Ministry of Foreign Affairs

Market Study: Opportunities for the Dutch Life Sciences & Health sector in Malaysia

Commissioned by the Netherlands Enterprise Agency

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Task Force +Health Care
Dutch platform for the life sciences & health sector

Netherlands Enterprise Agency

MALAYSIA

Market Study

Opportunities for the Dutch Life Sciences & Health sector in Malaysia

PREFACE

May 2019

From the Dutch perspective, the Malaysian Life Sciences & Health sector could be considered a hidden gem in Southeast Asia.

Malaysia is a fast developing upper middle income country with a strong commitment to universal healthcare coverage since the 1950s. Malaysia is recognised globally as a well-performing health system with a proper health infrastructure coverage and a well-trained workforce. However, the expenditure on health is on the rise due to an increasing demand for quality healthcare and a growing burden of chronic lifestyle- and age-related diseases.

The Government of Malaysia has pledged significant investments to increase insurance coverage and quality. Vulnerable groups and those living in more remote areas of Malaysia are prioritised. Prominent private health providers seek to maintain Malaysia's position as the main hub for medical tourism in the region.

In order to develop its health system in a sustainable manner, Malaysia, which is highly dependent on imported products and knowledge, looks to grow mutual beneficial international partnerships. These partnerships should provide solutions to Malaysia's health challenges whilst simultaneously benefitting the development of Malaysia's domestic industries.

This report was commissioned by the Netherlands Enterprise Agency (RVO.nl) and is produced by the Task Force Health Care (TFHC) in cooperation with the Embassy of the Kingdom of the Netherlands in Kuala Lumpur and Singapore. This report aims to align the respective Life Sciences & Health sectors of the Netherlands and Malaysia in an effort to increase mutual understanding and inspire collaboration between these countries. The report provides useful insights into the Malaysian health system and sector and identifies potential areas of opportunity.

OUR APPROACH

TASK FORCE HEALTH

IMPROVING HEALTHCARE TOGETHER

Established in 1996, Task Force Health Care (TFHC) is a public-private not-for-profit platform that represents and supports the Dutch Life Sciences & Health (LSH) sector. Our platform has a reach of 1,200 LSH organisations in the Netherlands, with 130 dedicated and diverse partners. Our partners include government, industry, knowledge institutes, NGOs, and healthcare providers.

Our core mission is to improve healthcare and well-being internationally and in a sustainable and demand-driven manner, with the use of Dutch expertise. We are currently actively engaged with over 20 countries to stimulate and facilitate relationships on government-, knowledge- and business levels. Our partners are active around the world and provide innovative and sustainable solutions relevant to both global and local healthcare challenges.

A PROGRAMMATIC APPROACH

- Bridging **Knowledge**, Aligning Interests and Identifying Opportunities
- Fostering and Strengthening **Networks**
- Facilitating **Dialogues** on Health Themes and Opportunities to Collaborate

OUR FOCUS

- Mutual Interests and Benefits
- Developing Sustainable and Long-term Approaches
- Demand-driven & Context Specific

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TOP REASONS – WHY MALAYSIA IS INTERESTING FOR THE DUTCH HEALTH SECTOR

HEALTH SYSTEM GROWTH

Malaysia's commitments towards Universal Health Coverage have resulted in major health infrastructure investments within the last decade and investments will continue beyond 2020.
See **section 4.5** & **section 6.5**

GLOBAL MEDICAL TOURISM DESTINATION

Malaysia draws large numbers of medical tourists, seeking to benefit from the excellent and relatively affordable services provided by Malaysia's private health sector.
See **section 3.5**

RURAL HEALTHCARE

Malaysia is investing to strengthen the accessibility and quality of health services for more rural populations. The government welcomes solutions to help achieve this policy objective.
See **section 4.5** & **section 6.5**

FAVOURABLE BUSINESS CLIMATE

Attracting foreign investments and businesses is high on the agenda in Malaysia. Foreign trade and investment agencies offer a wide range of incentives.
See **section 5**

AGEING

Although Malaysia is ageing less rapid compared to Singapore, Thailand and Vietnam, ageing is already a key policy concern. The private sector is already investing in high-end senior care projects.
See **section 3.3** & **section 6.2**

GROWING PRIVATE SECTOR

Malaysia's rather large private sector already delivers excellent health services to affluent and international patients. Private operators are willing to grow into other segments of the market. And the government is willing to license them in order to improve accessibility and quality.
See **section 4.3** & **section 4.5**

