Figure 6.18](#). Besides irradiating apparatus, a total of 817 radioactive sources consist of 647 sealed sources and 170 unsealed sources were registered or licensed in public and private medical institutions as shown in [Table 6.9](#).

Figure 6.17
Number of Licensed/Registered Medical Institutions with Medical Radiation Sources



Source: Medical Radiation Surveillance Division, MOH

Figure 6.18
The Number of Registered/Licensed Irradiating Apparatus



Source: Medical Radiation Surveillance Division, MOH

Table 6.9
The Number of Registered/Licensed Radioactive Sources

Type of radioactive source	Services	No. of sources		Total	
		Government	Private		
Sealed sources	Radiotherapy	25	59	84	647
	Nuclear Medicine	221	330	551	
	Blood irradiator	7	5	12	
Unsealed sources	Nuclear Medicine	42	128	170	170
TOTAL		295	522	817	

Source: Medical Radiation Surveillance Division, MOH

MONITORING & ENFORCEMENT ACTIVITIES UNDER THE ACT 304

A total of 1,187 medical institutions were inspected including 263 in government clinics/hospitals while the other 907 in private institution in the year 2020. It was found that 91.74 per cent of the medical institutions complied with the regulatory requirements while the remaining 8.26 per cent did not comply at the time of inspection. The results are shown in [Table 6.10](#). Follow-up actions were taken to ensure all medical institutions adhered to the regulatory requirements.

Table 6.10
The Number Of Inspection Performed In Year 2020

Category	No. of inspection	Status of Compliances	
		Comply	Not Comply
GOVERNMENT: Compliance with Registration Requirements	280	263	17
PRIVATE: Compliances with the licensing requirement	907	826	81
Total	1,187	1,089	98
Compliance Percentage (%)		91.74	8.26

Source: Medical Radiation Surveillance Division, MOH

In addition to the inspection works, a total of 12 medical physics consultancy companies that performed quality control tests for private clinics/hospitals were audited. It is found that all the tests performed accordingly to the test protocols as approved. In 2020, no legal action was taken. However, there was one (1) raid action that was carried out in 2019 on a Private Dental Clinic for having an irradiation apparatus without a valid license under Act 304 and the case is still under investigation for prosecution action.

MEDICAL PHYSICS SERVICES

In 2020, a total of 398 technical advice on ionising radiation (IR) and non-ionising radiation (NIR) activities were provided to the MOH's hospitals and clinics. The details are listed in [Table 6.11](#).

Table 6.11
Technical Advice on Ionising Radiation (IR) and Non-Ionising Radiation (NIR)

Type of Activities	Total
Preparation and evaluation of IR modality specifications and related facilities	84
Site visits, technical advice & testing & commissioning (T&C) - • T&C visit, TSA • Project progress/site visit • Shielding verification on the thickness	119
Inspection to government facilities to confirm QC certificate of irradiation apparatus	151
Verification on irradiating apparatus QC report	17
Verification of the level of security control of the use of radioactive materials under Category 1	4
Technical advice on non-ionising radiation (NIR) • Provision of MRI equipment specifications • Assessment of MRI equipment specifications • MRI security plan review • Testing, T&C sessions, MRI room reviews and telecommunications • Briefing / NIR dialogue	23
TOTAL	398

Source: Medical Radiation Surveillance Division, MOH

During the year 2020, several documents and studies related to radiation safety have been prepared/ conducted as follows:

- i. *Garis Panduan Pemantauan Perkhidmatan Saringan Mamografi*
- ii. *Laporan Awal Kajian Scattered Radiation Behind Chest-Stand*
- iii. *Draf Buku Log Pengendali Baru Radas Mamografi*
- iv. *Draf Buku Log Pengendali Baru Radas CT-Scan*
- v. *Draf Garis Panduan Penyediaan Site Security Plan*
- vi. *Draf Pelan Kecemasan Radiologikal KKM-CPRC*
- vii. *Draf Manual Peperiksaan Persijilan Pegawai Perlindungan Sinaran (Perubatan)*
- viii. *Draf Kriteria Pusat Latihan Persijilan Pegawai Perlindungan Sinaran (Perubatan)*

INTER-AGENCY TECHNICAL COOPERATION

1. On 2 to 6 December 2019, the MOH received a visit from the Director-General of Afghanistan Atomic Energy High Commission and Head of Regulatory Body through the International Atomic Energy Agency (IAEA) Scientific Visit: Governmental and Regulatory Infrastructure for Radiation Safety.
2. MRSD has recognised 150 continuous medical education (CME) training sessions under the Atomic Energy Licensing Act 1984).
3. A total of 140 hours of talks were given by officers at MRSD to personnel involved in medical radiation activities to provide radiation safety announcements.

WAY FORWARD

Radiation safety in medicine is becoming increasingly important since it will be one of the contributing factors to enhance quality use in irradiating apparatus and radioactive sources. MRSD will provide the expertise, technical capability and information technology related to ionising radiation and non-ionising radiation for better radiation protection to the patients, workers and the public.

The establishment of MRSD is to strengthen and expand the existing medical radiation safety activities in complying with all the standards and current regulatory requirements related to safety, security and safeguard for the needs of MOH services. MRSD will continue to provide effective and efficient control in the use of ionising radiation in medical to ensure the safety and health of patients, workers and members of the public through transformation, technology, innovation and quality approach.

In addition, existing activities and programs will be expanded in line with technological developments involving the use of radiation modalities to meet complex medical needs while complying with current standards and regulations. These include efforts to expand the scope of activities related to the security of radioactive sources and public engagement to agree with the vision and mission of the Ministry of Health Malaysia.

NATIONAL INSTITUTES OF HEALTH (NIH)

Despite the challenges associated with the COVID-19 pandemic throughout 2020, NIH staff continue to conduct effective and high-impact health-related research, training and consultancy to improve the quality of life of the nation.

A major contribution of NIH during this pandemic is the collaboration between Institute for Medical Research (IMR) and various agencies that developed a susceptible-exposed-infectious-recovered (SEIR) projection model to assist policymakers in controlling COVID-19 transmission. In addition, Institute for Behavioural Research (IHBR) has conducted research related to community understanding and compliance to physical distancing to contain COVID-19.

In the year 2020, a total of 389 scientific articles were published in indexed journals (Figure 6.19). A total of 364 publications were disseminated in various forms. Due to the new norm, an online platform was mostly utilised for training. A total of 278 technical training sessions were conducted in 2020.

Figure 6.19
NIH Annual Achievements 2020



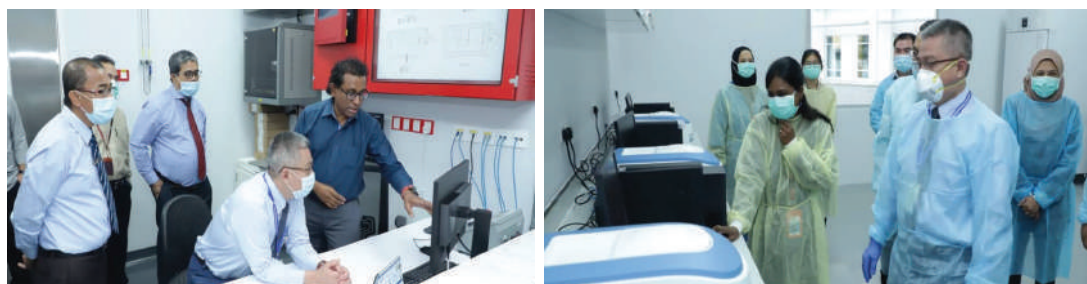
Source: NIH, MOH

INSTITUTE FOR MEDICAL RESEARCH (IMR)

IMR COVID-19 LABORATORY

The Institute for Medical Research (IMR) was on high alert from early January 2020 following the COVID-19 outbreak in Wuhan, China. After scientists from China shared the full genomic sequences of the coronavirus on 11 January 2020, IMR successfully developed the reverse transcriptase-polymerase chain reaction (RT-PCR) diagnostic protocol, a week before it was developed by the World Health Organization (WHO). Subsequently, optimisation of real-time RT-PCR was carried out and the testing reagents were provided to the National Public Health Laboratory (MKAK), Sungai Buloh, to commence diagnostic testing for COVID-19 from 24 January 2020. On 25 January 2020, the first laboratory-confirmed case of COVID-19 was reported in Malaysia. The COVID-19 laboratory in the IMR facility at Kuala Lumpur was later relocated to IMR Setia Alam, where it officially commenced operations with enhanced diagnostic capacity on 5 May 2020.

Image 6.26
The Minister Of Health, Deputy Ministers and The Deputy Director General (Research & Technical Support) Visiting IMR and The COVID-19 Laboratory



Source: IMR

Image 6.27

Preparation Of Buffers, Sample Loading and Nucleic Acid Extraction Using The AMTK-High-Throughput Liquid Handler at Biological Safety Level 3 (BSL3) Laboratory



Source: IMR

COVID-19 VACCINE DEVELOPMENT

IMR, in collaboration with the Malaysian Vaccines and Pharmaceutical Sdn. Bhd. (MVP) and the Tropical Infectious Diseases Research and Education Centre (TIDREC) at the University of Malaya, tested existing potential vaccines against the SARS-CoV-2 virus from March 2020. Two candidate vaccines used in the research were the Infectious Bronchitis Virus (IBV) and avian coronavirus vaccines. This collaborative work is based on research previously conducted by scientists from other countries who reported that the IBV in poultry has a high genetic similarity to the human coronavirus.

Image 6.28

COVID-19 Vaccine Development at Biological Safety Level 3 (BSL3) Laboratory



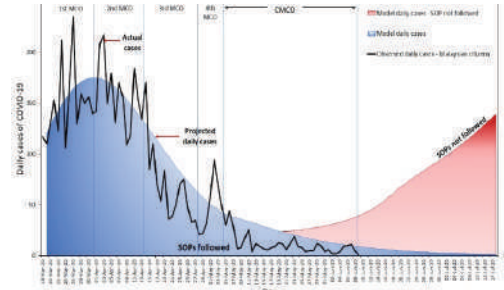
Source: IMR

STATISTICAL MODEL TO ASSIST POLICY DECISIONS FOR COVID-19 CONTROL STRATEGIES

The National Institutes of Health (NIH) modeling team from the Special Resource Centre (SRC), IMR, is led by Dr. Balvinder Singh Gill, the Head of SRC and comprised officers from the Crisis Preparedness and Response Centre (CPRC), Ministry of Health (MOH), Institute for Clinical Research (ICR), Biostatistics and Data Repository Centre, NIH, public universities (University of Malaya, University Malaysia Sarawak) and private universities (Heriot-Watt University Malaysia and International Medical University). The team was established in March 2020 to develop forecast models for the COVID-19 pandemic in Malaysia to determine the effectiveness of epidemic control interventions, especially compliance to Standard Operating Procedures and the enforcement of the Movement Control Order. The models were used to forecast daily, active and cumulative COVID-19 cases in Malaysia and were presented weekly at the National COVID-19 Operational Room, CPRC MOH. The statistical modeling was impactful in assisting policy decisions for COVID-19 control strategies.

Image 6.29

Discussion On The Conceptualisation And Exploration Of Different Forecasting Models



Source: IMR

MALAYSIAN STEM CELL REGISTRY (MSCR) MEMORANDUM OF UNDERSTANDING (MoU) BETWEEN IMR AND THE NATIONAL CANCER COUNCIL OF MALAYSIA (MAKNA)

The Malaysian Stem Cell Registry (MSCR) was founded in the year 2000 as a joint project by the Ministry of Health Malaysia, National Cancer Council of Malaysia (MAKNA) and IMR. The MSCR is a directory of all registered stem cell donors to facilitate the search for compatible stem cell donors for patients with haematological disorders. There are currently 33,800 registered stem cell donors. A total of 16 compatible blood stem cell transplantations have been successfully carried out among leukemia patients in Malaysia. On 10 February 2020, a signing ceremony for a Memorandum of Understanding (MoU) between Dr. Haji Tahir bin Aris (IMR Director) and Puan Farahida binti Mohd Farid (General Manager of MAKNA) was held at IMR, Setia Alam. The ceremony was attended by Mr. Vemanna Appanah (Deputy General Manager of MAKNA), Dr. Feisul Idzwan bin Mustapha (Deputy Director for Non-Communicable Diseases), Dr. Masita binti Arip (Head of MSCR) and officers of the Allergy and Immunology Research Centre. This MoU was an extension to the existing MoU which was signed in 1999 and will further enhance collaboration to improve the MSCR project through the increasing numbers of registered voluntary stem cell donors.

Image 6.30

Memorandum of Understanding Between IMR and MAKNA



Source: IMR

RM3.1 MILLION FUND FROM PERMODALAN NASIONAL BERHAD

The Permodalan Nasional Berhad (PNB) contributed RM3.1 million fund to IMR on 13 February 2020, as part of their efforts in supporting eligible government agencies to finance healthcare equipment during the COVID-19 pandemic. The PNB corporate social responsibility (CSR) team has been authorised to manage the zakat fund since 2016 to help eligible government agencies in need. The fund has been used to finance medical facilities for the purchase of dialysis machines and endoscopy as well as radiology equipment to support the Ministry of Health in the management of chronic diseases.

The initial proposal for the CSR was put up by Dr. Masita binti Arip and the Transplantation Immunology Unit team to improve the laboratory facilities for Malaysia's organ transplant immunological testing. The proposal was then expanded to include other units in Allergy and Immunology Research Centre (AIRC) as well as the virology unit within Infectious Diseases Research Centre (IDRC). All the efforts paid off when the proposal was supported by the Ministry of Health Malaysia and accepted by PNB. The presentation of the CSR Program Offer Letter with the amount of fund RM3.1 million was delivered by En. Aziz Anuar to Dr. Hj. Tahir Aris on 13 February 2020. The funding was committed for the purchase of 40 medical laboratory equipment including the fluorescent microscope, water purification system, thermal cycler, centrifuge concentrator, automated cell separator and biosafety cabinet to improve the performance and quality of IMR's laboratory services.

This memorable event was officiated by Dr. Hj Tahir bin Aris (IMR Director) and attended by IMR officers, including Dr. Norazah binti Ahmad (Head of Infectious Diseases Research Centre), Dr. Masita binti Arip (Head of Allergy and Immunology Research Centre), Dr. Norhazlin binti Mustafa (Head of Transplantation Immunology Unit), Dr. Adiratna binti Mat Ripen (Head of Primary Immunodeficiency Unit) and Dr. Rozainanee binti Mat Zain (Consultant Pathologist, Virology Unit). The representatives from Permodalan Nasional Berhad (PNB) were led by Encik Aziz Anuar (Senior Vice President of PNB), who gave a brief introduction of the corporate social responsibility (CSR) program and introduced all of his team members: Encik Zamani Abdullah, Encik Mohamad Rizal, Encik Muhammad Rashidan and Encik Faizal. IMR is thankful and appreciative of this gracious support. On 15 May 2020, Dr. Haji Tahir bin Aris (IMR Director) presented a certificate of appreciation to Encik Mohd Razaleigh Zainal (Head of Public Affairs at PNB) at IMR Kuala Lumpur.

Image 6.31

**The Offer Letter Presented By En Aziz Anuar, The Senior Vice President Of PNB,
To The IMR Director**



Source: IMR

Image 6.32

IMR and PNB representatives at the laboratory



Source: IMR

MOLECULAR EPIDEMIOLOGY OF ASYMPTOMATIC SUBMICROSCOPIC MALARIA

This research project is led by the Parasitology Unit, IMR, in collaboration with the Vector-Borne Diseases Control Sector, MOH and Health Departments of Sabah, Johor, Perak and Kelantan. The aim is to determine malaria infection among individuals with no apparent symptoms to prevent them from becoming sources of future malaria outbreaks. The lead investigator of the project is Miss Adela Ida anak Jiram. The project is ongoing from 2019 until 2022.

Image 6.33

Collection Of Research Samples In The Field Include Venous Blood Withdrawal, Blood Smears On Glass Slides And Dried Blood Spots



Source: IMR

In the field, the preparation of materials for sample collection was carried out together. Research samples were collected at public gathering sites or via mobile teams moving from house to house.

Image 6.34

Dr. Haji Tahir bin Aris (IMR Director) was also involved in the project



Source: IMR

SEAMEO TROPMED NETWORK MALAYSIA PROGRAM

The Diploma in Medical Microbiology (DMM) 2020 was conducted from 13 January 2020 to 21 June 2020 at the Seameo Tropmed Network School, IMR, National Institutes of Health (NIH), Setia Alam, Selangor. The DMM course program contains several modules, namely Epidemiology and Biostatistics, Bacteriology, Virology, Immunology, Mycology and Molecular Biology. The course lecturers and laboratory demonstrators are mostly from IMR and some invited lecturers are from MOH and local universities. There were seven (7) full-time participants; one (1) each from Myanmar and Vietnam and five (5) from Malaysia. In early March 2020, following the Movement Control Order (MCO) that was implemented in Malaysia during the COVID-19 outbreak, classes continued with the online e-learning method (for lectures and demonstrations). The hands-on practical sessions were postponed and conducted in June 2020 after the MCO was lifted. The DMM 2020 final examination was conducted from 10 to 18 June 2020. The external examiners for the examination were Prof Dr. Ngeow Yun Foong from Medical Faculty, University Tunku Abd Rahman and Assoc. Prof. Dr. Nazlina Ibrahim from National University of Malaysia (UKM). The examination concluded with seven (7) students passing the examination and was awarded the Diploma in Medical Microbiology. The 42nd convocation ceremony was held on 18 June 2020. The ceremony was graced by Dr. Haji Tahir bin Aris, Director of SEAMEO TROPMED Network Malaysia and the Director of the Institute for Medical Research (IMR). The Diploma in Applied Parasitology and Entomology (DAP&E) 2020 course which was planned for July 2020 was postponed due to the MCO.

Image 6.35

SEAMEO TROPMED Network Malaysia Program



Source: IMR

INTERNATIONAL COLLABORATION IN INTEGRATED VECTOR CONTROL MANAGEMENT (IVM) OPERATIONAL RESEARCH FOR DENGUE CONTROL – THE IDEM PROJECT

The Medical Entomology Unit has signed a collaboration agreement with several agencies to conduct operational research for dengue control in Kuala Lumpur and Putrajaya as part of a Public-Private Partnership Initiative. The agencies involved are IMR, London School of Hygiene & Tropical Medicine (LSHTM), Hospices of Lyon (HCL), Innovative Vector Control Consortium (IVCC), Bayer France (Bayer SAS) and In2Care, The Netherlands. The project is entitled “Effectiveness of novel tools for integrated vector control management on the incidence of dengue in Malaysia: A Cluster Randomised Controlled Trial” or also known as “iDEM Project” led by Dr. Nurulhusna Ab Hamid. The iDEM project will be conducted for three (3) years starting from November 2019 until November 2022. The main objective of the project is to evaluate the impact of the proposed IVM using a combination of two (2) novel vector control tools - Outdoor Residual Spray (ORS) and Auto Dissemination Device (ADD). This is to reduce the incidence of dengue cases in selected 140 high-rise residential localities in the Federal Territories of Kuala Lumpur and Putrajaya. Until December 2020, two (2) cycles of ORS activities were completed and a total of 7,005 ADD were deployed in all intervention localities.

Image 6.36

Community Engagement and iDEM Research Activities



Source: IMR

INSTITUTE FOR PUBLIC HEALTH (IPH)

The National Health and Morbidity Survey (NHMS) is a national health survey in Malaysia since 1986. NHMS was conducted every four (4) years since 2011. For the year 2020, communicable diseases were selected as the primary focus of the survey.

Image 6.37

The National Health and Morbidity Survey (NHMS) – Communicable Diseases



Source: IPH

The NHMS 2020 aims to obtain information on communicable diseases in Malaysia. The modules included in this survey are listed below:

- a) Antibody COVID -19 (Seroprevalence study)
- b) Hepatitis B and C (Seroprevalence study)
- c) Personal Risk Factor (Self-Administered Question)
- d) HIV Stigma (Self-Administered Question)
- e) Dengue Prevention (Self-Administered Question)
- f) Diseases related to pets at home (Self-Administered Question)
- g) Tuberculosis (Computer-Assisted Telephone Interview)
- h) Antibiotic use (Computer-Assisted Telephone Interview)
- i) Malaria awareness (Computer-Assisted Telephone Interview)

For the first time, compared to past years, the NHMS 2020 was conducted using three (3) new approaches to minimise physical, face-to-face interviews:

- a) Blood sampling at health facilities in selected areas;
- b) Self-administrated questionnaires and postage to NHMS Operation Room at IPH and
- c) Administration of questionnaires through Computer-Assisted Telephone Interview (CATI).

All blood tests for COVID-19 were sent to IMR, while blood tests for hepatitis B and C were carried out by accredited private laboratories.

Image 6.38

Main Approaches Used in Data Collection of NHMS 2020: A) Blood Sampling and B) CATI



Source: IPH

This survey is a collective effort of three (3) research institutes which are IPH, Institute for Health Behavioural Research (IHBR) and IMR, under the supervision of Dr. Noor Ani binti Ahmad, Director of IPH and Advisor for NHMS 2020. The principal investigator of the survey, Mr. Mohd Hatta bin Abdul Muttalip, was assisted by Dr. Noor Aliza binti Lodz and Dr. Chong Zhou Lin from IPH and Mr. Albeny Josling Panting from IHBR.

NHMS 2020 was conducted in collaboration with the State Health Departments, with the involvement of nurses and assistant medical officers from all over Malaysia. A total of 56 Pekerja Sambilan Harian (PSH) were recruited as data collectors during the survey period. More than 20 officers from IPH, IHBR and Sarawak State Health Department were appointed as field supervisors to lead and manage data collection in the field, starting from 2 August till 7 October 2020. Following field data collection, CATI was commenced and completed by 23 October 2020. A total of 2,260 houses in 113 enumeration blocks (EBs) were randomly selected throughout Malaysia to participate in this survey.

Image 6.39
Data collection of NHMS 2020 in the field



Source: IPH

Overall, out of 2,104 eligible houses, 1,876 (89.16%) houses successfully participated in this survey. A total of 5,957 (87.37%) from the 6,818 eligible respondents successfully participated in this study during phase I. For the Cognitive, Affective, Behavioural (CAB) module, the NHMS 2020 recorded a response of 4,588 (82.64%) of the total eligible respondents. For the CATI module, a total of 3,194 (57.40%) respondents were successfully interviewed.

Findings on antibody SARS-CoV-2 seroprevalence provide a more accurate estimate of the burden of COVID-19 infection in Malaysia, mostly post COVID-19 second wave. Moreover, the respondents of this survey were also informed of hepatitis B and C infections. This information is essential to identify the level of hepatitis infection and at the same time to ensure that those who are asymptomatic seek early treatment for the prevention of more chronic disease. Other information such as HIV stigma, knowledge related to HIV infection, awareness related to antibiotic resistance, malaria, and prevention of dengue and Rabies provide important evidence about Malaysians' cognitive, affective and attitude for the prevention and control of infectious diseases in this country. The findings of this survey are of great importance to the Ministry of Health Malaysia to formulate appropriate evidence-based strategies and initiatives for the control and prevention of infectious diseases. The most recent status of NHMS 2020 is a presentation of the survey findings to the members of the NHMS 2020 Steering Committee Meeting chaired by the Director-General.

INSTITUTE FOR CLINICAL RESEARCH (ICR)

In 2020, Institute for Clinical Research (ICR) celebrates 21 years with a total of five (5) established centers (Center for Clinical Trial, Clinical Epidemiology, Center for Clinical Outcome Research, Center for Coordination of Clinical Research Network and 36 Clinical Research Centers all around Malaysia) and one new unit (DHRI). Institute for Clinical Research (ICR) has been expanding and growing throughout the years.