GATEWAY TO ASEAN

Malaysia's geographic positioning within the ASEAN region is highly suitable for those wishing to access the larger regional market. Many European countries consider Malaysia as a central hub in the ASEAN region.
See **section 5**

R&D COLLABORATION

Malaysian universities are open to partner with foreign organisations to cooperate in R&D, as well as student exchange and PhD programmes.
See **section 5** & **section 6.4**

OPEN & ACCESIBLE DECISIONMAKERS

Malaysian (business) culture is open, warm and relatively informal. Malaysian decision-makers in healthcare are generally very open and accessible to discuss opportunities to collaborate.
See **section 5**

NON-COMMUNICABLE DISEASES

NCDs are on the rise in Malaysia due to changes in lifestyles and behaviour. Solutions that contribute to healthy lifestyles and controlling this growing burden are increasingly looked for.
See **section 3.4** & **section 6.2**

HOW DOES MALAYSIA COMPARE?

Table 1: Geographic, Demographic, Economic, Business, and Health context in Malaysia

	Netherlands	Malaysia	Singapore	Thailand	Vietnam
Geography & Demographics					
Land Size (km^2)	42 058	329 847	721.5	513 120	331 212
Population (2019)	17 109 189	31 600 000	5 838 861	69 410 868	95 540 000
% expected annual growth rate	0.27	1.23	0.74	0.08	0.88
65 years and older (2019) (%)	20	7	15	13	8
expected in 2050 (%)	28	16	34	29	22
Maternal Mortality Rate (100 000 births)	7	40	10	20	54
Life Expectancy at Birth	82	76	83	76	77
Life Expectancy Global Rank (2017)	19	89	4	91	70
Economic Context					
GDP PPP (in bln USD) (2017)	826.2	933.28	528.14	1 236.35	648.74
expected growth (2020)	2%	4.8%	2.7%	3.7%	6.5%
GDP per capita (2017)	48 223	29 144	94 104	17 893	6 927
annual growth rate (%)	2.5	4.4	3.5	3.7	5.7
(Health) Business Context					
Ease of Doing Business Rank	32	15	2	27	69
Logistics Index	6	41	7	32	39
Pharmaceutical Market (mln USD-2016)	6 000	3000	903	4562	4720
expected growth 2016-2021 (%)	0-0.5	9.5%	5.0%	7.7%	10%
Medical Device Market (mln USD - 2016)	3 486.1	1 233.1	539.4	1 183.2	981.4
projected CAGR 2016-2021 (%)	5.0	9.7	12.3	9.6	9.4
Medical Device Import from the Netherlands 000s USD (%)	n/a	18 208 (1.6%)	32 039 (1.0%)	23 755 (3.2%)	10 113 (1.2%)
Ranking	n/a	11	12	8	16
Medical Device Export to the Netherlands 000s USD (%)	n/a	90 178 (4.4%)	283 767 (4.8%)	8 362 (1.0%)	16 736 (2.7%)
Ranking	n/a	7	4	15	11
Health Context					
Health Expenditure (2016, bln USD)	81.7	13.2	17	25.3	14.9
Health Expenditure as % of GDP	10.69	4.4	6.1	6,2	7.3
Health Expenditure per Capita (USD)	4 746	422.7	2980.6	371	157.8
Public Health Share of HE	86.7	55.4	46.2	86.8	55.2
Type of Health System	Social Health Insurance	Universal Healthcare System	Universal Healthcare System	Universal Healthcare System	Universal Healthcare System

Accumulated data from: World Bank Data (2018), World Health Organisation (2018), Healthdata.org (2019), BMI Medical Devices reports, IMS Market Prognosis (2016), international trade administration (2016).