13TH NATIONAL CONFERENCE FOR CLINICAL RESEARCH (NCCR)

The 13th National Conference for Clinical Research was successfully organised by ICR from 24 to 26 August 2020 at the National Institutes of Health (NIH) Complex, Setia Alam, Selangor and for the first time in a virtual platform. In line with the global pandemic, the theme for this event was 'Conference of Very Importance Disease (COVID-19)' officiated by Malaysian Health Minister Y.B. Dato' Seri Dr. Adham bin Baba. A total of 24 local and six (6) foreign speakers from various disciplines shared their experiences and highlighted valuable research and best practices. The conference received an overwhelming response with 567 registered participants and 194 e-poster presentations. The Wu Lien-Teh's Young Investigators Award and Best Poster Awards were presented by Y.B. Health Minister. The Wu Lien-Teh's was awarded to Dr. Git Kim Ann with research title, Multi-centre Optimization and Validation of an Open Deep Learning Model For Covid-19 Detection on Chest Radiographs and Best Poster Award goes to Calvin Wong Ke Wen with research title, Effects of High Dose Vitamin C Supplementation on Severe COVID-19 Patients in The ICU: A Retrospective Analysis.

Image 6.40

Officiating of the 13th National Conference for Clinical Research by Y.B. Dato' Seri Dr. Adham bin Baba, Minister of Health Malaysia



Source: ICR

Image 6.41

The 13th National Conference for Clinical Research



Source: ICR

LAUNCHING OF E-BOOK: MEDICAL RESEARCH CONSULTATION

Medical research consultation has been one of the core services provided by ICR. On 9 December 2020, an e-book entitled 'Medical Research Consultation: Recommendation for Biostatisticians in Managing and Conducting Medical Research Consultation', written by Dr. Mohamad Adam bin Bujang, an expert in medical research consultations, was launched by Deputy Director General (Research and Technical Support), Dr. Hishamshah bin Mohd Ibrahim. The event was held in conjunction with the 3rd CRC Network meeting. This e-book highlights the importance of the role of a biostatistician in managing and conducting medical research consultations and is available for free at most e-book stores globally.

Image 6.42

e-book of Medical Research Consultation: Recommendation for Biostatisticians in Managing and Conducting Medical Research Consultation



Source: ICR

CRC NETWORK MEETING

CRC Network Meetings were held three (3) times in 2020. The first two (2) CRC Network Meetings were chaired by former ICR Director, Dato' Dr. Goh Pik Pin, whilst the third was chaired by the new Director, Dr. Kalaivasu a/l M. Peariasamy. The new ICR Director congratulated and thanked all CRC hospitals on their achievements and commitments in providing quality clinical research, research consultations and research training.

ESTABLISHMENT OF DIGITAL HEALTH RESEARCH INITIATIVES UNIT (DHRi)

ICR established a new unit, Digital Health Research Initiatives Unit (DHRi), in line with RMK-12 planning to lead research on the application of IR4.0 and Artificial Intelligence (AI), prioritising the niche areas of Precision Medicine, Digital Health and Clinical Trial Hubs. DHRi was established on 8 December 2020 with five (5) officers and will be expanding to achieve ICR's mission, vision and objectives.

VISIT OF MEDICAL EXPERT TEAM FROM THE PEOPLE'S REPUBLIC OF CHINA (PRC) TO MALAYSIA

An expert medical team from PRC visited Malaysia from 18 April to 2 May 2020 to share their clinical, laboratory and public health experiences in managing the COVID-19 pandemic. The team consisted of eight (8) individuals from various fields such as pulmonology, intensive care, psychiatry, infectious disease, data analysis, virology and traditional Chinese medicine (TCM). These experts had participated in the fight against COVID-19 in Hubei Province. Some of the activities during this visit include teleconference sessions with managing doctors in Ministry of Health hospitals and universities, dialogue sessions with researchers and visits to National Institutes of Health (NIH), Setia Alam and National Public Health Laboratory. Discussions focused on clinical trials, vaccine trials, biomedical research, Artificial Intelligence, mobile applications, health system and behavioural research between the expert team and NIH researchers.

Image 6.43

Visit of Medical Expert Team from the People's Republic of China to Malaysia



Source: ICR

CLINICAL UPDATES ON COVID-19

ICR took the initiative to host and organise weekly live webinars on COVID-19 with the Ministry of Health as co-host. The objective of these webinars is for experience-sharing and information dissemination in managing COVID-19 patients in Malaysia. The World Health Organization (WHO) COVID-19 education team has acknowledged the weekly webinar series and enlisted them at the WHO website. Speakers at the webinars were experienced clinicians and presented various topics related to COVID-19. The webinars were broadcasted on various social media websites every Thursday afternoon. Information from the webinars was also shared in other forms such as videos, slide presentations, publications of e-books and audio podcasts. The responses from clinicians, researchers and other related personnel were encouraging and supportive.

RESEARCH ON COVID-19

ICR collaborated with the CRC Network, clinicians, universities and other institutes to conduct impactful and quality COVID-19 research. These collaborations covered a wide range of research areas including epidemiology, clinical trials, modeling, biomedical and mental health aspects. One of the clinical trials involved WHO with research title, An International Randomised Trial of Additional Treatments for COVID-19 in Hospitalised Patients Who are All Receiving the Local Standard Of Care (Solidarity Trial) and this research is multicenter research involving Hospital Tuanku Fauziah Perlis, Hospital Sultanah Bahiyah Kedah, Hospital Pulau Pinang, Hospital Kuala Lumpur, Hospital Sungai Buloh, Hospital Melaka, Hospital Tengku Ampuan Afzan Pahang, Hospital Umum Sarawak and Hospital Queen Elizabeth Sabah.

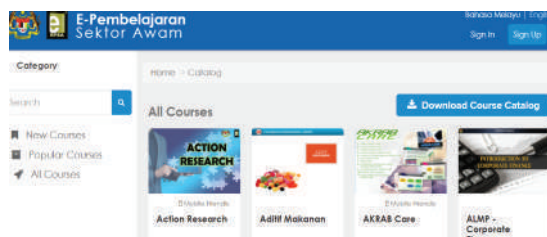
INSTITUTE FOR HEALTH MANAGEMENT (IHM)

ACTION RESEARCH ONLINE MODULE DEVELOPMENT

Action Research module was first developed and introduced by IHM in 2003. This Action Research module has been used to analyse and manage problems in the workplace especially in healthcare settings. Since its introduction, many healthcare workers have been trained in Action Research methodology and its application by key personnel in IHM. Beginning in 2012, the Action Research concept was applied in planning strategy and implementation of Cluster Hospitals throughout the country. This concept was later applied to enhance Full-Paying Patient Services in ten (10) hospitals

involved. Starting 6 November 2020, the Action Research module is now accessible online at *E-Pembelajaran Sektor Awam* (EPSA) making it the first online module on the civil servants' learning platform published from Research and Technical Support program. The link can be accessed at: <https://www.epsa.gov.my>.

Image 6.44
EPSA Website Featuring Action Research Module



Source: IHM

TALENT GROOMING PROGRAM (TGP) THROUGH MyTGP

2020 has been a challenging year for TGP in terms of the training provision for talents and the arrangement for panel meetings. Various improvements were undertaken to carry out the planned activities in line with the annual target of TGP. MyTGP, the online TGP system was launched in 2019 and fully utilized to manage the new TGP applications in 2020 and facilitate the selection of the new Talents by the Selection Panel. The Selection Meeting for Cohort 12 was conducted in a hybrid manner whereby the first-round screening was performed by each panel from all the respective programs through MyTGP. The final decision was made in the meeting on 25 November 2020 with only one panel from the six (6) programs presented at the final meeting to comply with COVID-19 SOP.

A total of 28 Talents were shortlisted into Cohort 12:

- a) ten (10) from the Medical Program
- b) five (5) from the Public Health Program
- c) three (3) from the Research & Technical Support Program
- d) five (5) from the and Oral Health Program
- e) four (4) from the Pharmaceutical Services Program
- f) one (1) from the Food Safety and Quality Division

Apart from that, this was also the first time that the Assessment Meeting for TGP Completion was conducted fully online. Five sessions were held weekly throughout December in which 20 Talents from Cohort 4 to Cohort 7 participated in the online assessment. Despite the COVID outbreak, three compulsory training courses were organised, i.e., 'Power of Delegation for Leadership Success', 'Leading Change', and 'Financial and Integrity Based Leadership'.

Additionally, the Institute for Health Management is completing the qualitative research entitled "Exploring the issues and challenges in completion of talent grooming program: A Qualitative Study" for the future betterment of TGP.

Image 6.45

Online assessment session for Talents' completion of TGP at the Pintar 3 Meeting Room, National Institutes of Health



Source: IHM

CONTRIBUTION TO FIGHT AGAINST COVID-19 PANDEMIC

A total of nine (9) members consisting of medical officers, a matron and administrative assistants were mobilised to Crisis Preparedness and Response Centres (CPRC) at district health offices within Selangor, CPRC Selangor and the National CPRC in Putrajaya.

The 'Malaysia Health System Response in COVID-19' was conducted as a collaborative study with Institute for Health Systems Research. The study aimed to explore both public and health personnel perspectives on health systems responses during the early phase of the pandemic.

The health system response gaps were identified and strategies to strengthen the health system to inform MOH on the current and future outbreak response and preparedness.

Apart from the above, two (2) other COVID-19 related studies are still ongoing. 'Perceived Effects of COVID-19 Pandemic on Diabetic Care of Patients in Selangor Public Primary Health Clinics' aims to assess the effect of COVID-19 pandemic on diabetic care in Selangor Public Primary Health Clinics in terms of quality of care and health outcomes. 'Cost Analysis of Public Health Measures for COVID-19 at District Health Office from Provider's Perspective' aims to provide policymakers with the necessary input in terms of cost of public health measures to contain COVID-19 pandemic at the level of district health office from the MOH perspective.

INSTITUTE FOR HEALTH SYSTEMS RESEARCH (IHSR)

LAUNCHING OF "THE COVID-19 CHRONICLES OF MALAYSIA" BY THE PRIME MINISTER

A major highlight of the year for IHSR was the launching of "The COVID-19 Chronicles of Malaysia: in the Face of a Pandemic" book by the Honourable Prime Minister, which took place at the Prime Minister's Office in Putrajaya on 23 September 2020.

At the launching ceremony, Prime Minister YAB Tan Sri Dato' Haji Muhyiddin bin Haji Mohd. Yassin signed a commemorative poster for the event, witnessed by the Health Minister, YB Dato' Sri Dr. Adham Baba; Director-General of Health, Tan Sri Dato' Seri Dr. Noor Hisham Abdullah; Deputy Director-General of Health (Research and Technical Support), Datuk Dr. Hishamshah Mohd Ibrahim; NIH Manager, Dr. S Asmaliza Ismail and IHSR Director, Dr. Nor Izzah Haji Ahmad Shauki.

Originally an idea of the Deputy Director-General of Health (Research and Technical Support), Dr. Hishamshah Mohd Ibrahim, the publication of 'The COVID-19 Chronicles of Malaysia' was a collaborative effort between the Malaysian Alliance for Embedding Rapid Reviews in Health System Decision-Making (MAera) and Institute for Clinical Research (ICR) of the National Institutes of Health (NIH).

'The Chronicles' document a timeline of public health strategies taken by Malaysia's health care system to address the COVID-19 crisis by using the rapid evidence synthesis methodology. This publication highlights the health care system's preparedness and response to the pandemic starting from 31 December 2019 to 30 June 2020.

Image 6.46

Launching of 'The COVID-19 Chronicles of Malaysia' by Prime Minister



Source: IHM

THE LAUNCHING OF 'MALAYSIA HEALTH SECTOR RESPONSE TO COVID-19 PANDEMIC'

The 'Malaysia Health Sector Response to COVID-19 Pandemic' report was launched online by the Health Minister, YB Dato' Sri Dr. Adham bin Baba on 5 November 2020. Published by IHSR, this report is dedicated to the country at a time of crisis and captures the robust and timely Malaysian health care system responses and strategies that were critical in the management of the crisis.

This report documents the various measures taken by MOH at all levels and across sectors to contain COVID-19. These responses include crisis and disaster planning and management; public health interventions including the Movement Control Order (MCO); primary care and hospital preparedness and response; operational support of health care facilities; the collective effort of MOH with other ministries and organisations; collaborations with regional and international agencies; control at country entry points and community empowerment. These responses from the time the coronavirus first emerged in the country until June 2020 have been proven to be effective in breaking the chain of transmission.

The COVID-19 crisis has shown the importance of unity and solidarity as a nation as well as public involvement in the management of an unprecedented pandemic. However, the fight against COVID-19 is not over. The experiences and lessons learned during this time will be invaluable in the management of future health crises and emergencies.

Image 6.47

Launching of 'Malaysia Health Sector Response to COVID-19 Pandemic' by Health Minister



Source: IHSR

WITSA Global Excellence ICT Awards – Runner-Up

'Malaysia's Pandemic Response Systems' developed by MOH has been awarded as runner-up in the COVID-19 Tech Solutions for Countries and Regions category at the World Information Technology and Services Alliance (WITSA) Global Excellence ICT Awards on 19 November 2020. The WITSA Global ICT Excellence Awards honours organisations from around the world that have created ICT applications or solutions that have benefited their communities, whether to provide public services, boost profits or advance connectivity.

The MAera team from IHSR was acknowledged for its contribution to the development of the COVID-19 Health Systems Response Dashboard, a part of the 'Malaysia's Pandemic Response Systems' that aims to document Malaysia's health systems response to the COVID-19 pandemic by collating information from publicly available sources and research databases.

Image 6.48

WITSA Global Excellence ICT Awards



Source: IHSR

INSTITUTE FOR HEALTH BEHAVIOURAL RESEARCH (IHBR)

The Institute for Health Behavioural Research (IHBR) was established in 2006. The primary functions of this institute are to conduct research, training and consultancy in the area of health behaviour. This institute focuses on behavioural determinants, health risk behaviours, program evaluation, instrument development and health communication.

RESEARCH FOCUSING ON COVID-19 PANDEMIC

On 16 March 2020, the Movement Control Order (MCO) under the Prevention and Control of Infectious Diseases Act 1988, and the Police Act 1967 were imposed on the public. The announcement had a dramatic and widespread impact nationwide. IHBR conducted several studies on health behaviour related to COVID-19 ([Table 6.12](#)) and published articles ([Table 6.13](#)) as listed below:

Table 6.12
Research Conducted on COVID-19

No.	Research Title
1.	Survey on Knowledge, Attitude, Practice, Belief, and Health Seeking Behaviour on COVID-19 Among Malaysian Who Travel Frequently to Singapore
2.	The COVID-19 Social Media: Dissemination of information in Facebook and Twitter and the public sentiment on it
3.	Discourse Analysis on Media Reports and How It Affects Human Behaviour During the Corona Virus (COVID-19) Outbreak
4.	Health & Social Behaviour During Movement Control Order (MCO) Following COVID-19: An Online Survey Among Adult Internet Users in Malaysia
5.	Adherence Toward Preventive Measure Among Malaysian Public During COVID-19 Pandemic - Using Theory of Planned Behaviour (TPB): An Online Survey
6.	Psychological Effects of Coronavirus Disease 2019 (COVID-19) Amongst Healthcare Workers
7.	Online Survey on Public's Understanding, Attitude and Practice Related to Physical Distancing
8.	An Analysis of Public Inquiries Received by CPRC During COVID-19 Pandemic
9.	Kepatuhan Terhadap SOP Pencegahan COVID-19 dalam Kalangan Masyarakat di Malaysia
10.	Preventive Behaviour During COVID-19 Pandemic Among School Children in Malaysia
11.	Outbreak Investigation on the COVID-19 Infections among Healthcare Workers in Sabah
12.	Research collaboration with IKU entitle: Knowledge and Practice of Infection Control Among Malaysian During COVID-19 Outbreak

Source: IHBR

Table 6.13
Publications with IHBR researcher as first author

No.	Article Title	Journal / Publication
1.	Information, motivation and behavioural factors in influencing diabetes self-care: A conceptual paper	Malaysian Journal of Social Sciences and Humanities (MJSSH)
2.	High Risk Behavior Among Malaysian Adolescents: A Comparison Between Gender.	Global Journal of Health Science
3.	Can patients make heads or tails of enhanced primary health care (EnPHC)? Experience through their own journey	BioMed Central Family Practice
4.	Usage of The Internet for Health Information Seeking Among Elderly in Malaysia	International Journal of Multidisciplinary Research 2020
5.	Exploring Knowledge on Herbal Medicine (HM) Usage in Disease Management among people with Type 2 Diabetes Mellitus (TD2M) in Negeri Sembilan	Malaysian Journal of Social Sciences & Humanity
6.	Information, Motivation & Behavioural Factors in influencing Diabetes Self-care: A Conceptual Paper	Malaysian Journal of Social Sciences & Humanities 2020
7.	The Effectiveness of <i>Kelab Doktor Muda</i> as Peer Educator towards the Knowledge, Attitude and Health Practices of Primary School Children	Global Journal of Health Science
8.	Maximum Isokinetic Familiarization of the Knee: Implication on Bilateral Assessment.	Human Movement Science
9.	Perception of Conventional Medicine and Herbal Medicine Usage Amongst Diabetic Patients: A Qualitative Study in Negeri Sembilan, Malaysia.	Global Journal of Health Science

Source: IHBR

THE DEVELOPMENT AND VALIDATION OF THE NATIONAL HEALTH MORBIDITY SURVEY (NHMS) INSTRUMENT TO MEASURE THE COGNITIVE, AFFECTIVE AND BEHAVIOUR (CAB) DOMAINS FOR DENGUE AND ZOONOSSES

Previous NHMS have generated a vast amount of population data since 1996, which focused on the prevalence of various diseases and health problems. However, data on the cognitive, affective, and behavioural (CAB) domains are limited. For NHMS 2020, IHBR focused on instrument development and validation to measure the CAB domains for dengue and zoonoses prevention, especially for adults and children. The validated instruments were used in the NHMS 2020 that focuses on communicable diseases.

Image 6.48

Best Field Supervisor, Puan Siti Nur Farhana binti Harun, for National Health Morbidity Survey 2020



Source: IHBR

Image 6.49

NHMS Team from IHBR



Source: IHBR

COCHRANE LIBRARY NATIONAL ACCESS BY NIH

In 2020, NIH Research Information Resources Sector successfully subscribed to The Cochrane Library with a national license and it is now freely available throughout Malaysia. The strategic partnership between Cochrane Malaysia, Wiley, and NIH researchers allow access to evidence-based information to guide health decisions and improve the national healthcare system.

The Cochrane Library was officially launched on 15 October 2020 along with a webinar series, entitled 'Getting Started with Cochrane Library' by Alejandra Barciela. The total number of Cochrane Library users until December 2020 was 275,082 patrons. The highest number of users was recorded in October with 125,003 patrons ([Table 6.14](#)). The following are statistics on the use of the Cochrane Library throughout 2020 including a nine (9) month trial starting from January to September ([Figure 6.20](#)).

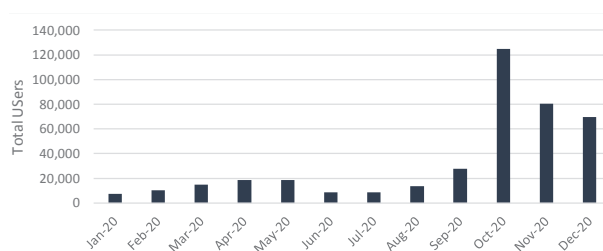
Table 6.14
Cochrane Library Users By Month in 2020

Event	Jan	Feb	Mar	Apr	May	Jun
Fulltext Total	7,480	10,524	14,741	18,702	18,599	8,836

Event	Jul	Aug	Sep	Oct	Nov	Dec
Fulltext Total	8,763	13,614	27,950	125,003	80,427	69,652

Source: IHBR

Figure 6.20
Cochrane Library users from January to December 2020



Source: IHBR

NIH WAY FORWARD

NIH researchers are urged to adopt an innovative approach to disseminate their research outputs that can benefit various stakeholders and Malaysians. Therefore, strategic collaboration with external agencies has been planned in 2021 which will be coordinated by the NIH Research Information Resources Sector to improve the skills of NIH researchers in improving the method of disseminating the research findings.

With the Cochrane Library database approved in 2020 at the NIH Research Information Resource Centre, it is hoped that NIH researchers can enhance the quality of research output in elevating the health services in Malaysia for the future.



07

ORAL HEALTH



ORAL HEALTH

INTRODUCTION

Oral diseases have a major adverse impact on general health and quality of life. A healthy and well-functioning dentition is important during all stages of life to support essential human functions, such as speaking, smiling, socializing and eating.

The Oral Health Program implemented various programs and activities throughout 2020 with emphasis on identified priority groups, including marginalised and vulnerable groups in such a way that the oral health status of the people will continually conform with the socio-economic progress of the country.

ACTIVITIES AND ACHIEVEMENTS

PRIMARY ORAL HEALTHCARE SERVICES

In 2020, Malaysia were challenged with the COVID-19 pandemic just like in other countries. The Movement Control Order (MCO) has been implemented by the Malaysian government and most government and private sectors have been instructed to suspend operations temporarily to curb the spread of COVID-19. The Oral Healthcare Service also received an impact from this pandemic where the delivery of oral health services could not be carried out as usual. Nevertheless, the program is committed to deliver oral health services by adopting the new norms.

Various initiatives were introduced in 2020, including School Dental Services using the high-risk approach method. The oral healthcare program for toddlers was strengthened through collaboration with external agencies to increase toddler coverage in private taska. Incremental oral healthcare was extended to preschool students to reduce the incidence of dental caries in the early stages of childhood growth.

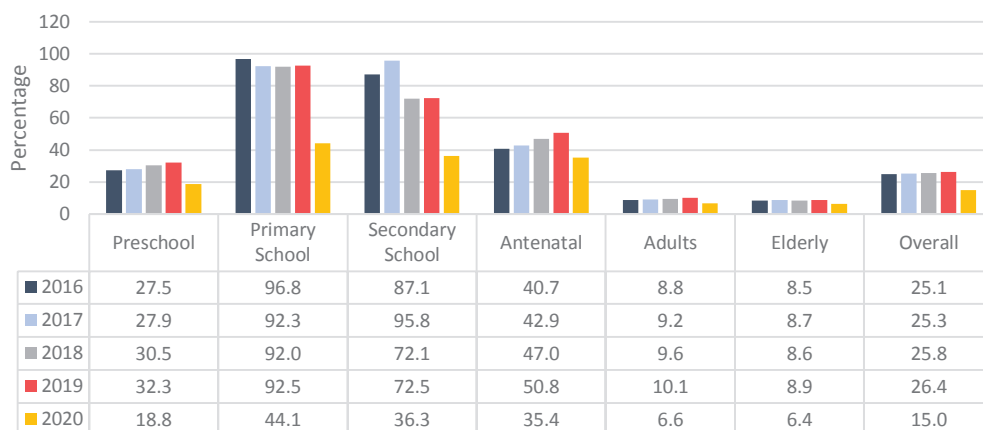
Starting March 2020, primary dental clinics only provide emergency treatments. Aerosol Generating Procedure (AGP) could not be implemented to avoid the risk of COVID-19 infection. However, efforts have been taken to equip all dental clinics with supporting equipment such as Extra-oral Suction, Air Decontamination Unit and Partition that can reduce the spread of the virus in the treatment room.