GLOSSARY OF TERMS

B2B	Business to Business
COPD	Chronic Obstructive Pulmonary Disease
DALY	Disability-Adjusted Life Year
DDG	Deputy Director General
DHSS	Demographic and Health Surveillance System
ETP	Economic Transformation Programme
EUMCCI	EU-Malaysia Chamber of Commerce & Industry
G2G	Government to Government
GDP	Gross Domestic Product
GDP (PPP)	Gross Domestic Product (Purchasing Power Parity)
HDI	Human Development Index
HPS	Hospital Pharmacy Stores
K2K	Knowledge to Knowledge
LSH	Life Sciences & Health
MATRADE	National Trade Promotion Agency of Malaysia
MDEC	Malaysia Digital Economy Corporation
MHTC	Malaysia Healthcare Travel Council
MIDA	Malaysian Investment Development Authority
MOH	Ministry of Health
MOHE	Ministry of Higher Education
MQA	Malaysian Qualifications Agency
MUCHP	Monash University Community Health Project
MyHDW	Malaysian Health Data Warehouse
NCD	Noncommunicable Disease
NKEA	National Key Economic Areas
NSP-NCD	National Strategic Plan for Non-Communicable Diseases
OECD	The Organisation for Economic Co-operation and Development
OOP	Out-of-pocket
PH	Pakatan Harapan
PHC	Primary Health Care
PHI	Private Health Insurance
R&D	Research and Development
RCPsych UK	Royal College of Psychiatrists United Kingdom
REMEDI	Refugee Medical Insurance Scheme
RHI	Resilient Health Infrastructure
RVO	Netherlands Enterprise Agency
TFHC	Task Force Health Care
UN	United Nations

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1 ABOUT THIS REPORT

Background & Purpose

Aligning the interests and strengths of the Dutch Life Sciences & Health sector with the health sector dynamics and interests of Malaysia

This market report was commissioned by the Netherlands Enterprise Agency (RVO) in The Netherlands. It is delivered by Task Force Health Care (TFHC), in close cooperation with the Netherlands Embassy in Malaysia. It provides an analysis of the Malaysian healthcare sector, business opportunities for organisations active in the Dutch Life Sciences and Health sector, and recommendations for the organisations in The Netherlands that see opportunities in working in Malaysia and that consider it a potential growth market for their organisations.

Methodology

Step 1: Identifying and mapping Dutch interest in the Malaysian health sector and the barriers they perceive

In order to obtain a better understanding of the interests of the Dutch Life Sciences & Health sector in Malaysia, historical data, Dutch representation in Malaysia, and results of a survey were referenced. The survey was sent out to over 1 200 Dutch actors within the Life Sciences & Health sector to share their activities, ambitions, and perceived opportunities and barriers in relation to Malaysia. Data was classified into type of organisation, strength (e.g. Medical Devices or eHealth), current or past activity in Malaysia, and their perception of Malaysia in terms of market growth. The results are presented in Chapter 2 and are used to guide the report towards aligning challenges and opportunities in Malaysia with Dutch expertise and solutions.

Step 2: Desk Research

In order to obtain a better understanding of the Malaysian health sector and its dynamics, a literature review was conducted. A range of documentation was perused, including government documents, academic articles, and reports from various organisations and federations. The information gathered was synthesised in order to provide a thorough overview of the Malaysian sector.

Step 3: Fact finding visit to Malaysia

An important element of the study was the fact-finding visit to Malaysia, whereby a delegation from TFHC, accompanied by representatives of the Netherlands Embassy in Kuala Lumpur, gained insights from key stakeholders in the Malaysian health sector. The fact-finding visit took place over a period of one week and included 10 meetings and 3 round table discussions with representatives from the public and private sector, operating at the national, regional and local level. The list of interviewees is presented in Annex 1.

These meetings and discussions enabled the collection of information with regards to additional sources and provided valuable insights into the sector. The data from these interviews allowed for cross-checking of data that had previously been obtained, resulting in the development of an objective and realistic report. These meetings also raised awareness in terms of the expertise and smart solutions offered by the Dutch Life Sciences & Health sector. The visit has resulted in the strengthening of existing relationships in Malaysia, and initiation of new relationships that will benefit from follow-up activities.


INSTITUT KANSER NEGARA


PANTAI HOSPITAL KUALA LUMPUR


PREMIER


PEACE OF MIND
PEACE OF MIND

2 MAPPING DUTCH INTEREST IN MALAYSIA

In order to gauge the degree to which the Dutch are interested in the Malaysian market, an online survey was sent out to 1 200 unique Life Sciences & Health organisations and companies in the Netherlands. The survey was also shared with multiple network and cluster organisations in order to extend its reach. Combined data from the survey, Task Force Health Care, and the Netherlands representation in Malaysia identified 35 unique organisations with activity and interest in Malaysia. Past experience suggests that the number of identified organisations that are active and interested in Malaysia will grow over time.

Figures 1- 5 below shows the current data available by 'type of organisation', 'strength', 'activity in Malaysia', and 'potential growth market'. The dominant perceived barriers derived from qualitative inquiry are listed in *Table 2*.