To ensure more efficient data management and reporting of primary dental services, the 'Gi-Ret PSY' system has been developed by the Oral Health Program team. This system allows reports on preschool, school and young adults to be generated systematically compared to the existing manual reporting. The system was implemented as a pilot project in all states in 2020 and will be fully implemented throughout Malaysia in 2021.

MONITORING AND EVALUATION

Performances were monitored quarterly and reports were presented at Oral Health Program's Technical meetings and *Jawatankuasa Dasar & Perancangan Kesihatan Pergigian* (JDPKP) meetings once a year. The overall utilisation of primary oral healthcare services has reduced significantly from 26.4 per cent in 2019 to 15.0 per cent in 2020 due to the pandemic COVID-19 outbreak (Figure 7.1).

Figure 7.1
Utilisation of Primary Oral Healthcare Services, 2016 to 2020

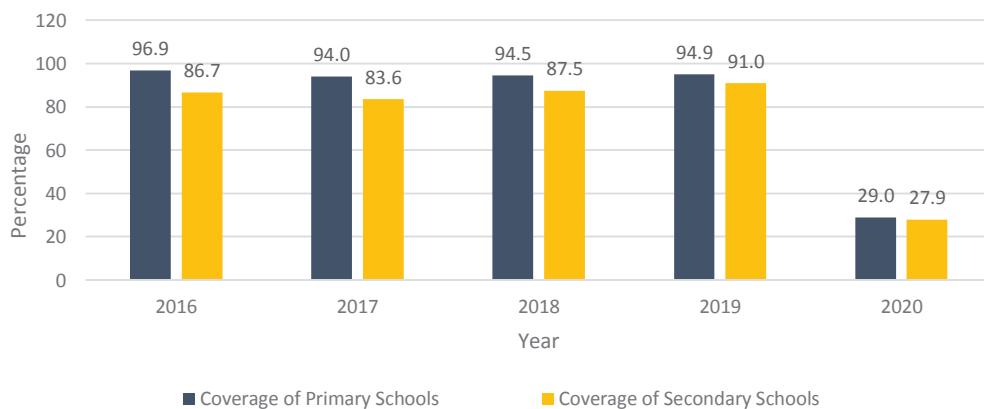


Source: Health Informatics Center, MoH

PRIMARY AND SECONDARY SCHOOL COVERAGE

The achievement of primary and secondary school coverage also showed a significant decline in 2020 following the frequent school closures during the COVID-19 pandemic (Figure 7.2).

Figure 7.2
Primary and Secondary Schools Coverage, 2016 to 2020



Source: Health Informatics Centre, MOH

SPECIALIST ORAL HEALTHCARE SERVICES

Four (4) dental specialist services have been expanded and established at 13 dental facilities in 2020 (Table 7.1).

Table 7.1
Expansion of Dental Specialty Services in 2020

DENTAL SPECIALTY	FACILITY
Special Needs Dentistry	1. Sarawak General Hospital
Orthodontics	2. Bayan Baru Dental Clinic, Penang
	3. Greentown Dental Clinic, Ipoh Perak
	4. Setapak Dental Clinic, WPKL & Putrajaya
	5. Petrajaya Dental Clinic, Sarawak
Periodontics	6. Mak Mandin Dental Clinic, Pulau Pinang
	7. Jalan Perak Dental Clinic, Penang
	8. Kota Setar Specialist Dental Clinic, Kedah
	9. Kuala Kangsar Dental Clinic, Perak
Restorative Dentistry	10. Sandakan Dental Clinic, Sabah
	11. Yong Peng Dental Clinic, Johor
	12. Seri Iskandar Dental Clinic, Perak
	13. Puchong Dental Clinic, Selangor

Source: Oral Health Program MoH

There were 399 dental specialists in 2020; an increase of 24.9 per cent compared to 2016. The workload of dental specialists is reflected by the ratio of a specialist to patients as shown in Table 7.2. Generally, pandemic COVID-19 in 2020 had affected the delivery of dental specialist services in MOH.

Table 7.2
Dental Specialist to Patient Ratio by Disciplines, 2016 to 2020

DISCIPLINES	2016	2017	2018	2019	2020
Oral and Maxillofacial Surgery	1:3,991	1:3,554	1:3,680	1:3,716	1:2,986
Paediatric Dentistry	1:2,730	1:3,005	1:2,854	1:2,541	1:2,044
Oral Pathology & Oral Medicine	1:878	1:833	1:864	1:951	1:770
Special Needs Dentistry	1:889*	1:1,159*	1:1,297*	1:1,413*	1:819*
Forensic Dentistry	1:108*	1:141*	1:110*	1:88*	1:59*
Orthodontics	1:4,056	1:3,556	1:3,423	1:3,711	1:2,026
Periodontics	1:2,113	1:1,466	1:1,349	1:1,373	1:712
Restorative Dentistry	1:1,439	1:1,294	1:1,308	1:1,327	1:1,228

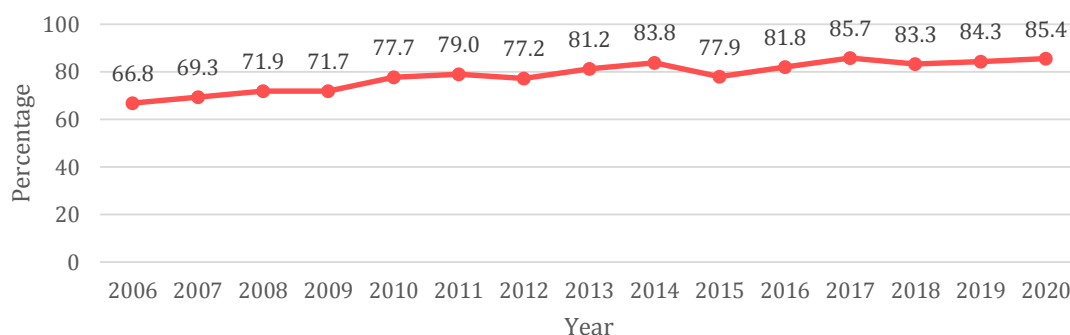
Source: Health Informatics & Management System, MOH (Preliminary data 2020) & *Oral Health Program (2020)

COMMUNITY ORAL HEALTHCARE SERVICES

WATER FLUORIDATION PROGRAM

In 2020, it is estimated that 72.4 percent of the population received a public fluoridated water supply. However, fluoridation coverage in Pahang has decreased from 0.8 per cent (2019) to 0.0 per cent (2020). Less than 50 per cent of water treatment plants in Sabah, WP Labuan, Sarawak, Kelantan and Pahang produces fluoridated water. Around 85.4 per cent of readings taken at reticulation points conformed to the recommended range of 0.4 to 0.6 ppm (Figure 7.3).

Figure 7.3
Conformance of Fluoride Level in Public Water Supplies to the Recommended Range (0.4 to 0.6ppm), 2006 to 2020



Source: Oral Health Program, MOH

PRIMARY PREVENTION AND EARLY DETECTION OF ORAL POTENTIALLY MALIGNANT DISORDERS AND ORAL CANCERS

A total of 90 high-risk kampung/estates/communities were visited and 1,475 residents aged 18 years and above were screened for the oral lesion. Opportunistic screening for walk-in patients at dental clinics and community outreach services found a total of 48,768 patients aged 18 years and above as having high risk habit with/or oral lesion from the total of 601,075 screened.

Preliminary data of 2020 showed that among those screened, 920 patients were seen with oral lesions and 602 of these patients (65.4%) with lesion were seen with high-risk habits. A total of 579 patients (62.9%) were referred to Oral & Maxillofacial Surgeons/Oral Pathology and Oral Medicine Specialists for further investigation and management with only 482 patients (83.3%) attended the specialist clinic.

As many as 112 patients (23.2%) were having malignant lesions and from 102 lesions with TNM staging, 12.8 per cent of the lesions were at Stage I meanwhile 70.6 per cent were at advanced stages (stage III and IV). A total of 82,017 participants were given dental health education regarding oral cancer for year 2020.

ORAL HEALTH PROMOTION

WORLD ORAL HEALTH DAY, 2020

This year marked a great start for the World Oral Health Day celebration. Highlights for the activities include several oral health talks in popular mass media such as *Media Prima Berhad Malaysia Hari Ini* slot at TV3, *Selamat Pagi Malaysia* at RTM and oral health talk at IKIM.fm radio. Other activities include community programs such as dental exhibitions and check-ups at *Projek Perumahan Rakyat* (PPR) which involved a mobile dental team.

The closing ceremony was organised by the Malaysian Dental Association on 19 September 2020 and attended by all collaborators. A photography competition held in conjunction with this year's theme 'Say Ahh, Unite for Mouth Health' has received overwhelming responses from both the public and private sectors.

Image 7.1

World Oral Health Day Activities, 2020



Source : Oral Health Program, MOH

ORAL HEALTH PROMOTION WEEK, 2020

The Oral Health Program Week with the theme *Norma Baharu, Senyuman Baharu* has successfully created its history when for the first time it was held virtually on Facebook live on 19 August 2020. The event was a collaboration between Oral Health Program and Terengganu Oral Health Division. Promotion activities such as instavideo and infographic competitions received overwhelming responses from the public. The program was continuously celebrated at the state level despite of the new norm situation.

Image 7.2

Oral Health Promotion Week Celebration, 2020



Source: Oral Health Program, MOH

STRENGTHENING ORAL HEALTH EDUCATION AND DELIVERY OF INFORMATION VIA SOCIAL MEDIA

During the early phase of the Movement Control Order (MCO) in March 2020, a special infographic team comprising of dental officers was formed to help developed infographic materials regarding the handling of issues related to the COVID-19 pandemic in oral health services. The source of reference was guidelines and information from the Oral Health Program and World Health Organization (WHO). The infographics uploaded in the Oral Health Program official social media such as Facebook, Instagram and Twitter have been widely disseminated among the community during the MCO period and have gained positive responses due to its up-to-date information. In addition, the establishment of an official team comprising of co-administrators and content developers helps strengthen the management of social media. The year's highlight was the creation of the Oral Health Program's official Twitter page with the objectives to expand and diversify the medium of information dissemination to the community.

Image 7.3
Infographic Material on Oral Healthcare in Social Media



Source : Oral Health Program, MOH

TRIAL –RUN FOR PENDIDIKAN KESIHATAN PERGIGIAN DALAM TALIAN (PKPDT)

The COVID-19 pandemic has transformed the landscape of education in Malaysia. Thus, online learning has become the most appropriate method for teaching and learning during the pandemic. The Oral Health Program has taken the opportunity to explore PKPDT as a potential education method for the future and to ensure that oral health education can still be delivered to students even though schools are closed. A trial-run session containing an oral health education syllabus was conducted in selected schools in four (4) states namely Penang, Perak, Terengganu and the Federal Territory of Kuala Lumpur and Putrajaya throughout the whole month of December 2020.

ORAL HEALTH QUALITY

NATIONAL INDICATOR APPROACH (NIA)

In 2020, four (4) indicators were monitored to measure the performance of the primary and community oral healthcare services ([Table 7.3](#)).

Table 7.3
Oral Health Indicators Under NIA, January to December 2020

NO.	INDICATOR	STANDARD (%)	ACHIEVEMENT (%)	SIQ YES/NO
1	Percentage of primary schoolchildren maintaining the orally-fit status	≥65	60.1	Yes
2	Percentage of secondary schoolchildren maintaining the orally-fit status	≥70	67.6	Yes
3	Percentage of non-conformance of fluoride level at reticulation points (Level < 0.4ppm)	≤25	14.3	No
4	Percentage of non-conformance of fluoride level at reticulation points (Level >0.6ppm)	≤7	0.4	No

Source: Oral Health Program, MOH

KEY PERFORMANCE INDICATORS (KPI) 2020

A total of 25 KPIs were monitored by the Oral Health Program in 2020. Of these, 11 KPIs are monitored three (3) monthly, 11 KPI are monitored every six (6) months and two (2) KPIs are monitored yearly. Overall, 11 KPIs achieved the targets whilst 14 KPIs did not achieve the targets ([Table 7.4](#)).

INITIATION OF NATIONAL ORAL HEALTH POLICY

The Oral Health Program has taken the initiative to develop the National Oral Health Policy. The initiative is seen timely as at present such policy is non-existent. In order to deliver the best oral healthcare services to the public, the National Oral Health Policy will be the reference document for program planning, implementation strategies, evaluation and monitoring of activities carried out.

In summary, the objectives of the National Oral Health Policy are to:

- Provide a basis in planning, developing strategies, implementation, evaluation and monitoring of oral health program and activities towards improving the oral health of the entire population.
- Improve oral healthcare delivery services for identified priority groups at risk of developing oral health problems.
- Improve oral healthcare delivery approach in a holistic manner involving relevant stakeholders and agencies.

Table 7.4
Key Performance Indicators (KPI) Achievements for Oral Health Program, 2020

KPI DOMAIN	INDICATOR	TARGET (%)	ACHIEVEMENT (%)
Access to MOH oral healthcare services	Percentage of dental clinics providing daily outpatient services	≥84	86.0
	Percentage of health clinics with dental facility components	≥75	66.9
	Percentage of antenatal patient coverage	≥60	44.0
	Percentage of primary school children rendered orally-fit	≥96	36.2
	Percentage of secondary school children rendered orally-fit	≥85	39.0
Oral health status of school children	Percentage of primary school children maintaining orally-fit status	≥65	60.1
	Percentage of secondary school children maintaining the orally-fit status	≥70	67.6
	Percentage of 6 year-old school children free of dental caries	≥50	35.1
	Percentage of 12 year-old school children free of dental caries	≥70	69.7
	Percentage of 16 year-old school children free of dental caries	≥50	55.4
	Percentage of primary school children who required and received fissure sealant treatment	≥96	76.0
	Percentage of schoolchildren identified as current smokers who have attended at least 3 consecutive intervention sessions under the KOTAK program	≥58	39.1
Oral health status of the antenatal mother	Percentage of antenatal mothers with orally-fit status	≥45	31.3
Oral health status of elderly	Percentage of 60 year-olds with 20 or more functional teeth	≥60	41.6
Delivery of denture services	Percentage of patients who received their dentures within 3 months	≥64	70.1
	Percentage of 60 year-old and above patients who received their dentures within 8 weeks	≥50	56.2
	Percentage of Ikon Gigi (iGG) who conducted at least one activity per month	≥40	45.2
	Percentage of the budget allocation for <i>Lathian Dalam Perkhidmatan</i> (LDP) organised by Oral Health Program, spent fully by the first week of December in the current year	100	100.0
Quality dental service and MS ISO certification	Percentage of dental clinics with MS ISO 9001:2015 certification	≥85	88.2
	Percentage of MOH dental facilities achieving at least 80 percent compliance during safety and health audits	≥95	84.5
Monitoring of private dental clinics	Percentage of monitoring inspections conducted on identified registered private dental clinics	100	89.5
Clients Charter Index	Percentage of outpatients seen by dental officers within 60 minutes.	≥86	93.9
Index of Customers Satisfaction	Percentage of customers satisfied with dental services received.	≥95	98.0
Index of Innovation Culture	Creating a culture of innovation in dental clinics under MOH - Percentage of dental clinics which replicated adapted or utilised products of innovations within 2 years.	≥80	95.7
Complaints Index	Percentage of complaints resolved within the stipulated period	≥85	98.6

Source: Oral Health Program, MOH

INITIATION OF NATIONAL ORAL HEALTH PLAN 2021 – 2030

The initiation of the National Oral Health Plan for Malaysia (NOHP) 2021-2030 started at the end of 2019. The 10-year plan was established since 2002 with the development of the NOHP 2002-2010, followed by the second plan i.e NOHP 2011-2020. It is a reference document that set the national oral health goals and strategies to address the key areas of concern aiming to improve Malaysians' oral health in general.

A representative from all dental fraternities was invited to participate and provide input in the development of the document, to ensure a more holistic plan. The mid-term achievement of NOHP 2011-2020, as well as the achievement at the end of 2019, were also taken into consideration. The NOHP 2021-2030 is formulated encompassing these focus areas; reducing major oral health disease burdens, tackling the common risk factors in health, increase access and equitability, ensuring quality and safe oral healthcare delivery and electronic medical record.

ORAL HEALTH INFORMATION MANAGEMENT

NATIONAL ELECTRONIC MEDICAL RECORD (EMR) PROJECT

The Ministry of Health, spearheaded by the e-Health Section of Planning Division embarked in Phase One of the National Electronic Medical Records (EMR) Project at seven (7) hospitals, 42 health clinics and 11 dental clinics in Negeri Sembilan. As a pre-implementation activity, site visits with the EMR team to dental clinics involved have been completed to conclude the bill of materials and estimated project cost. In preparation of project documentation by each project owner, series of workshops and discussions was held.

TELE-DENTISTRY INITIATIVE

Realizing the COVID-19 pandemic would likely be far from over, several discussions involving various divisions in MOH namely Family Health Development Division, Information Management Division, Legal Office and the Malaysian Dental Council with MAMPU were held to discuss the implementation of teledentistry initiatives i.e. the Online Appointment System (OAS) and Virtual Dental Clinic which aimed to improve oral health delivery such as reducing congestion at the MOH dental clinics during the disease pandemic.

Image 7.4
Virtual Clinic Meeting, 9 July 2020



Source: Oral Health Program, MOH

Image 7.5
Online Appointment System Meeting, May 2020



Source : Oral Health Program, MOH

MYHDW E-REPORTING (ORAL HEALTH)

The Oral Health Source System and Reporting System was developed under the Malaysian Health Data Warehouse (MyHDW) Phase 2 Project in 2017 to document the oral health services delivery data known as e-Reporting V2.0 Oral Health. Pre-workshop and workshops were conducted to standardize the Malaysian Health Informatics Framework (MyHIF) documentation and mapping of the dental processes to procedures to meet the Fixed Format Report (FFR) and Adhoc Query requirements.

WAY FORWARD

Some major issues and challenges were identified at the end of 2020 including slow trending of caries improvement, increasing trend of periodontal disease and late stage of oral cancer detection. These lead to an increase in oral healthcare needs among the population. However, the latest National Health Morbidity Survey 2019 showed a slight decrease in oral healthcare utilisation with only 23.7 per cent has a dental visit within the last 12 months. The utilisation trend was even more affected by the restriction movement and the new norms practice in dental facilities due to the COVID-19 pandemic.

Oral healthcare service delivery was made to abide by the new norms and ensuring patient and oral health personnel safety at all times. All aerosol-generating procedures (AGP) during routine dental care such as dental fillings and scaling are considered high-risk procedures. In order to address this situation, Oral Health Program has developed several procedures and guidelines in managing COVID-19 and reducing the risk of transmission in all MOH dental facilities. The procedures and guidelines mainly highlighted the importance of patient triaging at the entry point and strict adherence to infection preventive control measures at all times for all oral health personnel.

At the beginning of the pandemic, the treatment offered was mainly restricted to dental emergencies only. However as more evidence on the management of COVID-19 in the dental scenario has been available, oral healthcare services are now slowly resuming with the new norms and adaptations. Creative approaches were also outlined to ensure the population is continuously empowered in taking care of their oral health. The pandemic has also highlighted the importance of emerging needs of digital dentistry such as online appointment systems, teledentistry and electronic medical records.

The pandemic has also allowed the oral health personnel to stand hand-in-hand, shoulder-to-shoulder with all other health personnel in MOH and other agencies in combatting the plague. These include active involvements in mass screening and swab testing, monitoring quarantine orders and as hotline responders at the Crisis Preparedness and Response Centre (CPRC).

The year 2021 will be anticipated as another challenging year for healthcare service delivery which is heavily affected by the COVID-19 pandemic. The service shall continue to serve the Malaysian people at its utmost best capacity without compromising the safety measures to reduce COVID-19 infection.



08

PHARMACY



PHARMACY

INTRODUCTION

The pharmaceutical Services Programme is responsible to ensure pharmaceutical products marketed in the country comply with standards, are safe, efficacious and of good quality. The Programme protects the nation through enforcement of relevant medicines legislation and regulation, meanwhile, it facilitates access to medicines and advocates rational use of medicines by both healthcare providers and consumers. The Programme consists of five (5) main divisions headed by a Senior Director of Pharmaceutical Services and each main division plays an important role in different aspects but towards the same objectives to provide the best professional pharmacy services to the nation (Figure 8.1).

Figure 8.1
Pharmacy Services Programme



Source: Pharmacy Policy and Strategic Planning Division

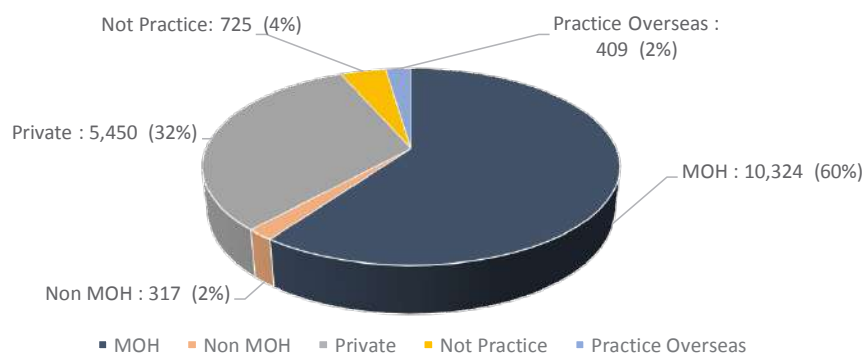
ACTIVITY AND ACHIEVEMENT

REGISTERED PHARMACIST IN MALAYSIA

There are a total of 17,225 pharmacists renewing their annual certificate (registered) for the year 2020 (Figure 8.2).

MEDICINES PROCUREMENT AND EXPENDITURE IN MINISTRY OF HEALTH MALAYSIA

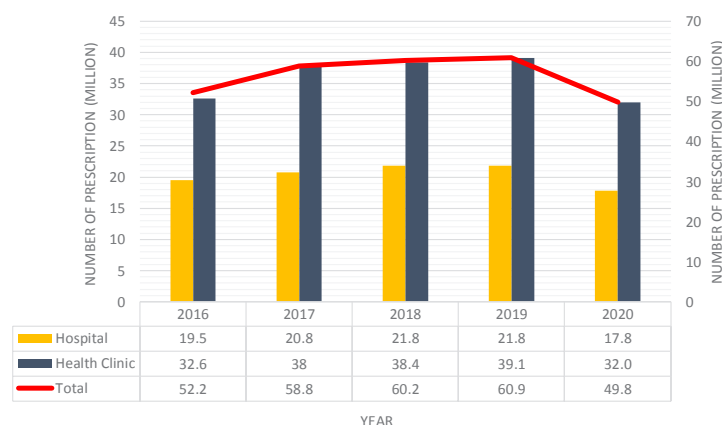
The total cost of medicines procured for all MOH hospitals, institutions and health clinics was RM 2,526.58 million. The expenditure decreased by 9.8 per cent as compared to the total in 2019. Medicines procured through concession company (in reference to Approved Purchased Product List (APPL)) amounted to RM 883.71 million (34.98%), MOH contracts of RM 1,163.73 million (46.06%) as well as direct purchase and quotation of RM 479.14 million (18.96%).