Interest by Type of Organisation

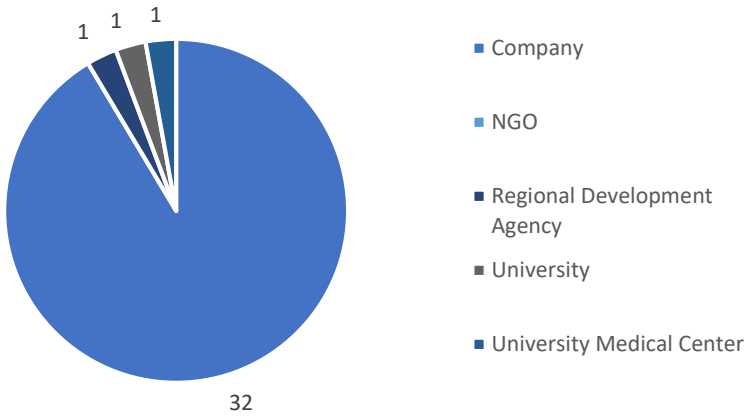


Figure 1: Interest by Type of Organisation

Interest by Strength

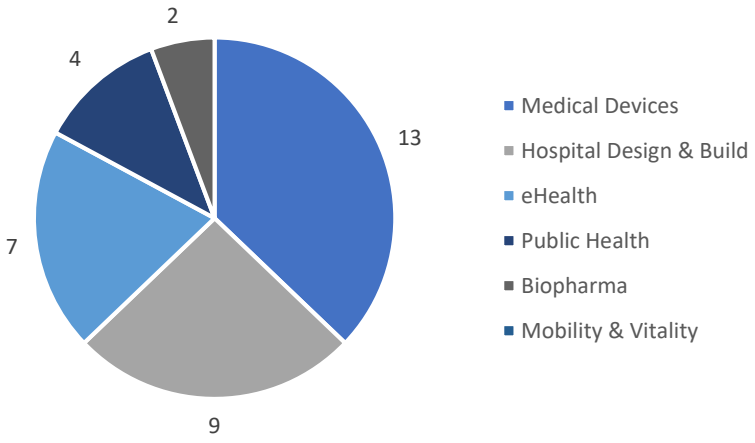


Figure 2: Interest by Strength

Are you active in Malaysia?

in terms of export, research, projects or otherwise

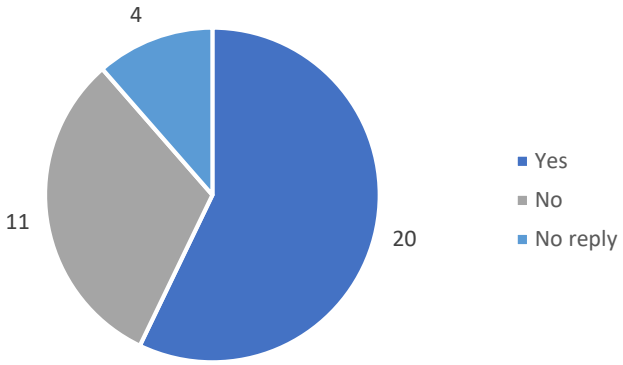


Figure 3: Dutch activity in Malaysia

Is Malaysia a (potential) growth market for your organisation?

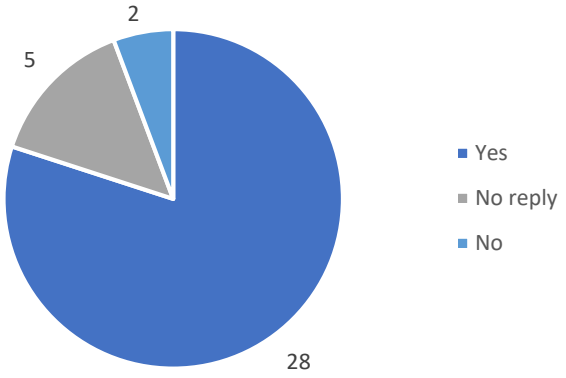


Figure 4: Is Malaysia a (growth) market for your organisation?

Do you experience or foresee barriers in becoming active in Malaysia?

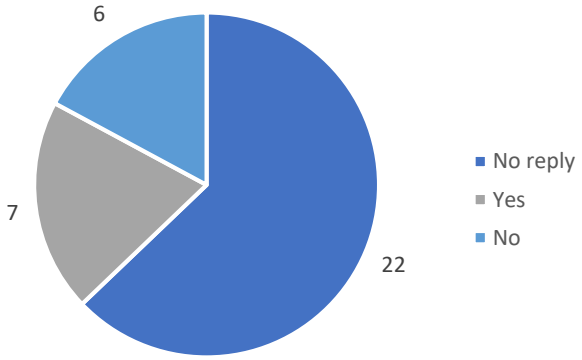


Figure 5: Do you experience or foresee barriers in becoming active in Malaysia?