Figure 8.2**Total Registered Pharmacists According To Practice Sector Based On Annual Certificate 2020**

Source: Pharmacy Board Malaysia Division

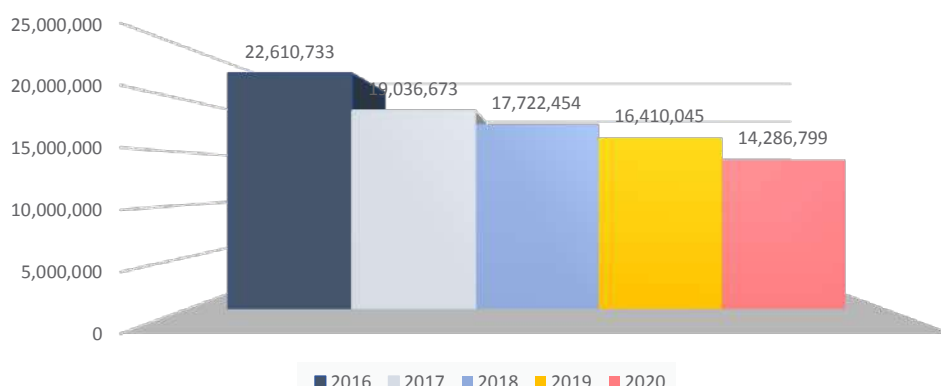
DISPENSING OF MEDICINES IN MOH HOSPITALS AND HEALTH CLINICS

In the year 2020, there was 18.2 per cent decrease in the number of outpatient prescriptions received in hospitals and health clinics compared to the previous year. The total number of prescriptions received at public health facilities was 49.8 million of which 32.0 million prescriptions were received at health clinics, and 17.8 million prescriptions were at hospitals (Figure 8.3). There was 12.9 per cent decrease in the number of inpatient prescriptions received at the hospital with a total of 14.3 million prescriptions (Figure 8.4).

Figure 8.3**Number of Outpatient Prescriptions Received for 2016 To 2020**

Source: Pharmacy Practice and Development Division, MOH

Figure 8.4
Number of Inpatient Prescriptions Received for 2016 to 2020



Source: Pharmacy Practice and Development Division, MOH

PRODUCT REGISTRATION

National Pharmaceutical Regulatory Agency (NPRA) under the Pharmaceutical Services Programme is responsible for processing registration applications for new chemical entities/new drugs, biologics, prescription, non-prescription, health supplements, traditional as well as veterinary products. Throughout 2020, a total of 1,421 new product registration applications were received and 1,447 products were registered, which includes applications received in the previous year (Table 8.1). These newly registered products comprise 53.84 per cent local products and 46.16 per cent imported products. The cumulative number of registered products up to December 2020 is 23,827 products.

Table 8.1
Number of New Products Registered for 2016 to 2020

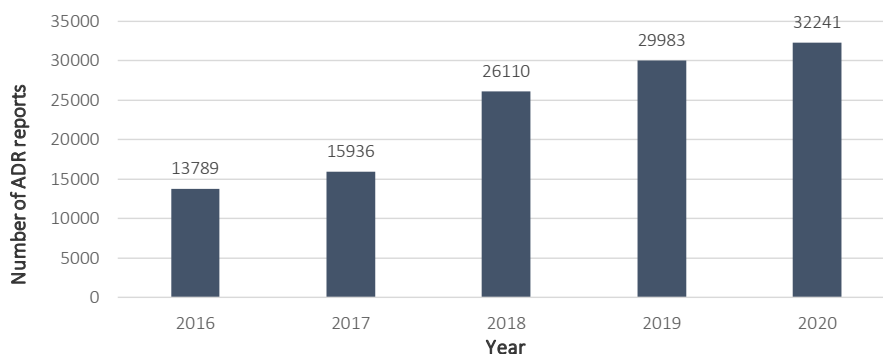
Product Category	2016	2017	2018	2019	2020
Prescription Products	263	325	354	187	291
Non-Prescription Products	40	61	79	66	64
Traditional Products	648	651	738	679	645
Health Supplements	238	242	322	315	378
Veterinary Products	79	68	73	77	69
Total	1,268	1,347	1,566	1,324	1,447

Source: National Pharmaceutical Regulatory Agency

POST PRODUCT REGISTRATION

NPRA continuously monitors registered products in the local market to ensure that the products adhere to safety, efficacy and quality requirements. In 2020, the National Adverse Drug Reactions (ADR) Monitoring Program received 32,241 reports, an increase of 7.53 per cent compared to the previous year (Figure 8.5).

Figure 8.5
Number of ADR Reports Received for 2016 to 2020



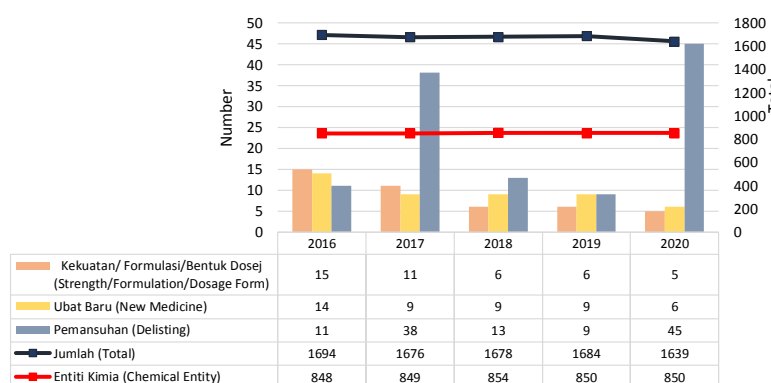
Source: National Pharmaceutical Regulatory Agency

LISTING OR AMENDMENT TO MINISTRY OF HEALTH MEDICINES FORMULARY

The Ministry of Health Medicines Formulary (MOHMF) is a list of drugs that have been approved for use in all MOH facilities. It serves as a guide for MOH healthcare professionals in determining medications needed for patient treatment. The application for listing/amendment to MOHMF is decided in the MOHMF Review Panel Meeting which is held three (3) times a year. The Pharmacy Practice and Development Division is responsible for processing and evaluating the application to MOHMF.

As of December 2020, 1,639 preparations comprising 850 chemical entities are listed in the MOHMF. The number of drugs listed in FUKKM from the year 2016 to 2020 is summarised in [Figure 8.6](#).

Figure 8.6
Drugs Listed in the MOHMF for 2016 to 2020

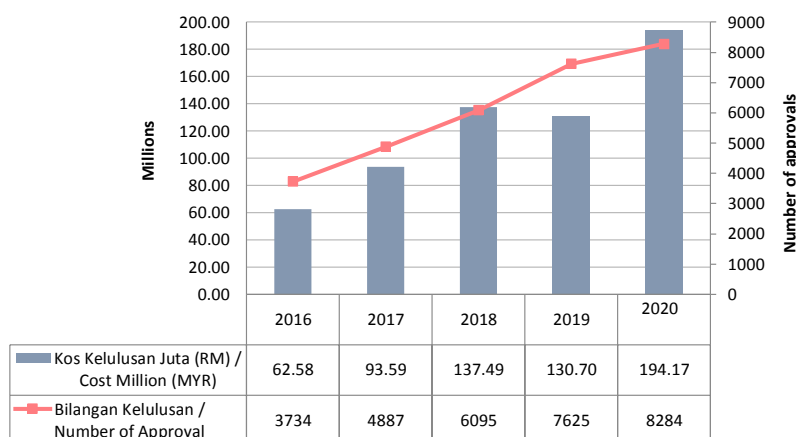


Source: Pharmacy Practice and Development Division

SPECIAL APPROVAL DRUGS

Special approval from Director General (DG)/Senior Director of Pharmaceutical Services is required to obtain and to use drugs that are not listed in the MOHMF including registered drugs or unregistered drugs. Applications for special approval are considered as alternative treatments with the priority to use options available in the MOHMF. In 2020, there were 8,776 applications received from MOH facilities with an increase of 7.8 per cent compared to the year 2019 (8,141 applications). In total, 94.4 per cent (8,284 applications) were approved with an estimated cost of RM194.2 million. The number and costs of special drug approvals for MOH facilities from the year 2016 to 2020 are summarised in Figure 8.7.

Figure 8.7
Number and Cost of Special Drug Approvals from MOH Facilities for 2016 to 2019



Source: Pharmacy Practice and Development Division

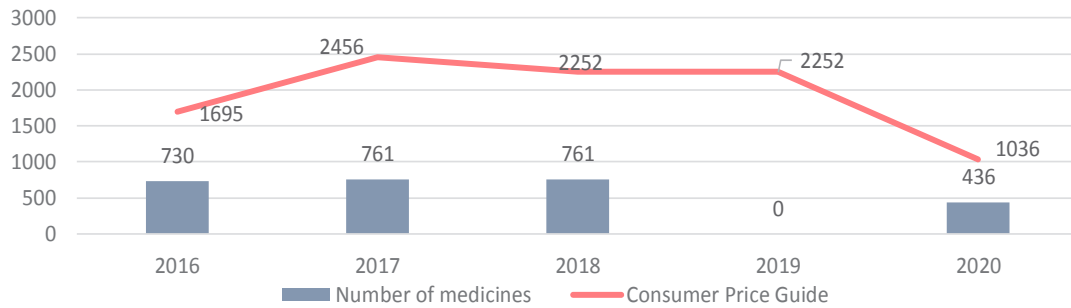
CONSUMER MEDICINES PRICE GUIDE

In the year 2020, a total of 1036 Consumer Price Guides involving controlled and over-the-counter (OTC) medicines have been updated on the Pharmaceutical Services website (Figure 8.8). Consumer Price Guide aims to guide the consumer on the medicine's availability and prices in the private sector to make informed choices. However, the information shared is still low and limited to certain medicines as it is currently voluntarily contributed by pharmaceutical companies.

RAID ON-PREMISES FOUND NOT COMPLIANCE WITH LEGAL PROVISIONS

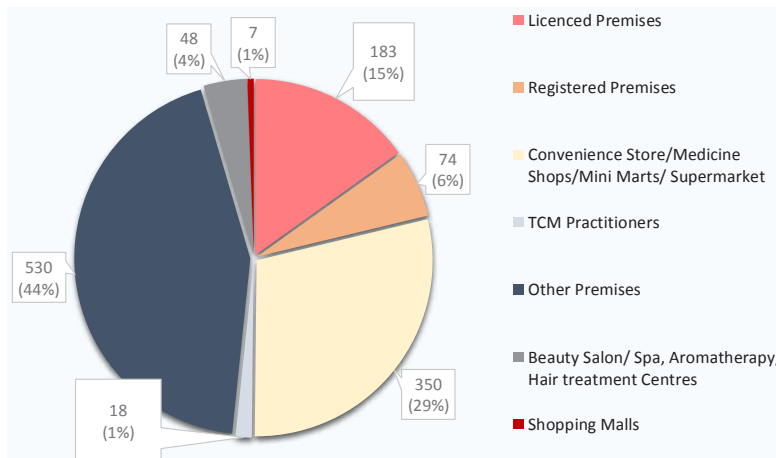
The Pharmacy Enforcement Division is responsible for ensuring that all pharmaceutical, traditional and cosmetic products in the market are genuine in terms of registration and notification. Among the efforts to ensure that the supply chain and marketing of these products comply with the provisions of the laws include raids which are carried out on-premises selling, supplying, storing or manufacturing unregistered products and unnotified cosmetics. Raids were also carried out on-premises selling, supplying, storing or manufacturing poisons, psychotropic substances, chemicals and controlled medicines operating without a valid license. In 2020, a total of 1,210 premises were raided nationwide (Figure 8.9).

Figure 8.8
Consumer Price Guide Sharing from The Year 2016 -2020



Source: Pharmacy Practice and Development Division

Figure 8.9
Types and Numbers of Premise Raided in 2020



Source: Pharmacy Enforcement Division

IMPLEMENTATION OF MS ISO 9001: 2015 QUALITY MANAGEMENT SYSTEM



The Pharmaceutical Services Program at the Ministry of Health Malaysia's Headquarters (IPKKM) has been certified with MS ISO 9001: 2015 Quality Management System since 2018. Various activities have been implemented and coordinated by the ISO Working Committee of the Pharmaceutical Services Program Headquarters throughout the year 2020.

On 24 to 26 February 2020, the Headquarters of the Pharmaceutical Services Program has engaged in a re-certification audit of MS ISO 9001: 2015 by the SIRIM QAS Sdn Bhd. The auditors are namely Mrs. Evelyn Liew Yuen Chun and Mrs. Leong Foong Khuan. A total of eight (8) Opportunity For Improvements (OFI) were found during this audit session. The Pharmaceutical Services Program Headquarters has successfully renewed its MS ISO 9001: 2015 certification for the period of 2021-2023.

WORLD PHARMACIST DAY 2020

As usual, the Pharmaceutical Services Programme celebrated World Pharmacists Day this year which marked the tenth World Pharmacists Day with the theme 'Transforming Global Health' to promote the role of the pharmacist in improving the health of the people. The roles of pharmacy are seen in various fields in various aspects. As such, pharmacists can transform health through pharmacy services in the communities. Pharmaceutical scientists can transform and prolong people's lives through the development of safe and effective medicines and vaccines. Pharmacy educators ensure qualified and competent pharmacists are produced to contribute to society.

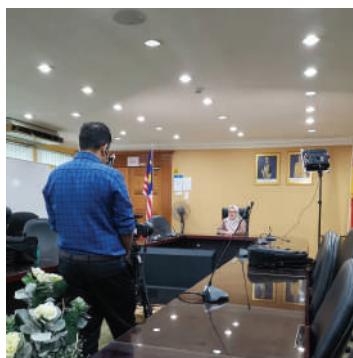
The celebration of this day was held virtually, joint by the State Pharmaceutical Services Division with a speech from the Senior Director of Pharmaceutical Services and a video presentation on the 'Pharmacist's Role during COVID-19 Pandemic'. An opening ceremony was also organised at the headquarters level.

Image 8.1

Activities Organised during the World Pharmacists Day 2020



World Pharmacists Day 2020 Opening Ceremony



Speech Recording of the Senior Director



Souvenir for the World Pharmacists Day 2020

Source: Pharmacy Policy and Strategic Planning Division, MOH

NPRA-PMDA BILATERAL MEETING 2020

Pharmaceutical and Medical Devices Agency (PMDA) Japan hosted the Malaysia-Japan Bilateral Meeting for the year 2020. Bilateral meetings between the two parties are traditionally held face to face either in Japan or Malaysia. A bilateral meeting was planned in early April 2020 in Tokyo but the meeting was canceled due to the COVID-19 pandemic. Therefore, the bilateral meeting was held virtually on 17 November 2020.

Participants from PMDA included Dr. Fujiwara Yasuhiro (Chief Executive), Mr. Uzu Shinobu (Senior Executive Director), Dr. Nakashima Nobumasa (Associate Executive Director for International Programs) and Dr. Sato Junko (Director of Office of International Programs). A representative from the Ministry of Health, Labour and Welfare (MHLW), Dr. Yasuda Naoyuki (Director of Office of International Regulatory Affairs) also participated in the meeting.

Participants from Malaysia included Datin Dr. Faridah Aryani Md Yusof (Senior Director of Pharmaceutical Services Programme) and Dr. Hasenah Ali (Director of NPRA), Deputy Directors - Mdm Rosilawati Ahmad, Mdm Basariah Naina and Dr. Roshayati Mohd Sani, including relevant heads of sections. In the meeting, Datin Dr. Faridah and Dr. Fujiwara made opening remarks reflecting on the cooperation between PMDA and NPRA thus far. Both parties were glad that despite the pandemic, bilateral engagements were continued virtually to discuss further cooperation in areas of mutual interest.

The meeting agenda included presentations from both agencies on regulatory measures taken during the COVID-19 pandemic. Other topics of discussion include training and capacity-building opportunities. PMDA also shared their available regulatory pathways to expedite the registration of COVID-19 related products, including vaccines.

TAIWAN FOOD AND DRUG ADMINISTRATION (TFDA) COVID-19 MEETING

On 16 June 2020, the Taiwan Food and Drugs Administration (TFDA) hosted a virtual meeting with selected regulatory authorities from the Asia Pacific to discuss and share experiences relating to the COVID-19 pandemic.

Participating regulatory authorities include European Medicines Agency (EMA), United States Food and Drug Administration (USFDA), Thailand (Food and Drug Administration (Thai FDA), Pharmaceutical and Medical Devices Agency Japan (PMDA) and the National Pharmaceutical Regulatory Agency Malaysia (NPRA).

Participants from NPRA include the Director - Dr. Hasenah Ali along with two Deputy Directors - Mdm Rosilawati Ahmad and Dr. Roshayati Mohd Sani.

During this unprecedented time, many regulatory authorities must adapt and update regulatory procedures considering potential disruptions to the economic and social sector caused by rising cases of positive COVID-19.

The main objective of the meeting is to provide a platform for regulatory authorities to share the actions taken by their agencies to prevent potential drug shortages or supply disruptions and measures taken to fulfill the increasing demand for alcohol sanitizer products and PPE during the early phase of COVID-19 pandemic. The meeting also discusses potential collaborations to enable information sharing of regulatory updates with regards to COVID-19.

OPERATION PANGEA XIII

Operation Pangea XIII that was held from 3 -10 March 2020 was Malaysia's 8th participation since Operation Pangea began. Operation Pangea XIII which was coordinated by INTERPOL targeted websites and social media selling and promoting illicit drugs including medical devices. This year, the operation focuses on the sale of illicit medicines and medical devices for COVID-19 treatment.

During the operation, a total of 347 personal websites, 360 accounts on social media platforms and 585 links on e-marketplace platforms found to be selling pharmaceutical products that violated the provisions of the law were monitored, investigated and taken action on.

In addition, a total of 853 postal packages were inspected. Out of these numbers, 79 postal packages contained unregistered Pharmaceutical products were confiscated. Inspections were also conducted at all major entry points across the country involving air cargo, airports, border posts and ferry terminals. A total of 1,026,857 units of unregistered medicines were confiscated with a seizure value of RM 2,554,456.00.



The raid was also carried out on 50 unlicensed premises where 23,278 pharmaceutical products that violated the provisions of the law were confiscated for further action.

Emphasis was also placed on activities to increase consumer awareness of the risks and dangers of purchasing medicines online. A total of 196 consumer awareness campaigns were conducted during the period of Operation Pangea XIII.

Activities related to the Online Drug Purchase Alert Campaign were streamlined and improved throughout 2020 while still maintaining the existing tagline which is #biarbetuliklanni!. Various activities have been implemented throughout 2020. These activities were carried out in line with the first objective of the Pharmacy Enforcement Action Plan 2020 which is to reduce the sale and advertising of unregistered pharmaceutical products and poisons in the new or online media. Activities that were carried out include radio and television interview sessions and announcements about

the dangers of buying medicines online through Facebook Ads, article write-ups, Youtube, digital screen and others.

Image 8.2
Inspection of Postal Packages



Source: Pharmacy Enforcement Division

WAY FORWARD

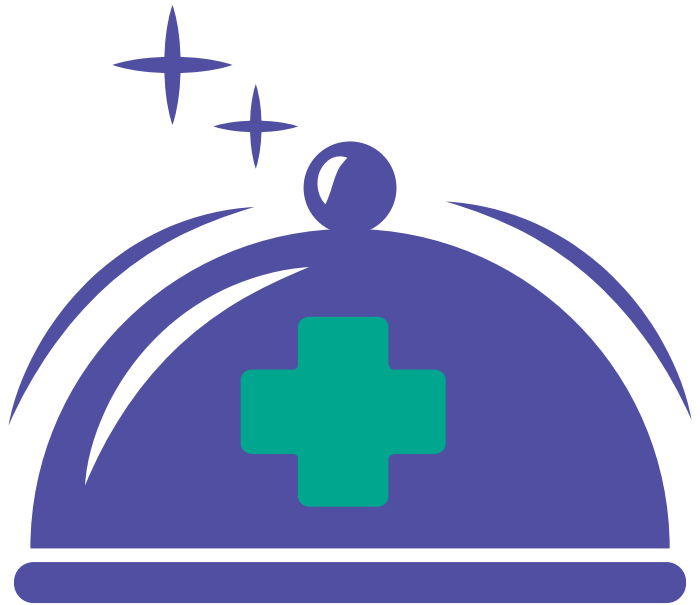
As part of the Ministry of Health Malaysia, the Pharmaceutical Services Programme looks forward to complementing the Ministry's goals and aspirations over time. In the meantime, to serve for growing health care demands, the Programme has constructed strategic plans with initiatives and targets clearly expressed down the road for the next five (5) years.

As an organisation comprises of five (5) Divisions, the Programme has built its foundation in various prospects from customer engagement, innovation-driven, sustaining operational excellence to enhancing capability building with shared values and leadership practices. The Programme has designed strategies in different aspects as such:

- Multi-sectorial engagements for medicinal products and health awareness
- Value proposition and role of pharmacy services
- ICT-based service innovations
- Research findings in policy development and practice
- Governance and regulatory control
- Monitoring product sales and advertisements
- Accessibility of pharmaceutical products
- Pharmacy resources
- Organisational efficiency, capacity and competency

CONCLUSION

COVID-19 pandemic had caused an impediment to some of the initiatives and activities planned for the year 2020. Despite battling COVID-19 and more challenges ahead, the Programme will continue to execute the duties and remain committed to the Programme's objectives in assuring medicines and pharmacy services provided are to the standard and accessible by the people.



09

FOOD SAFETY & QUALITY



FOOD SAFETY & QUALITY

INTRODUCTION

The Food Safety and Quality Program (FSQP) is responsible to protect the public against health hazards and fraud in the storage, preparation, processing, packaging, transportation, sale and consumption of food and facilitate food trade through various activities under the food safety assurance program. The mandate for this control is provided under the Food Act 1983 and its regulations.

ACTIVITIES AND ACHIEVEMENTS

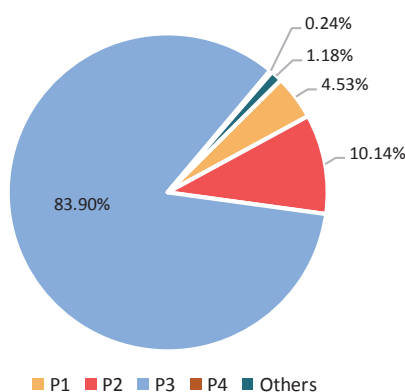
DOMESTIC COMPLIANCE

REGISTRATION OF THE FOOD PREMISES

Under Regulation 3 of the Food Hygiene Regulations 2009 (PPKM 2009), all food premises shall be registered with the Ministry of Health (MOH). A total of 26,619 food premises have been registered by the owner of the premises through online applications <http://fosimdomestic.moh.gov.my/until> 31 December 2020. This amount consists of 1,207 (4.53%) food factories (P1), 2,700 (10.14%) food premises involved in food catering (P2), 22,334 (83.90%) premises food outlets (P3), 63 (0.24%) vehicles selling food (P4) and 315 (1.18%) other food premises (Figure 9.1).

Figure 9.1

Percentage Of Registered Premises By Category For The Year 2020 (January To December)

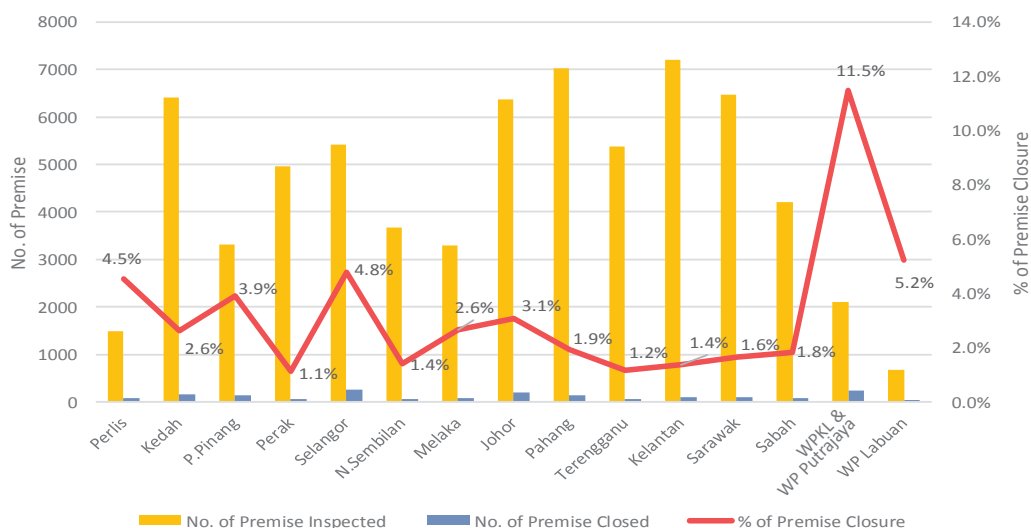


Source: Food Safety and Quality Program, MOH

FOOD PREMISE HYGIENE INSPECTION

Food premise hygiene inspection is a routine activity to ensure the cleanliness of the premises are in good condition and comply with the Food Act 1983 and Food Hygiene Regulations 2009. In 2020, out of a total of 67,976 food premises inspected, 1,751 (2.58%) insanitary food premises was closed under Section 11 of the Food Act 1983, while a total of 29,286 notices of the offense under Section 32B of the Food Act 1983 for offenses under the Food Hygiene Regulation 2009 was issued to owners of food premises and food handlers. [Figure 9.2](#) shows the number of premises inspected and the percentage of food premises closure by the state for 2020.