Main barriers in becoming active in Malaysia

Experienced or foreseen

Table 2: Main barriers experienced by the Dutch LSH-sector

1. Knowledge on market entry (local regulations, import duties, etc.)
2. Finding a good distributor

3 INTRODUCING MALAYSIA

3.1 History & Geography

Malaysia was formed in 1963 with the inclusion of North Borneo (Sabah) Sarawak and Singapore. In 1965 Singapore ceased to be part of Malaysia and became a separate nation. Malaysia is governed by a constitutional monarchy. The King of Malaysia is known as the 'Yang di-Pertuan Agong' or the 'Supreme Head'. The King is elected from the hereditary rulers of the 9 monarchies of Malaysia. Each monarch serves five years before a new monarch is elected.

Malaysia is the only country with territory on both the Asian mainland and archipelago. The geography of the country is made up of two parts. 80% of the Malaysian popultion is located in Peninsular Malaysia (also known as West Malaysia), which makes up 40% of the total country area. The remaining 20% of the population are located in East Malaysia, which makes up 60% of the country area.

Malaysia's climate is tropical, with two annual monsoon seasons. The southwest has a monsoon season between April and October, whereas the northeast has a monsoon season between October and February. Although the temperatures in Malaysia are generally moderated by the surrounding oceans, the country has high humidity levels. In the World Risk Index, Malaysia sits at 88th place out of 173 countries, with a risk index of 6.51. This reflects a medium level of exposure and vulnerability to natural disasters (Welle & Birkmann, 2015).

Table 3: Surface Area, Urbanisation, Climate, and Risk Index for Malaysia and The Netherlands

Geographical indicator	Malaysia	Netherlands
Surface (km^2)	329 847	42 058
Urbanisation (%)	76.0	91.5
Climate	Tropical	Temperate
Risk index	88	50

Source: Central Intelligence Agency, 2017; Alliance Development Works, 2014

3.2 Economy

The Malaysian economy is one of the most open and accessible in the world, with a steady trade to GDP ratio averaging over 140 percent since 2010. Income growth and employment are linked to this openness to trade and invest, with roughly 40% of all jobs in Malaysia being related to export activities. Malaysia's economy has seen an upward trajectory averaging 5.4% growth since 2010, with a GDP (PPP) of 930 750 million USD in 2017. Thanks to its open and diverse economy, Malaysia's economic forecast looks positive (International Monetary Fund, 2018) (The World Bank, 2018). Malaysia has a high Gini Coefficient of 0.46 (Central Intelligence Agency, 2017). This is indicative of a relatively unequal distribution of wealth.

The Malaysian population is divided into three household income groups which has implications for tax and healthcare categorizations. These groups are, the *Top 20%* (T20), the *Middle 40%* (M40), and the *Bottom 40%* (B40). Over the years, the bar for each group's income level has increased and this is one of the indicators of economic growth (Department of Statistics, 2016). The median income of the T20 group is RM 13 148, whilst the median income of the M40 and B40 groups are RM 6 275 and RM 3 000, respectively. The World Bank estimates that Malaysia's gross national income per capita will pass the high-income threshold of USD 12 236 (RM 49 923) sometime between 2020 and 2025. However, more than half of the Malaysian population will earn less than this threshold due to the unequal distribution of income.

Table 4: Economic Indicators for Malaysia

	Netherlands	Malaysia					
	2018	2016	2017	2018*	2019*	2020*	2023*
GDP PPP (bn USD)	972.45	864.86	933.28	999.84	1070.00	1140.00	1390.00
real growth (%)	2.8	4.2	5.9	4.7	4.6	4.8	4.8
per capita PPP (000)	56.57	27.34	29.14	30.82	32.5	34.27	40.22
Inflation rate (%)	1.4	2.1	3.8	1.0	2.3	2.6	2.3
Unemployment (%)	3.9	3.5	3.4	3.2	3.0	2.8	2.8
Government net lending / borrowing (% of GDP)	0.6	-2.6	-2.9	-2.7	-2.6	-2.5	-2.1
Government gross debt (% of GDP)	53.1	56.2	54.1	55.1	54.3	52.9	48.1

Source: International Monetary Fund, 2018

A growing concern for the Malaysian government is the narrow tax base. In 2017, although 14.6 million people were registered in the labour force, only 15% earned enough to pay personal income tax. This means that only 2.27 million people (in a population of 31.6 million people) are contributing to income tax (Iskandar, 2017).