Figure 9.2
Number Of Food Premises Inspection And Percentage Of Food Premises Closure by State for 2020

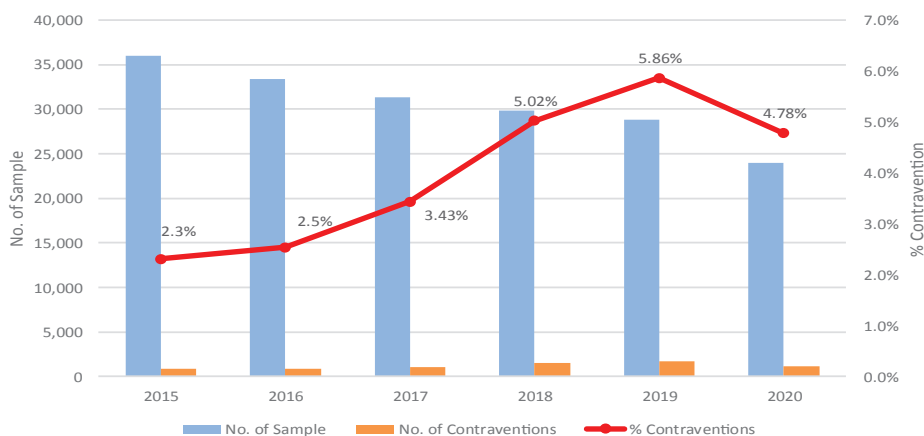


Source: Food Safety and Quality Program, MOH

FOOD SAMPLING

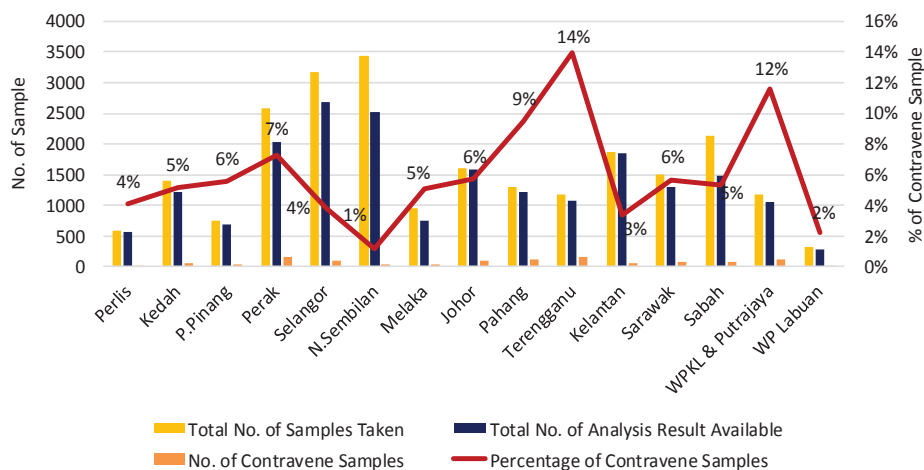
Food sampling is carried out to ensure that food is prepared or sold in Malaysia complies with the requirements of the Food Act 1983 and its regulations 2020, a total of 23,949 samples were taken and analysed by the Food Safety and Quality Laboratory (MKKM) including other laboratories gazetted under the MOH. From the analysis, 1,144 (4.78%) of the samples were found to violate the Food Act 1983 and its regulations. [Figure 9.3](#) shows the number of samples taken for 2015 to 2020 which shows a reduction trend for 2020 compared to 2019. [Figure 9.4](#) shows the achievement based on the state with two (2) states detected to have a collision rate of more than 10 per cent, namely Terengganu (14.0%) and the Federal Territory of Kuala Lumpur and Putrajaya (12.0%).

Figure 9.3
Number Of Sample Taken And Percentage Of Contravention For 2015 To 2020



Source: Food Safety and Quality Program, MOH

Figure 9.4
Number of Sample Taken and Percentage of Contravention by State for 2020



Source: Food Safety and Quality Program, MOH

SPECIAL OPERATION (THEMED)

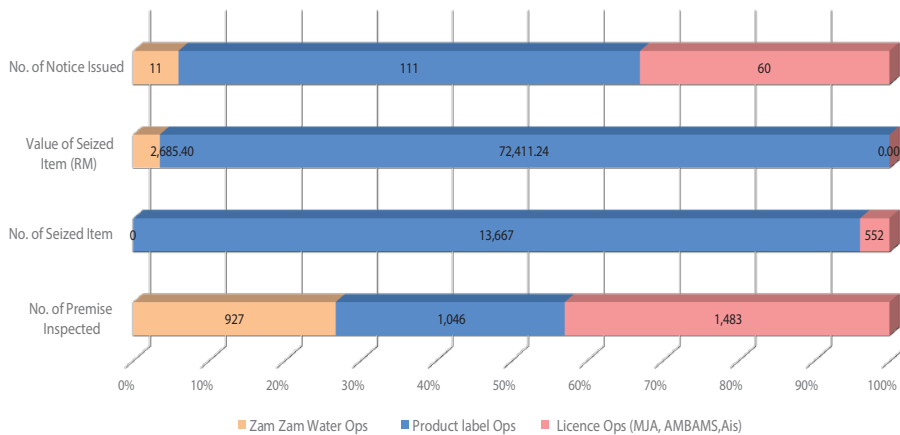
In 2020, the Domestic Compliance Branch had continued Special Operations (Themed) as a proactive measure to address food safety issues. A total of three (3) Special Operations were carried out in 2020 namely Zam Zam Water Ops, Import Product Labeling Ops and License Ops for water vending machine (MJA), natural mineral water and packaged drinking water (AMBAMS) and ice (Image 9.1 and Figure 9.5).

Image 9.1
The Ops Khas 2020



Source: Food Safety and Quality Division, State Health Department

Figure 9.5
Summary Report For The Three Special Operations For 2020



Source: Food Safety and Quality Program, MOH

FOOD IMPORT CONTROL

Food import control activities are undertaken nationwide cover 56 entry points throughout the country which are under the supervision of the FSQD, MOH. A total of 219,053 food consignments were imported into Malaysia in 2020 compared to a total number of 321,828 food consignments in 2019. The decrease in food consignments this year is a result of the Covid-19 pandemic, which affected international trade especially in the early stages of the disease. From the total, 118,997 (54%) consignments were inspected and 3,740 (3.1%) consignments were sampled for analysis of various types of parameters. Of the total number of sampling that was taken, 39 (1%) of the food samples were found to have violated the Food Act 1983 and its regulations.

Meanwhile, for the inspection of compliance with imported food products, 260 (0.81%) of the 32,102 did not comply with the food labeling provisions under the Food Act 1983 and its regulations. From the non-compliance, 225 (94.5%) of the 238 re-labeling applications were approved.

FOOD EXPORT CONTROL

EXPORT MONITORING PROGRAM

The monitoring program is one of the activities under the official control of the MOH. It is developed specifically by commodities and importing countries' requirements. Due to the COVID-19 pandemic, the frequency of sampling activities of all monitoring programs was rescheduled to enable comprehensive implementation of all the listed premises. The total of sampling for export monitoring program as stated in [Image 9.2](#).

Image 9.2
Sampling For Export Monitoring Program Year 2020

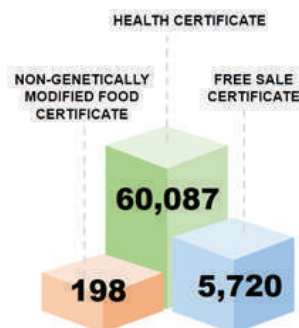


Source: Food Safety and Quality Program, MOH

ISSUANCE OF EXPORT CERTIFICATES

Issuance of export certificate to the exporter is to comply with importing country requirements. For the year 2020, a total of 66,005 export certificates had been issued to the exporter ([Image 9.3](#)).

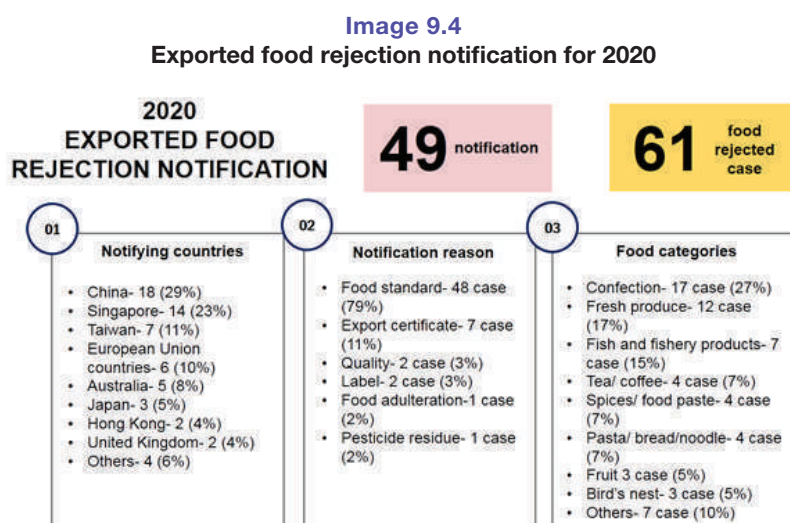
Image 9.3
Issuance of Export Certificates for the Year 2020



Source: Food Safety and Quality Program, MOH

EXPORTED FOOD REJECTION NOTIFICATION

Exported food rejection notification refers to information on rejected/contravened/recalled exported products that not complied with the importing country's requirements. By 2020, Malaysia had received 49 notifications and 61 food rejected cases. Summary for exported food rejection notification as detailed in [Image 9.4](#).



Source: Food Safety and Quality Program, MOH

FOREIGN VERIFICATION AUDIT VISIT

Foreign verification audit visits from importing countries of South Korea, Dominican Republic, and China have been conducted to evaluate the food safety system implemented by Malaysia along the export production chain ([Table 9.1](#)).

Table 9.1
Foreign Verification Audit Visit

Country	Agency	Commodity	Date	Audit Method
Dominican Republic	Ministry of Agriculture	Milk and Dairy Products	20 – 22 January 2020	Onsite Audit
South Korea	Ministry of Food and Drug Safety (MFDS)	Miscellaneous	1 May– 31 July 2020	Documentation Audit
China	General Administration of Customs, People's Republic of China (GACC)	Fish and Fishery Products	13 October 2020	Video Inspection
		Frozen Durian (Pulp, Paste and Whole Fruit)	20-22 October 2020	Video Inspection

Source: Food Safety and Quality Program, MOH

FOOD CERTIFICATION SCHEME AND RECOGNITION

Hazard Analysis Critical Control Points (HACCP) and Good Manufacturing Practice (GMP) Certification Scheme are internationally recognized Food Safety Assurance Program in ensuring food safety. Meanwhile, *Makanan Selamat Tanggungjawab Industri* (MeSTI) certification scheme is focusing on small and medium enterprises (SMEs) to fulfill the requirements provided under the Food Hygiene Regulations 2009.

“*Bersih, Selamat dan Sihat*” recognition or BeSS also offered to food outlets such as restaurants, food stalls, cafeterias and mobile premises such as food trucks. [Table 9.2](#) shows the total numbers of certificates issued until the year 2019.

Table 9.2
Foreign Verification Audit Visit

			
1,106	1,133	5,044	8,184

Source: Food Safety and Quality Program, MOH

LICENSING ACTIVITIES

Under the Food Regulations 1985, all processing premises of natural mineral water, packaged drinking water, ice and vend water, which are for trade or business purposes, shall be licensed by the Ministry of Health (MOH). [Table 9.3](#) shows the total number of license issuances for natural mineral water, packaged drinking water, ice and water vending machine in the year 2020.

Table 9.3
License Issuances of Natural Mineral Water, Packaged Drinking Water, Ice and Water Vending Machine in the Year 2020

Natural Mineral Water	Packaged Drinking Water	Ice	Water Vending Machine
2	14	146	1,892

Source: Food Safety and Quality Program, MOH

OTHER ACTIVITIES

COVID-19 EDUCATIONAL MATERIALS

The COVID-19 pandemic that hit the country has led to the implementation of the Movement Control Order (PKP) starting on 18 March 2020. During this pandemic, BKKM take an initiative to produce educational materials such as infographics, guidelines and videos related to the COVID-19 issue for information and guidance to the public. [Image 9.5](#) shows some of the educational materials produced in 2020.

Image 9.5
Guidelines and Infographics



Source: Food Safety and Quality Program, MOH

WORLD FOOD SAFETY DAY CELEBRATION AT NATIONAL LEVEL 2020 WITH THE LAUNCH OF FOOD ADVERTISING GUIDELINES

FSQP in collaboration with the State Health Department (JKN) nationwide has implemented the launch of the World Food Safety Day Celebration 2020 simultaneously through virtual online using the Zoom application and live streaming on Facebook on 3 September 2020. Food Advertising Guidelines were also launched during the ceremony. This activity was the first to be carried out in MOH under the practice of new norms (Image 9.6).

Image 9.6

World Food Safety Day Celebration 2020 at National Level With The Launch of Food Advertising Guidelines



Source: Food Safety and Quality Program, MOH

MEETING OF FOOD SAFETY AND NUTRITION CLUSTER

The Ministry of Health (MOH) has been given the responsibility to lead the Food Safety and Nutrition Cluster assisted by the Secretariat of the National Food Safety and Nutrition Council (NFSNC). Activities under this cluster are on utilization which is focused across the food value chain. The first Food Safety Cluster Meeting chaired by the Secretary-General of the Ministry of Health Malaysia was held in hybrid on 21st December 2020 (Image 9.7). This cluster meeting was attended by senior officials from various agencies under the Ministry, academia, and non-governmental organisations

Image 9.7
Food Safety and Nutrition Cluster Meeting on 21 December 2020



Source: Food Safety and Quality Program, MOH

MUTUAL RECOGNITION ARRANGEMENT FOR INSPECTION AND CERTIFICATION SYSTEM ON FOOD HYGIENE FOR PREPARED FOODSTUFF PRODUCTS (MRA ON PF)

The ASEAN MRA on PF is developed to enable the mutual recognition of inspection and certification systems on food hygiene for products under the HS Code 16-22 to facilitate free flow trade in ASEAN and protect the consumer's health. In 2020, a total of 29 auditors from the ASEAN Member States were approved as Experts Panel including four (4) from Malaysia for the implementation of MRA on PF in ASEAN.

DEVELOPMENT OF ASEAN FOOD SAFETY REGULATORY FRAMEWORK (AFSRF) AGREEMENT

The draft AFSRF Agreement is developed to provide a coherent and integrated approach that links the ASEAN food safety initiatives in a legal framework, closing gaps and ensuring that food safety is implemented across the food chain. The draft Agreement has been finalised by the 6th Task Force AFSRF and is expected to be signed by circulation at the 1st half of 2021, due to pandemic Covid-19 (Image 9.8).

Image 9.8
The 6th Meeting of Task Force on the Development of ASEAN Food Safety Regulatory Framework Agreement, 4 to 6 March 2020



Source: Food Safety and Quality Program, MOH

CONCLUSION

The FSQP will always be committed to strengthening food safety and quality control throughout the food supply chain through accountability with stakeholders to ensure that the people at every stage receive safe and quality food in line with the Shared Prosperity Vision 2030.



10

**MEDICAL DEVICE
AUTHORITY**



MEDICAL DEVICE AUTHORITY

INTRODUCTION

Medical Device Authority (MDA) is the government agency entrusted to serve the Malaysia medical devices industry and was established under Act 738. It is a federal statutory agency under the Ministry of Health Malaysia to implement and enforce the Medical Device Act 2012 (Act 737).

The major objectives of the Act are to address public health and safety issues related to medical devices and to facilitate medical device trade and industry. MDA functions are as follows:

- Registration of medical devices, conformity assessment bodies, issuing of establishment license, surveillance and vigilance of post-market and advertisements, and enforcement.
- To implement, enforce, assess and propose relevant improvements to the Medical Device Act.
- Supervise all medical device matters involving its industries and activities.
- To encourage and promote medical device development, medical device industry and its activities including research and training.
- To provide consultation, advice and any other services involving the medical device industry and its activities.
- Imposing fees or any charges on services that were provided by the Authority.

MDA is led by the Director-General of Health, YBhg. Tan Sri Dato' Seri Dr. Noor Hisham bin Abdullah as chairman and the Authority also comprise MDA's Chief Executive, a representative of the Ministry of Finance, a representative of the Ministry of Health and representatives from the medical device industry in Malaysia.

Presently, in terms of management and administration, MDA is led by the Chief Executive assisted by three (3) division directors. MDA organisation structure comprises three divisions and two units which are known as Registration, Licensing and Enforcement Division, Policy, Code and Standard Division, Technical Evaluation Division, Management Services Unit and Corporate Communication Unit. MDA is also supported by a legal advisor officer and an integrity officer.

ACTIVITY AND ACHIEVEMENT

MEDICAL DEVICE REGISTRATION

Throughout the year 2020, MDA has successfully evaluated and registered 4,852 medical device applications. MDA has also received 3,742 Change Notification applications that apply to registered medical devices. The amount of a medical device that was registered, classified according to their classes, are as follows:

Table 10.1
Total Of Medical Device Application Registered By Class And Change Notification
Application For The Year 2020

No.	Risk Class	Number Of Medical Devices Registered	Number of Change Notification Applications
1.	Kelas A	2,404	722
2.	Kelas B	1,276	1,320
3.	Kelas C	907	1,087
4.	Kelas D	234	613
5.	Kombinasi	4	-
6.	Produk Ancillary	27	-
Total		4,852	3,742

Source: Registration Department, MDA

ESTABLISHMENT LICENSING

MDA has approved a total of 361 new establishment licensing applications and a total of 449 licenses renewed. Request for amendment and change of ownership recorded a total of 286 and 532 applications respectively. For establishment licensing, the amount of establishment licenses application that was evaluated and registered are as follows:

Table 10.2
Number Of Establishment License Application Registered For The Year 2020

No.	Type Of Application	No of Applications Registered
1.	New Application	361 licenses
2.	Establishment License Renewal	449 licenses
3.	Amendment	286 licenses
4.	Change of Ownership	532 licenses

Source: Establishment Licensing Department, MDA

SURVEILLANCE AND ENFORCEMENT

The achievements for surveillance and enforcement activities are as follows:

Table 10.3
Number of Surveillance and Enforcement Activities Conducted For The Year 2020

No.	Activity	Number
1.	Complaints received	114
2.	Inspection and intelligence conducted	148
3.	Issuance of enforcement warning letter	31
4.	Issuance of warning letter on misleading advertising	96
5.	Raids and confiscation	2
6.	Removal of non-registered medical devices from e-commerce platforms	20,295
7.	Educational inspection on the face mask	49
8.	Complaints completed	35
9.	Pre-registration CAB inspection	2
10.	CAB surveillance inspection	5
11.	"Witness" Inspection on CAB auditor	4
12.	Surveillance inspection on establishments	19

Source: Enforcement Unit and Policy, Code and Standard Division, MDA

CERTIFICATE OF FREE SALES (CFS), MANUFACTURING CERTIFICATE (MC)/CFS FOR EXPORT-ONLY, AND EXEMPTION NOTIFICATION (EXPORT-ONLY AND IMPORT FOR RE-EXPORT)

Achievement for application of CFS, MC, exemption notification of export-only and import for re-export are as follows:

Table 10.4
Number of CFS, Exemption Notification on Export-Only and Import for Re-Export Application For The Year 2020

No.	Activity	Number
1.	CFS application evaluation	678
2.	CFS for Export-Only application evaluation	120
3.	MC application evaluation	30
4.	Issuance of notification letter for export-only	95
5.	Issuance of notification letter for re-export	11

Source: Policy, Code and Standard Division, MDA

EXEMPTION NOTIFICATION, SPECIAL ACCESS APPLICATION, AND PRODUCT CLASSIFICATION

Achievement for Exemption Notification, Special Access Application, And Product Classification is as follows:

Table 10.5
Number Of Exemption Notification, Special Access Application, and Product Classification For The Year 2020

No.	Activity	Number
1.	Application evaluation on Notification for Active Medical Device (ventilator, PT Monitor, SPO2, RO)	Number of applications received: 15 Number of Notification Letter issued out: 12
2.	Application evaluation on Notification for X-ray	Number of applications received: 2 Number of Notification Letter issued out: 2
3.	Application evaluation on Notification for COVID-19 IVD Test Kit	Number of applications received: 536 Number of Notification Letter issued out: 295
4.	Application evaluation on Notification for normal procedure	Number of applications received: 100 Number of Notification Letter issued out: 77
5.	Application evaluation for Notification on: i. PPE (<i>Personal Protective Equipment</i>) ii. <i>Non-contact infrared thermometers - NCITs</i>	Number of applications received: i. PPE (<i>Personal Protective Equipment</i>): 87 ii. <i>Non-contact infrared thermometers - NCITs</i> : 45 Number of Notification Letter issued out: i. PPE (<i>Personal Protective Equipment</i>): 16 ii. <i>Non-contact infrared thermometers - NCITs</i> : 39
6.	Issuance of Product Classification letter	411

Source: Technical Evaluation Department. MDA

WAY FORWARD

MDA will strive to play its role and functions in achieving the Vision to be an internationally recognized regulatory authority providing world class services in a leading medical device hub for a safe and effective healthcare environment of the nation by the year 2023. Missions have also been identified in line with the Vision as set out in the MDA Strategic Plan for 2019 to 2023.

The first mission is effective in the control and enforcement of the act. Provision of legal control over the medical device industry in Malaysia through compliance with the Act and regulations under it to ensure the performance of safety and public healthcare leading to customer satisfaction.

Second, driven by technology and human resource competencies. Continuous development of human resource competencies for the sustainability of the organisation's effectiveness. Continuous development of delivery process through the use of "state-of-the-art" information and communication technology.

Third, customer engagement and stakeholders. Collaborative and consultative relationships can benefit the needs of customers, stakeholders and consumers.

The fourth mission, to create and strengthen international relationships through harmonization and recognition (MOU/MRA).

MDA is determined to keep advancing through the development of more comprehensive guidelines that focuses on policy, regulatory documentation, standards and control mechanism, list development, and medical device regulatory library that contain references related to medical device control programs such as information on registered medical device, establishment license and other related data.