3.3 Socio-demographic Trend

Malaysia has a population of 31.6 million people (32.4 million according to local estimates), with a population density of 97.53 people per km^2, compared to the Netherlands which has a density of 506.66 people per km^2. Average annual population growth rates are expected to continue to slow down as the country's fertility rate declines. UN Population Projections show that Malaysia is likely to become an "ageing" population by the year 2020, when 7% of the population is expected to be aged 65 years and over. The country's demography is expected to change from "ageing" to "aged" (> 14%) by 2040. This is considered an extremely rapid transition, with similar transitions taking 115 years in France, 69 years in the United States and 45 years in England (United Nations, 2017). Malaysia's working-age population currently makes up 70% of the total population, but this proportion is expected to decrease to 64% by 2050, and 56% by 2100. This will have major impacts on the workforce and broader economic development of the country (Atun, Berman, Hsiao, Myers, & Aun Yap, 2016).

Malaysia scores 0.802 on the Human Development Index, which is a relatively high score (the Netherlands index is 0.931) (United Nations Development Programme, 2018).

Table 5: Key Demographic indicators for Malaysia

	Malaysia				Netherlands			
	2017	*2020	*2025	*2030	2017	*2020	*2025	*2030
Population (million)	31.6	32.8	34.9	36.8	17.0	17.1	17.4	17.6
65 years or older (%)	5.9	7.0	8.3	9.7	17.9	20.0	22.1	24.5
Life Expectancy at birth	75.5	75.5	76.3	77.1	82.1	82.9	83.6	84.4
Crude birth rate per 1 000	1.35	1.23	1.04	1.04	10.6	10.6	10.5	10.3
Infant mortality per 1 000	17	16.2	14.8	14.8	3.0	2.0	2.0	2.0

Source: United Nations, 2017

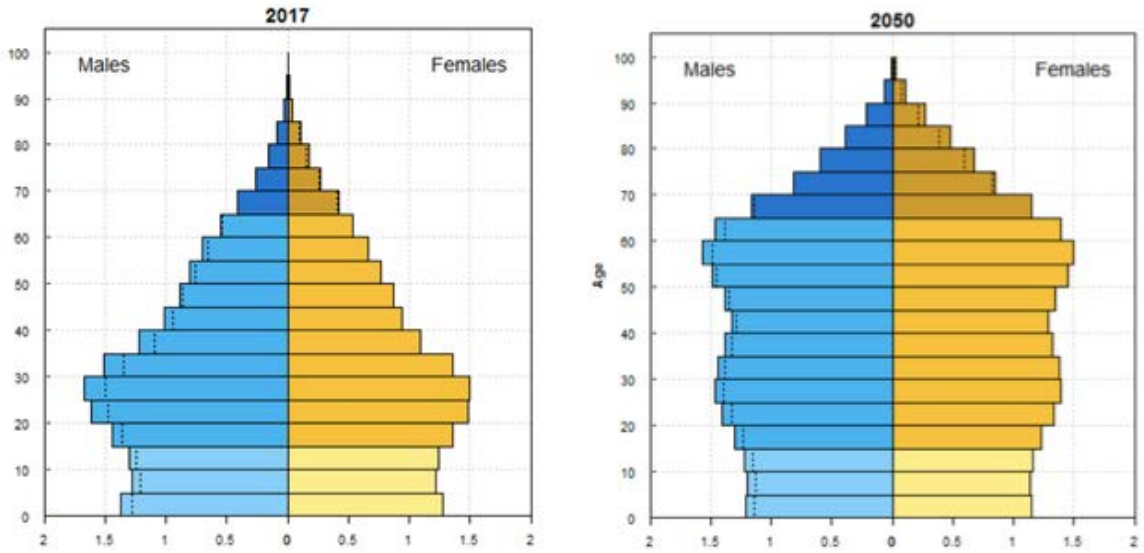


Figure 6: Malaysian Population Pyramid for 2017 and projected population for 2050. The dotted line indicates the excess male or female population in certain age groups.

3.4 Health Status and Burden of Disease

The World Health Organisation estimates that the average Dutchman lives a longer and healthier life than the average Malaysian. The Dutch have an average life expectancy at birth of 82.1 years, whilst the average Malaysian's life expectancy at birth is 75.5 years. The Dutch also have a higher average healthy life expectancy of 72.1 years, compared to Malaysia's healthy life expectancy of 66.6 years.

Looking at lifestyle behaviours, overall Malaysia scores better compared to the Netherlands. Malaysians consume far less alcohol, have fewer tobacco users, and have fewer obese adults (aged 18 and over), compared to the Netherlands. The Netherlands has a better score in terms of physical activity and has fewer obese people in the age 10-19 population. Malaysia also has a much lower suicide rate of 5.5 per 100 000 people, compared to the Netherlands rate of 12.6 per 100 000 people (WHO, 2018).

Table 6: Estimated Risk factors for health in Malaysia and the Netherlands

Risk factors for total population (2017)	Malaysia	Netherlands
Alcohol consumption (litres pure alcohol)	1	9
Tobacco smokers 15+(%)	22	24
Physical inactivity 18+ (%)	38	29
Obesity 18+(%)	15	23
Obesity 10-19 (%)	11	6

Source: (Institute for Health Metrics and Evaluation, 2018).

The burden of NCDs in Malaysia is lower (74% of all deaths in 2016) than that of the Netherlands (90% of all deaths in 2016) (World Health Orgnization, 2018). However, Malaysia's burden of NCDs is still high and rapidly increasing as the population demographic transitions to an "aged" population. As a result, the last comprehensive Malaysian health system review identified NCD's as a serious and growing problem (Atun et al., 2016).

The World Health Organisation reported that in 2016, approximately 19% of all deaths in Malaysia were caused by communicable diseases. Of the communicable diseases, those which caused the largest burden were respiratory infections and HIV/AIDS. To compare, 7 000 Malaysian adults and children died of AIDS in 2016, compared to 200

in the Netherlands. Despite Malaysia's tropical climate, parasitic and vector diseases such as malaria do not rank high in terms of Disability-Adjusted Life Years (DALYs, meaning premature death or disability). Malaysia has seen a lot of success in reducing incidences of malaria and childhood illnesses. However, some serious diseases such as tuberculosis, HIV and dengue are re-emerging on a small scale (Ministry of Health, 2017). There is a need for efforts and strategies to help the marginalized and disadvantaged cope with these patterns of disease. For an overview of leading causes of death in Malaysia view Annex 2.

Table 7: Key indicators on Malaysia's disease burden

Disease Burden (2017)	Malaysia	Netherlands
% of death by NCD	74	90
Risk of premature death (between 30-70)	17	11
NCD burden		
Cardiovascular diseases (%)	38	26
Cancers (%)	16	32
Other NCDs (%)	16	23
Chronic Respiratory diseases (%)	4	7
Diabetes (%)	3	2
Suicide per 1 000	0.05	0.13
Total CD burden in DALY's (per 1 000)		
Infectious and parasitic diseases	657.2	5.9
Neonatal conditions	223.4	53.6
Respiratory Infectious	359.5	88.1
Nutritional deficiencies	94.4	15.7
Maternal conditions	13.9	1.3

Source: (World Health Organization, 2017) (World Health Orgnization, 2018) (United Nations Development Programme, 2018) (Institute for Health Metrics and Evaluation, 2018)

3.5 Medical Tourism

Malaysia is a global force in the medical tourism market. Medical tourism is seen as a key industry by the Malaysian government. The Malaysia Healthcare Travel Council (MHTC) has been set-up to facilitate and promote the industry. Malaysia successfully works to maintain its top position. In 2018, Malaysia has won 7 of the 15 awards at the 2018 IMTJ Medical Travel Awards (IMTJ, 2018). Malaysia's competitive position is a result of the country's high-quality (private) health services, which are offered at competitive prices, its central position (connectivity due to KLCC Airport), a strong tourism and shopping reputation, and cultural affinity with many other regions in the world as an Anglophone country with an Islamic tradition.

4 THE MALAYSIAN HEALTH SYSTEM

4.1 Historical Background

The Malaysian health system was inherited from the British upon becoming independent in 1957, with services primarily based in urban areas. By the 1980's there was a growing demand for healthcare, prompted by rising incomes, urbanisation, and the expansion of the Malaysian middle class. The result of this demand was the transformation of the healthcare system from a largely government-led and funded public service enterprise, to a dual-tiered parallel public-private system with a thriving and sizable private sector.