11

DEVELOPMENT



DEVELOPMENT

INTRODUCTION

The Development Division, Ministry of Health Malaysia (MOH) is responsible for managing activities related to the management, planning, implementation, control, monitoring and evaluation of the development programs and projects of MOH's health facilities implemented under the Malaysia Plan (RMK). The division was formerly known as the Planning and Development Division, but later was separated into two (2) new entities namely the Planning Division and the Development Division with different functions after the organisational restructuring took place on 1 September 2012. Subsequently on 27 September 2018, the Development Division went through the rebranding of its organisation in which the responsibilities and functions were reorganised into three (3) main sections and supported by 12 units as follows:

- A. Section of Project Management I:
 - 1. Project 1 (North Region) Unit
 - 2. Project 2 (Central Region) Unit
 - 3. Project 3 (East Region) Unit
 - 4. Public, Private and Partnership Unit
- B. Section of Project Management II:
 - 5. Project 4 (South Region) Unit
 - 6. Project 5 (Sabah and Sarawak) Unit
 - 7. Budget RMK Unit
 - 8. Technical and Procurement Unit
- C. Section of Resource Management:
 - 9. Land Unit
 - 10. Finance and Administration Unit
 - 11. Coordination (Visits/Parliament) Unit
 - 12. Coordination (Meeting Secretariat) Unit

ACTIVITIES AND ACHIEVEMENTS

DEVELOPMENT EXPENDITURE IN 2020

In the 11th Malaysia Plan (RP4) Year 2020, MOH was granted with the development expenditure (DE) of RM2.661 billion for the implementation of 363 development projects of health facilities involving 65 new projects and 298 extension projects. During the time, MOH had received two (2) Notices of Restriction on Warrant Allocation consecutively on 5 July 2020 and 2 September 2020 for the overall total of RM350,000. It resulted in the actual allocation of DE approved for the year 2020 was RM2.311 billion.

The spending performance of DE as of 31 December 2020 was RM3.858 billion, which represented the overall 166.98 per cent of the annual allocation approved for MOH. Details of MOH's development expenditure is stated in [Table 11.1](#).

Table 11.1
The Ministry of Health's Development Expenditure in 2020

Project	Current Expenditure 2020 (RM)	Liability 2020 (RM)	Expenses 2020 (RM)	Liability + Expenses 2020 (RM)	%
BP 100 – Training	19,577,200	3,912	18,789,470	18,793,382	96.00
102 Upgrading Training Projects	4,351,300	0	4,340,560	4,340,560	99.75
105 In Service Training	15,225,900	3,912	14,448,910	14,452,822	94.92
BP 200 – Public Health	315,774,630	4,962,375	305,138,213	310,100,588	98.20
201 Public Health Service Rural Areas	105,302,070	101,000	99,382,078	99,483,078	94.47
202 Water Supply and Environmental Health (BAKAS)	9,156,000	0	9,096,309	9,096,309	99.35
203 Public Health Service City Areas	200,416,560	4,861,375	195,759,826	200,621,201	100.10
204 Mobile Clinic	900,000	0	900,000	900,000	100.00
BP 300 – Health Facilities	797,768,640	6,252,461	2,365,102,808	2,371,355,270	297.25
BP 400 – Hospital	215,684,600	249,867	215,236,867	215,486,734	99.91
BP 500 – Research & Development (R&D)	13,965,500	0	13,733,808	13,733,808	98.34
BP 600 – Upgrading & Maintenance	115,273,700	3,426,228	108,020,928	111,447,157	96.68
BP 700 – Land Acquisition & Maintenance	28,699,000	207,831	28,480,016	28,687,848	99.96
BP 800 – Information & Technology (ICT)	28,929,500	0	24,370,763	28,928,952	84.24
BP 900 – Quarters Maintenance	14,890,100	0	14,852,693	14,852,693	99.75
BP 900 – Staffs Facilities	77,648,520	22,490	76,983,129	77,005,619	99.17
901 Rural Areas Quarters	14,461,710	0	14,460,112	14,460,112	99.99
902 City Areas Quarters	7,080,000	0	6,442,903	6,442,903	91.00
904 State Health Office	56,106,810	22,490	56,080,113	56,102,603	99.99
BP1100 – Equipment and Vehicles	682,338,610	8,289,247	664,018,475	672,307,722	98.53
Total	2,310,550,000	23,414,412	3,834,727,082	3,858,141,494	166.98

Source: Development Division, MOH

LAND MANAGEMENT AND MONITORING

The Development Division is also responsible for administering the management and acquisition of land and buildings in accordance with the National Land Code 1965, the Land Acquisition Act 1960 and the relevant Treasury Circulars for the development of health facilities. The land acquisition processes for developing the health facilities of MOH all over the country must be with the consent of the Land Management and Monitoring Committee (JKPPT) chaired by the Secretary-General of MOH. A total of 75 application papers were submitted by various agencies under the MOH for land acquisition and presented in JKPPT. [Table 11.2](#) indicates the list of JKPPT meetings held in the year 2020.

Table 11.2
List of JKPPT Meeting in the Year 2020

No.	Meetings	Date	Numbers of Papers
1.	MJKPPT Bil. 1/2020	24 February 2020	9
2.	MJKPPT Bil. 2/2020	30 June 2020	17
3.	MJKPPT Bil. 3/2020	27 August 2020	17
4.	MJKPPT Bil. 4/2020	19 October 2020	17
5.	MJKPPT Bil. 5/2020	16 December 2020	15
Total			75

Source: Land Unit, Development Division, MOH

TRAINING DEVELOPMENT FOR ENHANCING THE OFFICERS' COMPETENCIES

The Development Division also focused on designing, planning and implementing the Training Operation Plan to enhance the competencies of its officers in managing and performing tasks, especially in project management as well as updating information in the SPPII system. The list of the training development activities held throughout the year 2020 is as per [Table 11.3](#) below.

Table 11.3
List of Training Activities for Competency Development for The Year 2020

No.	Activity	Date
1.	Training Session on Project Monitoring System II (SPP II) (Series 1) at BPM Training Room, Level 5, Block E7	2 June 2020
2.	Training Session on Project Monitoring System II (SPP II) (Series 2) at Bilk Gerakan, Level 3, Block E3	3 July 2020
3.	Training Session on Project Monitoring System II (SPP II) (Series 3) at BPM Training Room, Level 5, Block E7	6 July 2020
4.	Review Workshop on The Implementation of Health Facility Development Project, MOH at Avilion Port Dickson, Negeri Sembilan	9 to 10 August 2020

Source: Coordination Unit, Development Division, MOH

Image 11.1

Training Session on Project Monitoring System II (SPP II) (Series 2) at Bilik Gerakan, Level 3, Block E3 on 3 July 2020



Image 11.2

Training Session on Project Monitoring System II (SPP II) (Series 3) at BPM Training Room, Level 5, Block E7 on 6 July 2020



Image 11.3

Review Workshop on The Implementation of Health Facility Development Project, MOH at Avilion Port Dickson, Negeri Sembilan on 9 – 10 August 2020



Source: Coordination Unit, Development Division, MOH

THE AWARDS OF COMPLETED HEALTH FACILITY DEVELOPMENT PROJECTS

The process of awarding the completed health facility development projects involved the inspection on the projects with the end-user, Public Works Department (JKR) and the contractors involved. After the facility building was completely built and all related processes were properly undertaken, the key was awarded to the end-user, namely the State Health Department or health institutes. In 2020, a total of 10 MOH's completed health facility development projects were awarded to the end-users as stated in [Table 11.4](#) below.

Table 11.4
List of MOH's Health Facility Development Projects Awarded in the Year 2020

No.	Projects Completed and Delivered	Date
1.	Surgical And Hemodialysis Chamber Of Hospital Papar, Sabah	8 Jan 2020
2.	Health Clinic (Type 3) With Quarters Of Kuala Kangsar, Perak	18 July 2020
3.	Health Clinic (Type 2) With Quarters Of Batu Berendam, Melaka	8 August 2020
4.	Health Clinic (Type 3) Kampung Gial, Perlis	25 August 2020
5.	Health Clinic (Type 2) Batu Muda, W.P. Kuala Lumpur	5 Sept 2020
6.	Department Of Transfusion Medicine, Hospital Raja Perempuan Zainab II, Kota Bharu, Kelantan	12 Sept 2020
7.	Health Clinic (Type 3) Bukit Indah, Johor	8 Nov 2020
8.	Health Clinic (Type 3) Benut, Pontian, Johor	8 Nov 2020
9.	Quarters Of Health Clinic Kuala Tahan, Jerantut, Pahang	7 Dec 2020
10.	Health Clinic (Type 7) Chuping, Perlis	23 Dec 2020

Source: Coordination Unit, Development Division, MOH



12

INTERNAL AUDIT



INTERNAL AUDIT

INTRODUCTION

The Internal Audit Division (IAD) of the Ministry of Health (MOH) was established in 1980 following the Treasury Circular No.2 Year 1979. The roles and responsibilities of IAD have been strengthened through Treasury Circular PS 3.1/2013, through the Implementation of Internal Audit of the Ministry or Department of the Federal and State Government. The IAD is headed by the Head of Internal Audit which is part of the Ministry's internal control component and serves to assure Management regarding the control process and its impact on governance.

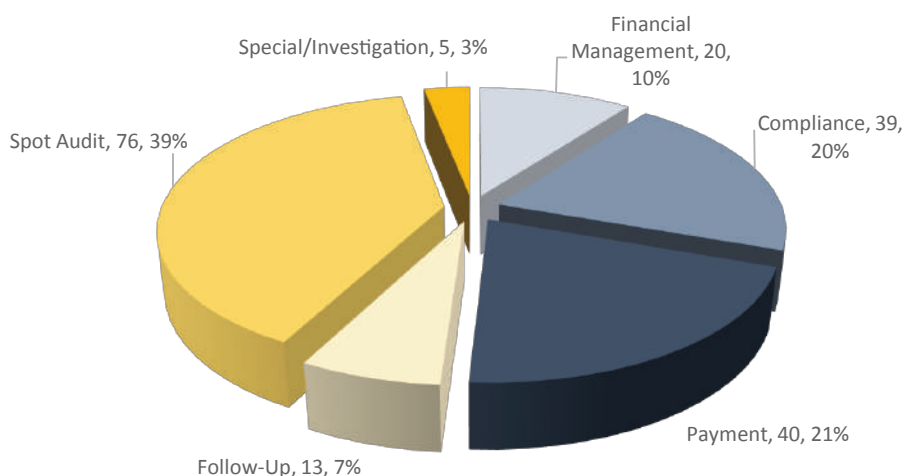
ACTIVITIES AND ACHIEVEMENTS

In line with PS 3.1 and auditing standards of The International Organization of Supreme Audit Institutions (INTOSAI) and The Chartered Institute of Internal Auditors, IAD has implemented three (3) types of auditing programs throughout 2020 involving Financial Auditing, Performance Auditing and Verification of Initial Balance of Asset and Liabilities (Accrual Accounting).

FINANCIAL AUDITING

Financial Auditing covers a wide range of methods that include auditing of internal controls, compliance with financial/legal regulations including financial records as well as the financial system established at the Responsibility Centres (RCs). In 2020, IAD had conducted six (6) types of activities under Financial Auditing including Financial Management Auditing, Compliance audit, Payment, Follow-up audit, Spot Audit and Special/Investigation Audit (Figure 12.1).

Figure 12.1
Percentage Of Financial Audits Conducted In 2020



Source: Internal Audit Division, MOH

PERFORMANCE AUDITING

IAD had also carried out performance auditing to evaluate whether the Federal Government activities had been carried out efficiently, economically and effectively to achieve its desired objectives. In the year 2020, a total of nine (9) performance audits had been conducted involving procurement management, programs/activities management and ICT project (Table 12.1).

Table 12.1
List of Performance Audits

No.	Topics
1.	Management of Diagnostic and Imaging Services (Radiology)
2.	Management of Rehabilitation Treatment Activities at MOH Hospital
3.	Management of Seizures Item
4.	Management of Quarters in Health Clinics
5.	Management of In-House Food Preparation Services at MOH Hospital
6.	Management of Disposal Assets (Medical Equipment) at MOH Hospital
7.	Management of Ambulance Boat at MOH
8.	Management of TPC-OHCIS System in MOH Clinics
9.	Management of Radiotherapy and Oncology Services at the National Cancer Institute

Source: Internal Audit Division, MOH

The audit results and findings raised in the audit report had been presented in the Audit Committee's Meeting following the requirements of the Treasury Circular PS 3.2. The two (2) outcomes of the Audit Committee's Meeting are the recommendations for improvement of the processes and procedures to strengthen the internal controls and the punitive actions to be taken by the Integrity Unit for cases that have been identified requiring further action.

VERIFICATION OF INITIAL BALANCE OF ASSET AND LIABILITIES (ACCRUAL ACCOUNTING)

As agreed in the Accrual Committee Meeting, IAD needs to perform verification of the initial balance of assets and liabilities on the Ministry's financial statements, the balance sheet items. In the year 2020, IAD had conducted four (4) activities to verify the balance of assets and liabilities on the items of the financial statements in line with the implementation of Federal Government Accrual Accounting. The verification audit performed involves the confirmation of the initial balance data of Assets and Liabilities (Additional items such as land and buildings), Immovable Assets, Intangible Assets and Accounts Receivable (Hospital Treatment Charges).

CONCLUSION

The roles and functions of the internal audit carried out by IAD can be achieved with the support of various levels of Management in MOH and the Responsibility Centres (RCs). All efforts taken by every individual in MOH to rectify and improve shortcomings in processes and procedures as well as upheld governance has helped MOH to strengthen the public service delivery system in the healthcare sector.



13

CORPORATE COMMUNICATION



CORPORATE COMMUNICATION

INTRODUCTION

The Corporate Communications Unit was established to enhance the image of the ministry, promote the policies and programs of the ministry through an organised and effective public relations strategy. In addition, Corporate Communications Unit acts as the frontline unit in managing customer service and public complaints. This unit consists of five sections:

- i. Media Section
- ii. Strategic Communications Section
- iii. Corporate Affairs Section
- iv. Public Response Management Section
- v. Customer Service Section

ACTIVITIES AND ACHIEVEMENTS

MEDIA SECTION

Table 13.1
Media Section Activities in 2020

No.	AKTIVITI
1.	Media Briefing Session on COVID-19 Test Detection Process and Procedures by Institute for Medical Research (IMR), Ministry of Health Malaysia on 26 th February 2020.
2.	Media Visit to COVID-19 Low-Risk Quarantine and Treatment Centre at Malaysia Agro Exhibition Centre (MAEPS) Serdang on 3 rd April 2020.
3.	Media Engagement Night with Deputy Health Minister I on 9 th July 2020.
4.	Media Management Session with the Director-General of Health: Preparedness by the Ministry of Health Malaysia in Facing with the COVID-19 Pandemic on 29 th July 2020.
5.	A total of 260 interview sessions with the Ministry of Health Malaysia's top management and experts were held in the electronic media (TV and radio) as well as the print media (newspapers and magazines) throughout 2020.
6.	A total of 105 Press Conferences were conducted throughout 2020 on the current situation of COVID-19 starting 29 th January 2020.
7.	Ministry of Health Malaysia signed COVID-19 Vaccine Supply Agreement with pharmaceutical company Pfizer on 24 th November 2020 for the supply of vaccines.

Source: Media Section, Corporate Communications Unit, MOH

MEDIA BRIEFING SESSION ON COVID-19 TEST DETECTION PROCESS AND PROCEDURES BY INSTITUTE FOR MEDICAL RESEARCH (IMR), MINISTRY OF HEALTH MALAYSIA

A total of 27 journalists and photographers from the print and electronic media visited the Medical Laboratory of the Institute for Medical Research (IMR), Ministry of Health Malaysia (MOH) in Kuala Lumpur on 26 February 2020. This program aims to introduce to all media practitioners how COVID-19 samples are processed starting from the Sample Acceptance Unit until laboratory results are obtained.

Image 13.1

Media Briefing Session on COVID-19 Test Detection Process and Procedures



Source: Media Section, Corporate Communications Unit, MOH

MEDIA VISIT TO COVID-19 LOW-RISK QUARANTINE AND TREATMENT CENTRE AT MALAYSIA AGRO EXHIBITION CENTRE (MAEPS) SERDANG

Media Visit to COVID-19 Low-Risk Quarantine and Treatment Centre (PKRC) at MAEPS, Serdang was held on 3 April 2020. PKRC was developed as one of the Government's proactive efforts in preparing health facilities to cope with the outbreak of COVID-19. This can accommodate a total of 604 stable COVID-19 patients, who are with no to mild symptoms.

Image 13.2

Media Visit to COVID-19 Low-Risk Quarantine and Treatment Centre at MAEPS



Source: Media Section, Corporate Communications Unit, MOH

MEDIA ENGAGEMENT NIGHT WITH DEPUTY HEALTH MINISTER I

YB Dato' Dr. Noor Azmi Ghazali, Deputy Health Minister I attended the Media Engagement Night at Seri Pacific Hotel Kuala Lumpur on 9 July 2020. A total of 60 media representatives were present at the event.

Image 13.3

Media Engagement Night with Deputy Health Minister I



Source: Media Section, Corporate Communications Unit, MOH

MEDIA MANAGEMENT SESSION WITH THE DIRECTOR-GENERAL OF HEALTH: PREPAREDNESS BY THE MINISTRY OF HEALTH MALAYSIA IN FACING WITH THE COVID-19 PANDEMIC

YBhg. Tan Sri Dato' Seri Dr. Noor Hisham Abdullah, Director General of Health gave a briefing to the media on the Preparedness of the Ministry of Health Malaysia (MOH) in addressing the COVID-19 pandemic during the Media Management Session at the MOH Headquarters on 29th July 2020. A total of 80 representatives from 30 media agencies attended this session.

Image 13.4

Media Management Session with the Director-General of Health



Source: Media Section, Corporate Communications Unit, MOH

MEDIA INTERVIEW SESSIONS

A total of 260 interview sessions with top management and field experts from the Ministry of Health Malaysia were held in the electronic media (TV and radio) and print media (newspapers and magazines) throughout 2020. Among them, YB Dato' Sri Adham bin Baba, Minister of Health Malaysia attended an interview session with Astro Awani on 16 March 2020 to discuss the topic of the COVID-19 Virus.

Image 13.5

Media Interview Sessions with Minister of Health YB Dato' Sri Adham bin Baba



Source: Media Section, Corporate Communications Unit, MOH

PRESS CONFERENCE ON THE CURRENT SITUATION OF COVID-19 INFECTION

A total of 105 press conferences were conducted on the current situation of COVID-19 throughout the year 2020 starting 29 January 2020 by YBhg. Tan Sri Dato' Seri Dr. Noor Hisham Abdullah, Director General of Health. On 1 July 2020, the Ministry of Health Malaysia (MOH) recorded the lowest daily figure of zero new cases of COVID-19 infection involving domestic transmission with one imported case.

Image 13.6

Press Conference on COVID-19



Source: Media Section, Corporate Communications Unit, MOH

MINISTRY OF HEALTH MALAYSIA SIGNED AGREEMENT OF COVID-19 VACCINE SUPPLY WITH PHARMACEUTICAL COMPANY PFIZER

On 24 November 2020, the Ministry of Health Malaysia through YB Dato' Sri Dr. Adham Bin Baba, Minister of Health had signed an early purchase agreement with pharmaceutical company Pfizer to obtain a supply of 12.8 million doses of COVID-19 vaccines to meet the immunization needs of 20 per cent or 6.4 million Malaysians by 2021.

Image 13.7

Signing Session of COVID-19 Vaccine Supply Agreement with Pfizer Company



Source: Media Section, Corporate Communications Unit, MOH

STRATEGIC COMMUNICATIONS SECTION

Since the outbreak of COVID-19, MOH began to gain international coverage in 2020. The Strategic Communications Section focuses on current developments regarding the COVID-19 pandemic. This section provides a lot of material in the form of infographics, posters, short videos related to the COVID-19 pandemic apart from living broadcasts via the official Facebook (FB) page of the MOH. Since the COVID-19 outbreak is a global pandemic issue, there has been a significant increase in the number of viewers and followers on MOH social media, namely on Facebook, Twitter, Instagram and Youtube, which a channel to get the latest COVID-19 information in Malaysia.

Table 13.2

MOH's Official Media Page Target Followers (Until 25th Dec 2020)

NO.	MOH SOCIAL MEDIA	TARGET FOLLOWERS / SUBSCRIBERS	FOLLOWERS ACHIEVED
1	Facebook	2 million	4 million
2	Twitter	800,000	1 million
3	Instagram	800,000	1 million
4	Youtube	5,000	10,000

Note: Data as of 25 December 2020

Source: Strategic Communications Section, Corporate Communication Unit, MOH

The preparation and dissemination of infographics, as well as live broadcasts via official FB MOH, is done consistently every day so that the followers can get the latest information on the number of new cases, the number of cases cured, the number of deaths and the number of active cases.

Figure 13.1
Daily COVID-19 Case Infographics



Source: Strategic Communications Section, Corporate Communication Unit, MOH

In order to ensure that the latest information on COVID-19 reaches the public's knowledge, this section provides a live broadcast via the MOH's Facebook, namely:

- (i) Live broadcast of the arrival of aircraft carrying Malaysian passengers from Wuhan, China in February 2020.

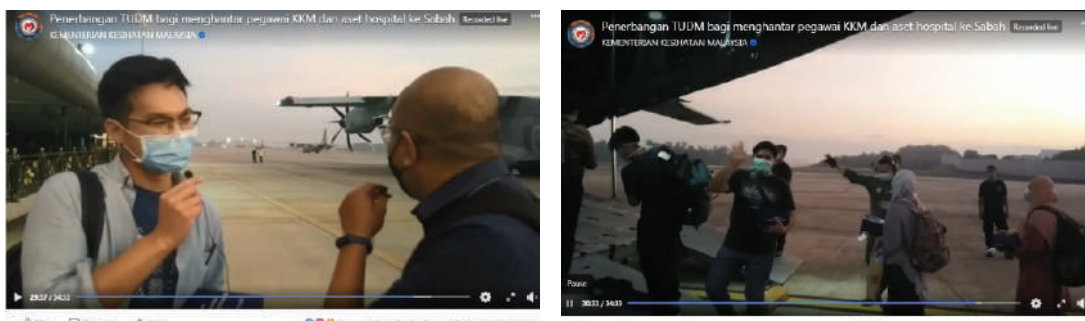
Image 13.8
Facebook Live Session on Arrival of Malaysian Passengers from Wuhan, China



Source: Strategic Communications Section, Corporate Communication Unit, MOH

- (ii) Live broadcast of the process of transfer MOH assets with health personnel to Sabah in collaboration with the Royal Malaysian Air Force in October 2020.

Image 13.9
Facebook Live Session on the Transfer of MOH Asset and Health Personnel to Sabah



Source: Strategic Communications Section, Corporate Communication Unit, MOH

- (iii) Live broadcast of the press conference on the latest information of COVID-19 in Malaysia from the residence of YBhg. Tan Sri Dato' Seri Dr. Noor Hisham Abdullah, Director General of Health.

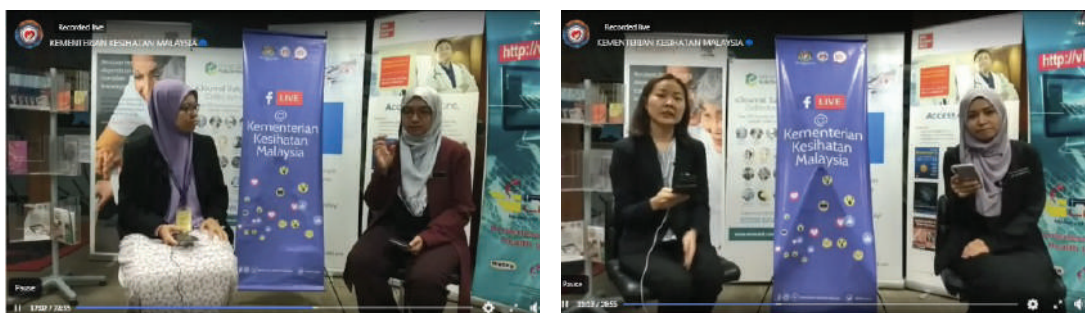
Image 13.10
COVID-19 Latest Information Press Conference by the Director-General of Health



Source: Strategic Communications Section, Corporate Communication Unit, MOH

- (iv) Live broadcast via FB Live Special Programme on 'Get to Know COVID-19' (6 episodes)

Image 13.11
Get To Know COVID-19 Programme in Facebook Live Session



Source: Strategic Communications Section, Corporate Communication Unit, MOH

CORPORATE AFFAIRS SECTION

PUBLICATION OF MOH E-NEWSLETTER 2020

The MOH E-Bulletin is the monthly publication produced by the Corporate Communication Unit which portrays activities of the MOH throughout 2020. In addition, it also serves as documentation of health services in Malaysia as well as a reference source for civil servants and the public.

Image 13.12
MOH e-Newsletter 2020



Source: Corporate Affairs Section, Corporate Communication Unit, MOH

COVID-19 CONTRIBUTION OF THE MINISTRY OF HEALTH MALAYSIA

COVID-19 Contribution of the Ministry of Health Programme is a public contribution to the MOH either in the financial form to the COVID-19 Medical Fund or a contribution in the form of equipment such as face masks, personal protective equipment (PPE) and health equipment. The donation is intended to assist the MOH in dealing with the spread of the COVID-19 pandemic that occurred not only in Malaysia but throughout the world. The MOH greatly appreciates all the contributions and support from all contributors involved in dealing with the spread of COVID-19 in the country.

Image 13.13
COVID-19 Contributions Ceremony



Source: Corporate Affairs Section, Corporate Communication Unit, MOH

PUBLIC RESPONSE MANAGEMENT SECTION

In 2020, the Ministry of Health Malaysia (MOH) had received a total number of 19,065 public feedbacks registered in the Sistem Pengurusan Aduan Awam (SiSPAA) according to the categories listed in [Table 13.3](#).

Overall, the Ministry had achieved 95.5 per cent (7,663) resolving complaints out of the total complaints received. Detailed information on complaints received and resolved as in [Table 13.4](#).

Starting 2020, MOH analyses complaints according to the new complaint issue categories set out in the SiSPAA (Sistem Aduan Pengurusan Aduan Awam) as shown in [Table 13.5](#).

Table 13.3
Number of Public Feedbacks Received in the Year 2020

NO.	TYPE OF FEEDBACK	CATEGORIES	RECEIVED
1	Complaint	Ordinary	6,649
		Complex	1,375
2	Non Complaint	Report	2,742
		Recognition	4,827
		Inquiries	2,117
		Suggestion	688
		Application	667
Total Public Feedbacks			19,065

Source: Public Response Management Section, UKK, MOH

Table 13.4
Number of Complaints Received and Resolved in 2020

NO.	CATEGORIES	RESOLVE DURATION	RECEIVED	RESOLVED (%)	RESOLVED WITHIN 15 DAYS (KPI) (%)
1	Ordinary	15 working days	6,649	6,615 (99.4%)	6,238 (93.8%)
2	Complex	>16 – 365 days	1,375	1,048 (76.2%)	-
Total			8,024	7,663 (95.5%)	

Source: Public Response Management Section, UKK, MOH

Table 13.5
Percentage of Complaints Received Based on Issued Category in 2020

NO.	ISSUE CATEGORY	PERCENTAGE (%)
1.	Patient Management	49.5
2.	Public Health	10.4
3.	Quality of Governance Services	11.5
4.	Administration Management	21.6
5.	Public Facilities	3.2
6.	Clinical Facilities	1.5
7.	Pharmaceutical Services	1.7
8.	Food Safety and Quality Division Services	0.6

Source: Public Response Management Section, UKK, MOH

In 2020, MOH had met the target of Key Performance Indicator (KPI). For the first KPI, which is the resolution rate of the Ordinary Complaint category, MOH had achieved 93.8 per cent compared to the target of 85 per cent. Meanwhile, for the second KPI, which is the Non-Complaint Feedback resolution rate, MOH has achieved 92.3 per cent compared to the target of 90 per cent. These achievements are detailed in [Table 13.6](#) as below.

Table 13.6
Key Performance Indicator (KPI) Year 2020

KEY PERFORMANCE INDICATOR	TARGET	ACHIEVEMENT
Resolving Ordinary Complaint Within 15 Working Days	85%	93.8%
Resolving Non-Complaint Feedback (excluding Report feedback) Within 15 Working Days	90%	92.3%

Source: Complaint Management Section, Corporate Communication Unit, MOH

CUSTOMER SERVICE SECTION

The Customer Service Section is responsible for managing incoming calls in the Headquarters of the Ministry of Health Malaysia. [Table 13.7](#) shows a decrease in the number of incoming calls by 24,064 or 32.9 per cent in 2020 as compared to 2019.

Table 13.7
Number of Calls Received by the Customer Service Centre

NO.	ACTIVITY	2019	2020
1.	January	5,686	5,567
2.	February	5,327	6,270
3.	Mac	6,465	3,736
4.	April	6,505	1,904
5.	May	6,961	2,169
6.	June	5,224	4,828
7.	July	6,634	5,265
8.	August	6,023	4,247
9.	September	6,110	5,072
10.	October	7,405	5,265
11.	November	5,465	4,247
12.	December	5,247	4,665
	Total	73,052	48,988

Source: Customer Service Section, Corporate Communication Unit, MOH



14

INTEGRITY



INTEGRITY

INTEGRITY EMPOWERMENT UNIT

Integrity Unit has conducted two (2) *Bicara Integriti* programs, a SMART INTEGRITI course and produced seven posters escalated through MOH's Postmaster and five (5) flyers about nurturing integrity in MOH.

Bicara Integriti is a forum-style program, with a distinguished speaker invited as a panelist to convey the integrity messages throughout all levels of professions in MOH, to create more awareness towards the importance of practicing integrity in our jobs. The SMART INTEGRITI Course with the involvement of 22 participants has an objective to nurturing and enhancing the leadership trait with the empowerment of integrity for the participants to excel in their daily job.

Integrity Unit's hopes by organizing these programs will promote more integrity messages and awareness among the MOH's staff to be more accountable in their jobs and making integrity part of the work culture.

Image 14.1

Integrity Empowerment Programs 2020



Bicara Integriti Program



SMART INTEGRITI Course

Source: Unit Integriti KKM

GOVERNANCE UNIT

Anticorruption Committee Meeting was seated twice in February and August 2020. This Anticorruption Committee has discussed the arisen issues on integrity, governance and anticorruption in MOH including the improvement of the process and proceeding of disciplinary actions towards MOH Staff.

The Ministry of Health's Anticorruption Plan has completed its first phase by conducting the *Bengkel Pembangunan Pelan Antirasuah dan Pengurusan Risiko Rasuah KKM*. This Workshop was held on 7 – 11 September 2020 in Malacca. Action plans have been developed from the workshop to address the potential risk and arising risk in MOH. Unit Integrity is preparing the final draft of the MOH Anticorruption Plan 2021-2025 and the plan will be launched in 2021.

Image 14.2

MOH Antibribery Development Plan & Bribery Risk Management Plan Workshop



Source: Unit Integriti KKM

DETECTION AND VERIFICATION UNIT

A Courtesy Visit from KPKPj Nurahim bin Abd. Rahim, Director of Agency Integrity Management Division, Malaysia Anti-Corruption Commission (MACC) upon YBhg. Dato' Dr. Seri Chen Chaw Min The Secretary General of the Ministry of Health Malaysia was held on 5 August 2021. Joining the visit was YBhg. Dato' Wan Rahim bin Wan Ramli, Head of Integrity Unit in MOH.

COMPLIANCE UNIT

MOH is the first Ministry to received MS ISO 37001: Anti-Bribery Management Division and has strengthened its recognition with a close partnership with State Health Department and Health Institutions through various talks on ABMS compliances. In the year 2020, Unit Integrity has given talks to several agencies such as JKN Pahang, JKN Kelantan, National Institute of Health (NIH) and PERKESO.

MS ISO 37001: 2016 ABMS Audit Committee Workshop was held on 11 – 13 August 2020 at Block E7, Ministry of Health. There were 20 participants involved in this workshop. The workshop has an objective to enhance and empower all the internal auditors with regards to MS ISO 37001: 2016 ABMS and the process and procedures of auditing at MOH.

In 2020, Integrity Unit has given out more than 44 consultations in various compliance issues and anti-corruption in MOH. Integrity Unit has also conducted an inspectorate on an incident of an Ambulance that caught fire at Hospital Melaka in January 2020.

Image 14.3

MS ISO 37001: 2016 ABMS Audit Committee Workshop



Source: Unit Integriti KKM

DISCIPLINARY UNIT

Integrity Unit has developed and published *Buku Panduan Mengurus dan Melaporkan Tindakan Tata tertib*, second edition in October 2020. The second edition of this book is a more comprehensive guideline for the disciplinary secretariat in every MOH's department to minimize the weaknesses of the management and processes under the *Peraturan-Peraturan Pegawai Awam (Kelakuan dan Tata tertib) 1993*. The book has been uploaded to the MOH Portal.

Integrity Unit has been involved in six (6) awareness and knowledge sharing programs concerning any guidelines and public policies. These programs were held with an objective to nurturing and keep the awareness among MOH Staff and ultimately to minimize any punitive action in long term.

Integrity Unit has closed 726 disciplinary cases under *Lembaga Tata tertib KKM* for the year 2020 for management and support group which involves multiple malpractices.



15

POLICY & INTERNATIONAL RELATIONS



POLICY & INTERNATIONAL RELATIONS

INTRODUCTION

The Policy and International Relations Division (BDHA) consists of two (2) sections which are the Policy & Administrative Section & the International & Industry Section. The division is responsible for managing important tasks as follows:

- (i) Formulation and implementation of public health policies;
- (ii) Focal point in international affairs and the development of healthcare industries;
- (iii) Coordinating international trade and liberalization issues;
- (iv) Ensuring Malaysia's health-related interests are voiced and protected in diplomacy through the international legal instruments and the Free Trade Agreement (FTA);
- (v) Coordinating the preparation of Cabinet Papers; and
- (vi) Secretariat role for Post-Cabinet Meetings.

ACTIVITIES AND ACHIEVEMENTS

Throughout 2020, BDHA had implemented and coordinated various high impact activities at various levels including COVID-19 management. Among the activities and achievements were:

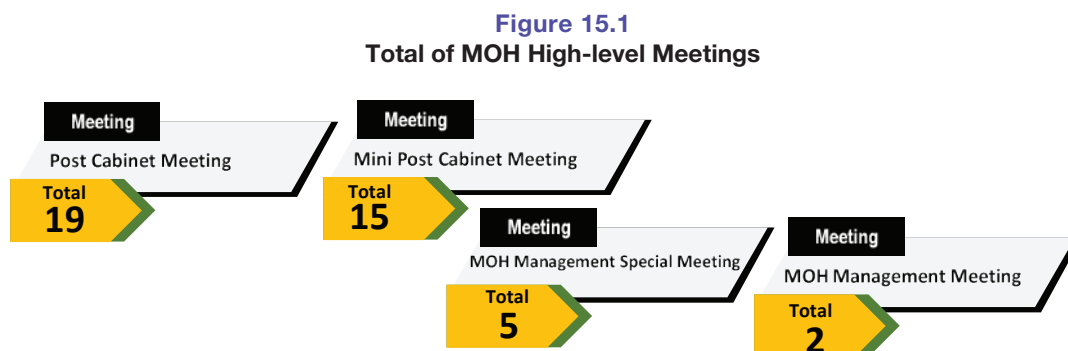
POLICY COORDINATION AND STRATEGIC COOPERATION

CABINET RELATED MATTERS

In 2020, BDHA prepared and coordinated 14 Cabinet Notes, two (2) Joint Notes and 12 Memorandums for tabling at the Cabinet Meeting. BDHA had also provided inputs and facilitated the preparation of 60 comments on memorandums received from other ministries as well as 73 feedbacks to decisions made by the Cabinet throughout the year 2020.

HIGH-LEVEL MEETINGS WITHIN THE MINISTRY OF HEALTH

BDHA has coordinated high-level meetings within the Ministry of Health (MOH) as [Figure 15.1](#).



Source: Policy and International Relations Division, MOH

INTERMINISTERIAL HIGH-LEVEL MEETINGS

BDHA served as the secretariat for high-level meetings with other Ministries as [Image 15.1](#):

Image 15.1

Meeting between Health Minister with Members of the State Executive Council (Health Portfolio) and State Health Director

10 JAN	Courtesy Call and Discussion Session between Secretary General of Minister of Health (MOH) and Director General of Malaysian Administrative Modernization and Management Planning Unit (MAMPU) on the Initiatives to Empower Health Service Delivery	✓
17 MAR	Meeting between Health Minister with Members of the State Executive Council (Health Portfolio) and State Health Director	✓
08 SEPT	Briefing session to YBhg. Tan Sri Chief Secretary to the Government	✓



Source: Policy and International Relations Division, MOH

PRODUCTIVITY IMPROVEMENT AND GOOD REGULATORY PRACTICE ACTIVITIES

BDHA served as the focal point in engaging productivity improvement and good regulatory practice programs with Malaysian Productivity Corporation (MPC) as [Image 15.2](#).

Image 15.2

Development Program for Regulatory Coordinator

01	Behavioural Insights survey
02	Business Licensing Guidelines Coordination
03	Public Service Productivity Measurement
04	Development Program for Regulatory Coordinator



Source: Policy and International Relations Division, MOH

MOH CORPORATE CULTURE COORDINATOR

BDHA served as a coordinator for Corporate Culture in MOH and a member of the Subcommittee on Customer Management (Corporate Culture Implementation). In summary, corporate culture activities that have been implemented at MOH and Health State Department throughout 2020 are as [Figure 15.2](#).

Figure 15.2
Culture Corporate Activities



Source: Policy and International Relations Division, MOH

INTERNATIONAL COOPERATION

ASIA-PACIFIC ECONOMIC COOPERATION (APEC) 2020

APEC has played a significant role in the economic growth of Malaysia, leading to manifold gains through cooperation with the other 21 member economies. Malaysia hosted the APEC meetings for the second time in 2020, with the first one being in 1998. MOH is the focal point for APEC Health Working Group (HWG) and Life Sciences Innovation Forum (LSIF). Aside from that, Malaysia, represented by YBhg. Datuk Dr. Chong Chee Kheong, Deputy Director-General of Health (Public Health) also held the HWG Co-Chair position along with Mr. Michael Pearson, Director General of the Public Health Agency of Canada. Throughout 2020, MOH through BDHA as MOH APEC Secretariat has cooperated with National APEC Secretariat, Ministry of International Trade and Industry (MITI), organised a series of preparatory meetings and capacity building programs among others as [Image 15.3](#).

Image 15.3
Ministry's Involvement in APEC 2020

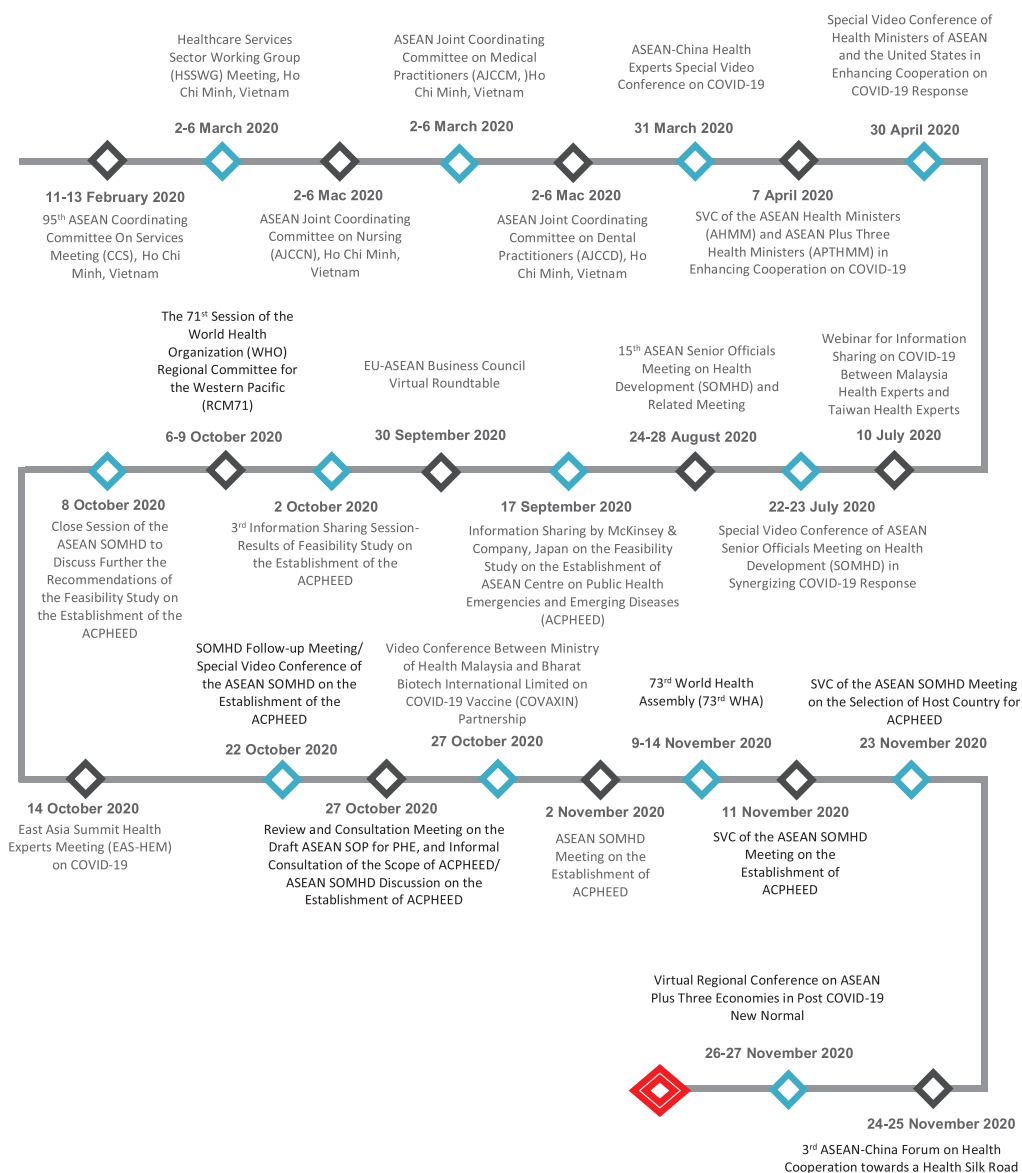


Source: Policy and International Relations Division, MOH

WORKING VISIT/MEETING ON COOPERATION SEMINAR/FORUM

In 2020, BDHA had coordinated the Ministry's participation in International Conferences, either physically or virtually, as [Figure 15.3](#).

Figure 15.3
MOH International Participation



Source: Policy and International Relations Division, MOH

COURTESY CALL

BDHA was also tasked to coordinate courtesy calls upon the YB Minister of Health Malaysia and top management by foreign delegates. BDHA had coordinated a total of 12 courtesy calls from 9 countries as [Table 15.1](#).

Table 15.1
Courtesy Call by Foreign Delegates

	TYT HIROSHI OKA Ambassador of Japan to Malaysia	13 January & 3 July 2020
	TYT LEE CHI BEOM Ambassador of Republic Korea to Malaysia	19 June & 9 October 2020
	TYT Maurico Gonzalez Lopez Ambassador of Colombia to Malaysia	23 June 2020
	TYT ABU WALID Ambassador of Palestine to Malaysia	26 June 2020
	TYT ANDREW GOLEDZINOWSKI High Commissioner of Australia to Malaysia	2 July 2020
	TYT MAHMOUD QATTAN Ambassador of Saudi Arabia to Malaysia	17 July 2020
	PYT PAM CHONG DUNN High Commissioner of New Zealand to Malaysia	22 July 2020
	TYT GUIDO LOAYZA DEVÉSCovi Ambassador of Peru to Malaysia	14 August 2020
	TYT VANU GOPALA MENON High Commissioner of Singapore to Malaysia LOY HUI CHEN Deputy High Commissioner of Singapore to Malaysia	14 & 17 September 2020

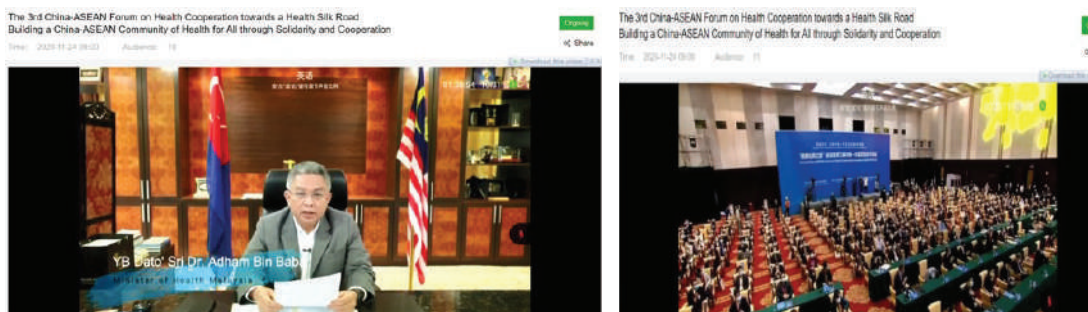
Source: Policy and International Relations Division, MOH

Apart from that, BDHA had also arranged courtesy calls upon the YB Minister of Health Malaysia and top management by the industrial representative as follows:

- i. Courtesy Call on YB. Minister of Malaysia by Malaysian Organisation of Pharmaceuticals Industries (MOPI) was held on 24 June 2020; and
- ii. Courtesy Call on YB. Minister of Health Malaysia by Pharmaceutical Association of Malaysia (PhAMA) was held on 19 August 2020.

Image 15.4

Ministry's Involvement in Working Visit/ Meeting On Cooperation Seminar/ Forum



Source: Policy and International Relations Division, MOH

Image 15.5

Courtesy Call upon YB Minister of Health Malaysia and Top Management by the Ambassador of Saudi Arabia, Colombia, Palestine and Peru



Source: Policy and International Relations Division, MOH

KNOWLEDGE SHARING PROGRAM (KSP) IN COLLABORATION WITH KOREA DEVELOPMENT INSTITUTE (KDI) AND ASIAN DEVELOPMENT BANK (ADB)

MOH is currently working with the Korea Development Institute (KDI) and the Asian Development Bank (ADB) for the Knowledge Sharing Program (KSP). KSP is a partnership program launched in 2004 by the Ministry of Economy and Finance of Korea (MOEF) as a comprehensive policy research and consultation program, based on the sharing of knowledge and experience for development. In 2020, two (2) programs for KSP for 2020 was coordinated as follows:

- i. Knowledge Sharing Program Launching Seminar Between Ministry of Health Malaysia, Asian Development Bank and Korea Development Institute, 1 September 2020; and
- ii. Video Conference in Conjunction with Knowledge Sharing Program Interim Reporting Workshop Between Ministry of Health Malaysia, Asian Development Bank and Korea Development Institute, 3 December 2020.

OFFICIAL VISIT/STUDY VISIT TO MINISTRY OF HEALTH MALAYSIA

BDHA had coordinated official and study visits by foreign officials and delegation to the MOH and its health facilities. The details are as [Table 15.2](#).

Table 15.2
Total Number of Visitors and Study Visit Received for the Year 2020

No.	Country	Total Visitor
i.	China	8
ii.	Taiwan	3
Total		11

Source: Policy and International Relations Division, MOH

INPUT COORDINATION

BDHA had also coordinated 657 inputs on ASEAN/APEC/OIC/WHO/UN leader's statements, reports, projects and official responses to the multilateral organisations as well as inter-ministerial input.

PANDEMIC COVID-19 MANAGEMENT

STRATEGIC COOPERATION TO CONTROL COVID-19 TRANSMISSION

Strategic cooperation between MOH-MOSTI-KKMM was initiated through a meeting held at MOH on 22 March 2020. The meeting aimed to discuss any field of cooperation that can be contributed by both MOSTI and KKMM in managing COVID-19 transmission in Malaysia.

Image 15.6

Meeting on Strategic Cooperation MOH-MOSTI-KKMM to Control COVID-19 Transmission



Source: Policy and International Relations Division, MOH

COOPERATION FOR CROSS BORDER ARRANGEMENT DURING THE COVID-19 OUTSIDE THROUGH THE RECIPROCAL GREEN LANE (RGL)/PERIODIC COMMUTING ARRANGEMENT (PCA)

To reduce the number of COVID-19 imported cases, the Government of Malaysia had implemented restrictions at all International Entry Points (PMA) starting on 23 March 2020. After the situation becomes stabilized, BDHA together with several MOH Technical Divisions were involved in various meetings and discussions to establish cross-border cooperation with foreign countries through Green Lane and Commuting Arrangement. To date, the Government of Malaysia only has cross-border arrangements with Singapore through 17 series of meetings and discussions conducted.

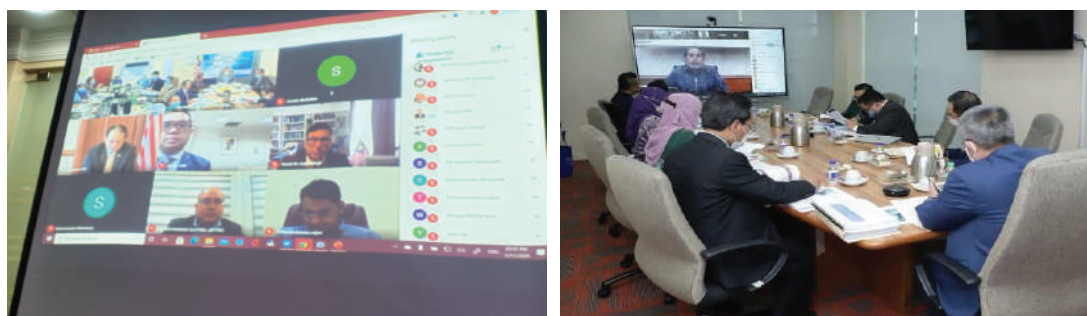
PANDEMIC MANAGEMENT STRATEGIC COMMITTEE (JSPP)

BDHA was the given a role as a secretariat for Working Group 1: Health Security, Pandemic Management Strategic Committee (JSPP) chaired by the Honorable Minister of Health. The Working Group has been tasked to formulate, plan, implement, monitor and improve every health security strategy, program, initiative and any related issue in accord with the desired goal, which is to protect people from any pandemic threats. A total of eight (8) strategies, 34 programs and 136 initiatives have been identified through series of engagements with stakeholders, which will be implemented in a period of one (1) month to five (5) years.

COVID-19 VACCINE ACCESS GUARANTEE COMMITTEE (JKJAV)

The COVID-19 Vaccine Access Guarantee Committee (JKJAV) is specially established in line with the decision of the Cabinet Meeting on 14 October 2020 to ensure that the supply of COVID-19 vaccines can be procured efficiently and is safe for use by the people of Malaysia. The JKJAV committee is co-chaired by the Honorable Minister of Health and the Honorable Minister of Science, Technology and Innovation and has four (4) working committees comprising various Government agencies as pillars to serve the objective. The Policy and International Relations Division (BDHA) has been entrusted as the parent secretariat together with MOSTI in ensuring systematized meetings are organised. A total of five (5) series of meetings have been coordinated throughout 2020.

Image 15.7
JSPP and JKJAV Meetings

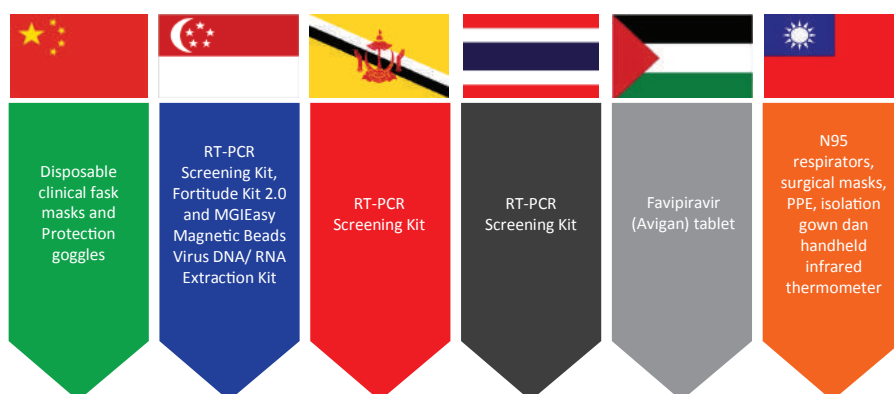


Source: Policy and International Relations Division, MOH

CONTRIBUTIONS FROM FOREIGN GOVERNMENTS/AGENCIES/ORGANIZATIONS

BDHA has coordinated the handover ceremony from Foreign Governments/Agencies/Organisations to assist Malaysia in dealing with the COVID-19 pandemic as [Figure 15.4](#).

Figure 15.4
List of Contributors and Contributions Received in 2020



Source: Policy and International Relations Division, MOH

HEALTH INDUSTRY DEVELOPMENT

NATIONAL ECONOMIC STRATEGIC PLANS

Apart from that, this Division was involved in the preparation of several national strategic plans related to economic activities led by other ministries. This Division is also part of the Technical Committees for the preparation of the New Services Sector Blueprint and National Trade Blueprint under the MITI.

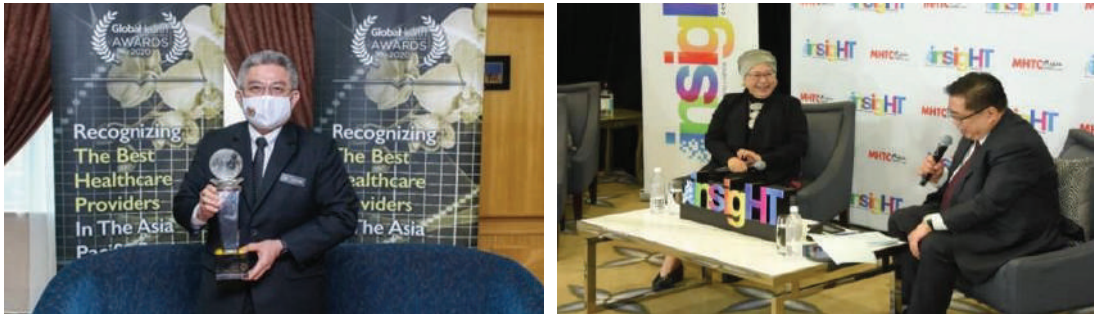
FOREIGN EQUITY PARTICIPATION IN PRIVATE HEALTHCARE FACILITIES

The policy on foreign equity participation in private healthcare facilities which took effect in 2015 was reviewed and revised by BDHA to align with the current situation related to the private healthcare services sector in ensuring that the industry continues to grow. On 17 July 2020, the Cabinet had agreed that the policy on Foreign Equity Participation in Private Healthcare Facilities be suspended and all applications related to foreign equity participation in private healthcare facilities in the future should be approved by a special committee chaired by the Minister of Health and members of the committee should include senior officials from the Ministry of Health and representatives from the relevant ministries/agencies.

MALAYSIA HEALTHCARE TRAVEL COUNCIL (MHTC)

Malaysia Healthcare Travel Council (MHTC) was officially transferred back to the MOH based on the Cabinet Meeting decision on 25 March 2020 and placed as a strategic partner under BDHA. Since then, the Division has been working closely with MHTC for various activities, including the development of the SOP for medical tourism amidst the COVID-19 pandemic.

Image 15.8
Ministry's Involvement in Private Healthcare Facilities Industry



Source: Policy and International Relations Division, MOH

CONCLUSION

BDHA has successfully implemented the functions of the division throughout the year 2020. To uphold the quality of service and as a dynamic organisation, BDHA will further enhance the implementation of its functions and plans to remain relevant and excellent at the MOH.



16

ProtectHealth



INTRODUCTION

ProtectHealth Corporation Sdn Bhd (ProtectHealth) was incorporated as a wholly-owned subsidiary of ProtectHealth Malaysia (PHM), established under the Ministry of Health, Malaysia (MOH). Profit took a backseat for ProtectHealth as the company positioned itself as a not-for-profit company. ProtectHealth coordinates administer and manage initiatives related to financing healthcare services as mandated by MOH. ProtectHealth was established with two (2) mandates in December 2016 as approved by Jemaah Menteri which are to operate Voluntary Health Insurance (VHI) for all and to become a Strategic Purchaser in reducing healthcare costs and enhancing primary healthcare.

Today, ProtectHealth is known as a game-changer in the healthcare industry landscape as it carries the company's main service as the healthcare scheme administrator for *Skim Peduli Kesihatan* for B40 group (PeKa B40) as mandated by the Government. PeKa B40 aimed at addressing the health needs of the lower-income, focusing especially on non-communicable diseases (NCDs). PeKa B40 is offered to Malaysians who fall within the lower 40 per cent of the household income range, known as the B40 group. Recipients of Bantuan Sara Hidup (BSH) and their spouses, who are aged 40 years and above, are automatically enrolled into PeKa B40. No registration is specifically required to join PeKa B40. Through PeKa B40, where appropriate, they will receive four (4) health-related benefits.

These benefits are:

- i. Health Screening (HS)
- ii. Health Aid (HA)
- iii. Completing Cancer Treatment Incentive (CCTI)
- iv. Transport Incentive (TI)

ACTIVITY AND ACHIEVEMENT

PeKa B40 PROVIDERS

ProtectHealth is the purchaser of the first service in the country that has been successful in purchasing services from both public and private providers. This is part of strategic purchasing mandate fulfillment. As of 31 December 2020, PeKa B40 benefits are discharged through providers from 1,876 General Practitioners (GP), 181 lab partners, 891 *Klinik Kesihatan* (KK) and 145 MOH Hospitals.

PeKa B40 BENEFIT PERFORMANCE

Despite the global pandemic COVID-19 largely impacted the number of visits for health screening in the year 2020 especially the outreach program, health screening was still conducted at PeKa B40 registered clinics. As of 31 December 2020, a total of 460,672 beneficiaries have undergone health screening.

Table 16.1 shows the number of beneficiaries screened at KK and GP and referrals made till 31 December 2020 while **Table 16.2** reflects the number of approved applications for all PeKa B40 benefits. The total cost for all approved applications is indicated in **Table 16.3**. ProtectHealth had also saved the Government over RM 9.9 million through price negotiation for the Drug-Eluting Stent (DES) which is part of our PeKa B40 Benefit two (2).

Table 16.1
PeKa B40 Health Screening and Referrals Cases

	Number of beneficiaries seen (First Visit)			Number of beneficiaries seen (Second Visit)			Number of referrals from GP to KK	Number of referrals from GP/KK to MOH Hospital
	KK/ Hospital KKM	GP	Total	KK/ Hospital KKM	GP	Total		
Total	174,220	286,452	460,672	149,552	273,624	423,176	65,719	51,878

Source: ProtectHealth Corporation Sdn. Bhd.

Table 16.2
Number of Approved Applications for Each PeKa B40 Benefits

Benefits	Number of Applications	Number of Approved Applications	Percentage of Approved Applications	Number of Beneficiaries (Approved)
Health Screening	460,672	-	-	460,672
Health Aid	22,418	18,229	81.3%	16,813
Completing Cancer Treatment Incentive	5,333	4,199	78.7%	3,350
Transport Incentive	15,794	13,949	88.3%	7,711

Source: ProtectHealth Corporation Sdn. Bhd.

Table 16.3
Cost Approved for PeKa B40 benefits

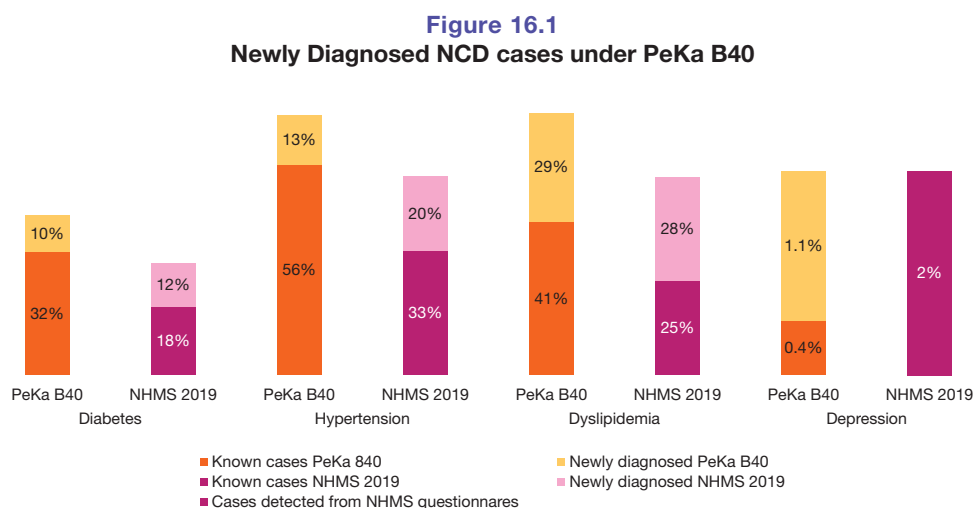
Benefits	Total cost for all applications (RM)	Total cost for approved applications (RM)
Health Screening	40,806,326.00	40,806,326.00
Health Aid	74,587,097.34	57,998,818.28
Completing Cancer Treatment Incentive	1,995,400.00	1,585,900.00
Transport Incentive	1,741,370.00	1,494,240.00
Total	119,130,193.34	101,885,284.28

Source: ProtectHealth Corporation Sdn. Bhd.

DETECTION OF NEWLY DIAGNOSED NCD

Among the key findings of PeKa B40 health screening is the detection of new cases of NCDs. Referring to [Figure 16.1](#), the percentage of newly diagnosed NCD cases (data as of 30 September 2020) from PeKa B40 health screening is similar to the findings of the 2019 National Health Morbidity Survey (NHMS).

However, the percentage of cases that have been diagnosed (existing NCD) for PeKa B40 screening is higher than the findings of NHMS. This is because PeKa B40 is more likely to receive a response from those who have been diagnosed with NCD and those who need other PeKa B40 benefits such as Health Aid and Completing Cancer Treatment incentives.



Source: ProtectHealth Corporation Sdn. Bhd.

WAY FORWARD

In conclusion, the PeKa B40 initiative has screened 460,672 beneficiaries and had successfully detected a significant percentage of newly diagnosed NCD cases (151,729 cases as of December 2020). This is a massive cost saving to the government through early treatment and prevention of complications. ProtectHealth will continue to strengthen its fundamentals, strive to build capabilities, keep true to its founding mandate and to be fully optimising digital technologies in delivering PeKa B40 and other initiatives as mandated by the Government.



17

**CLINICAL
RESEARCH
MALAYSIA**



CLINICAL RESEARCH MALAYSIA

INTRODUCTION

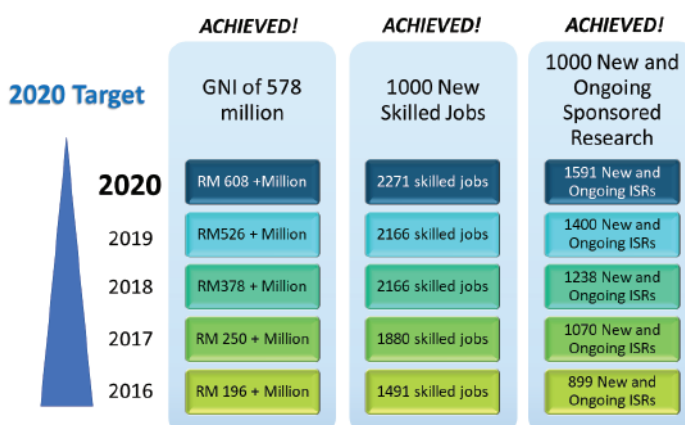
Clinical Research Malaysia (CRM), established in 2012, is a corporatized entity wholly owned by the Ministry of Health Malaysia to facilitate sponsored clinical research in Malaysia. CRM is a certified company with Quality Management System (QMS) ISO 9001:2015 accreditation by SIRIM QAS that provides speedy and reliable end-to-end support for quality studies to its partners. Among CRM's range of services include complimentary feasibility studies and investigator matching, consultation and management of clinical trial budget, review of Clinical Trial Agreement (CTA) and Non-Disclosure Agreement (NDA), placement of Study Coordinators at trial sites, and training related to clinical research.

To ensure smooth and consistent quality trial delivery, CRM works closely with the government and relevant authorities to ensure that all regulations and best practices are thoroughly met. As studies unfold, CRM works together with industry players and investigators to propel clinical research in Malaysia, while at the same time creating high-skilled job opportunities in the industry.

ACTIVITIES AND ACHIEVEMENTS

CRM's conception goals were to create 1,000 new skilled jobs in clinical research, conduct 1,000 sponsored research and produce a gross national income (GNI) income of RM578 million by 2020. Data collected in 2020 shows that CRM has achieved all targets set, with two (2) having been achieved since 2017 (Figure 17.1).

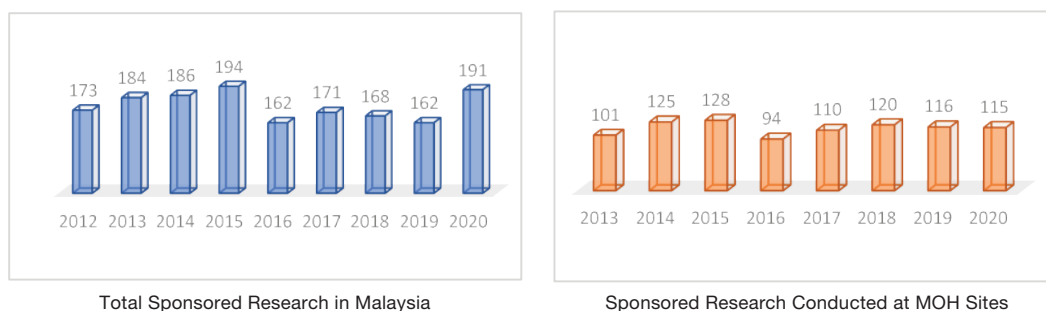
Figure 17.1
CRM Key Performance Indicators and Yearly Achievements



Source: Clinical Research Malaysia

In 2020, a total of 191 sponsored research was approved by Medical Research and Ethics Committee (MREC) and Institutional Review Boards/Independent Ethics Committees (IRB/IECs) (Figure 17.2). This number is a significant increase from the trend reported in the previous years, elucidating Malaysia's strengthening position in sponsored research. In addition, despite the impact of the COVID-19 pandemic in many of the economic and social areas in the region, sponsored research continues to progress in the country with significant interest in infectious disease research for the year 2020. Over 60 percent of sponsored research conducted in Malaysia is conducted in MOH facilities, many of which are in public hospitals.

Figure 17.2
Number of Sponsored Research from 2012 to 2020



Source: Clinical Research Malaysia

It is also essential for Malaysia to be viewed as a preferred destination for multinational sponsored research and CRM has been promoting Malaysia's capabilities and capacities in clinical research since its establishment in June 2012. Despite the pandemic, the clinical research industry has continued engaging with CRM, some of which involving new industry players in the Malaysian clinical research landscape, as depicted by the growing number of sponsors and Contract Research Organisations (CRO) (Figure 17.3).

Figure 17.3
Growth Rate of Sponsor and CRO from 2014 to 2020

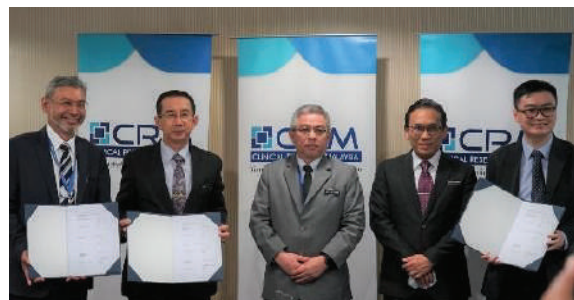


Source: Clinical Research Malaysia

In terms of company performance, CRM has achieved all its KPI 2020 targets, with a gross profit of RM621,355. CRM has obtained 18.8 million visits and impressions to its website and social media platforms, through an efficient social media approach and branding, with minimal expenditure. CRM's 2020 customer satisfaction survey by sponsors, CRO & investigators, reported an average score of 86.87 per cent customer satisfaction on CRM overall services, which exceeded the target set. The Clinical Operations department, which primarily provides CRM study coordinator services, reported the highest score of 90.64 per cent. This performance is also reflected in study recruitment achievement, as trials that have been facilitated by CRM study Coordinators have achieved over 85 per cent patient recruitment. CRM remains steadfast on its four (4) key strategies which are growing investigators and sponsored research, collaborating with stakeholders, creating awareness on clinical research, and developing its human capital by building up a career path for its study coordinators.

The COVID-19 pandemic provided opportunities for the country to be involved in COVID-19 related research and CRM played an important role in COVID-19 vaccine discussion through science diplomacy and inter-ministerial engagements. While the impact of the pandemic in terms of patient recruitment is similar to the rest of Asia, Europe and the United States, the recovery on the recruitment rate was seen to be much faster and many essential clinical studies resume as normal despite the pandemic. Despite the COVID-19 pandemic that has affected the country's economy, public health and social well-being, CRM remained crisis-proof with job security being intact.

Image 17.1
Dr. Voon Pei Jye's Education Scholarship



Source: Clinical Research Malaysia

The Ministry of Health (MOH) through CRM, sponsored Dr. Voon Pei Jye, Medical Oncologist at Sarawak General Hospital, for a Clinical Fellowship Training at Princess Margaret Cancer Centre, Toronto, Canada. This completes CRM's Phase 1 Realization Project (P1RP) which was conceived in 2016 and executed in stages to develop Malaysia's early phase clinical trial capability.

Clinical Research Malaysia inked a Memorandum of Understanding (MoU) with the National Cancer Center Hospital Japan to develop Malaysia's capabilities and capacities in oncology clinical research. Through this partnership, Malaysia will benefit from early phase oncology drug development, cancer genomic medicine advancement and drug access and development.

Image 17.2

MoU signing between CRM and National Cancer Centre Hospital, Japan



Source: Clinical Research Malaysia

WAY FORWARD

Moving forward in 2021, CRM will continue striving towards Operational Excellence in all departments by embracing teamwork, empowerment, and communication by further escalating its endeavors on the four (4) key strategies. New business opportunities that facilitate clinical research operations at the site are to be explored, including home study visits, study recruitment advertising and destruction of investigational products. Continuing its aim in becoming a global trusted Research Management Organisation, CRM will be embarking on ISO 37001:2016 Anti-Bribery Management System. The company will also be undergoing its re-certification of ISO 9001:2015 Quality Management System to ensure deliverance of speed, quality, and reliability in the services it provides.

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 Pn. Nur Athirah binti Mohamad Zaini
 Pn. Nur Azlina binti Abdul Aziz
 Pn. Nur Dayana binti Shaari
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