After 61 years of single-party rule, a new coalition was voted into government in May 2018. With the new coalition, Pakatan Harapan (PH; English: The Alliance of Hope), more reform is expected in the public health sector. The healthcare field was designated as one of 12 National Key Economic Areas (NKEA), with a particular emphasis on pharmaceuticals, under the Economic Transformation Programme (ETP). This is intended to bring Malaysia to a high-income status by 2020. Within this framework, Malaysia plans to invest heavily in health infrastructure, clinical research, medical tourism promotion, promotion of the use of generic drugs, and the production of drugs for exports (Burton, 2019).

4.2 The Malaysian Healthcare System

The Malaysian healthcare system is dichotomous in nature, with public and private service providers. The Ministry of Health acts as funder, service provider and regulator (Galen Centre for Health and Social Policy, 2018). In terms of public health provision, the Ministry of Health (MOH) is responsible for health promotion, disease prevention, as well as curative and rehabilitative care delivered through hospitals, clinics and long-term care institutions. Other government ministries also offer health-related services. Public health services are the primary providers for most rural areas of Malaysia. Approximately 55.4% of health expenditure is funded from public sources (World Health Organization, 2013). The private sector mainly provides services to the urban population through physician clinics, private hospitals, diagnostic laboratories and ambulance services. There are also a few NGOs who provide services to specific population groups. A large proportion of the Malaysian population still make use of traditional medicine (World Health Organization, 2013).

Public Sector

The Malaysian government sets a fee schedule for public sector charges whereby Malaysian citizens pay RM 1 (USD 0.30) for a general outpatient consultation and RM 5 (USD 1.50) for a specialist consultation. Non-citizens, however, pay RM 15 (USD 4.50) and RM 60 (USD 18). Public facilities may not refuse services to people who cannot pay. Many groups are exempt or are charged minimal amounts, including public sector employees and their dependents under employer-employee collective agreements. For dental services, all Malaysians regardless of income can use public services for a nominal charge. Groups exempt of costs include preschool children, school children up to 17 years, pregnant women, civil servants and their dependents under 21 years of age, and physically, mentally and economically disadvantaged people.

The Malaysian government manages an extensive network of primary care clinics and hospitals, ranging from small district hospitals without specialists to large hospitals in state capitals that provide specialist services. Public sector health services are organised centrally by the MOH with minimum decentralisation. Besides the MOH, University Hospitals under the Ministry of Higher Education are also important providers of healthcare, whilst the Ministry of Defence has two hospitals for military personnel and their families (Atun, Berman, Hsiao, Myers, & Aun Yap, 2016). To generate extra income, government hospitals offer different types of wards that range from basic to more luxurious depending on the subsidy the patient is able to pay (Puteh & Almualm, 2017) (Juni, 2014). Annex 3 provides

an overview of the different charges for Malaysian wards. Annex 4 provides an overview of out-patient and specialist clinic charges.

Private Sector

Universal access to the Malaysian healthcare system has led to heavy use of the health services. As the demand for health services has amplified, a vibrant private sector has developed. The private sector is predominantly beneficial to higher income groups, giving this population of people access to higher quality care, shorter waiting times, choices of physicians and other benefits (Quek, 2009). The private health sector is regulated under the Private Healthcare Facilities and Services Act of 1998.

National Governance

Important functions of the government health system, such as policy making, regulation, and planning are centralized at the Ministry of Health (MOH). The MOH is organised into six technical programs which are each led by a Deputy Director General (DDG) or Principal Director. These programs are:

1. Public Health (which includes primary health care);
2. Medical (hospitals and specialist care);
3. Oral Health;
4. Pharmaceutical Services;
5. Food Safety and Quality; and
6. Research & Technical Support.

Subnational Governance

The MOH delegates tasks to state health departments and district health offices at the sub-national level. State health departments mirror the central Ministry's programmatic structure for each of the technical programmes. The only exception is the 'Research and Technical Support Program', which operates only at the central level. State health departments also have an additional programme called the 'Engineering Services Division'. State health departments are run by Deputy State Health Directors who report both to the State Health Director and to the national-level programme leads. State health departments run state hospitals, which are important public providers of tertiary health care.

District health offices manage district-level public health through several divisions. They oversee regulatory, management and pharmacy functions, provide collective health services, and have responsibility for critical service delivery units. These units include health clinics, community clinics, maternal and child health clinics, dental clinics, mobile clinics, flying doctor services, and Malaysia clinics. Secondary (and to some extent tertiary) health care is represented at the district level through the district hospital. Oral health is represented through the district dental health office (World Health Organization, 2013). For a full overview of the Malaysian health system please view Annex 5.

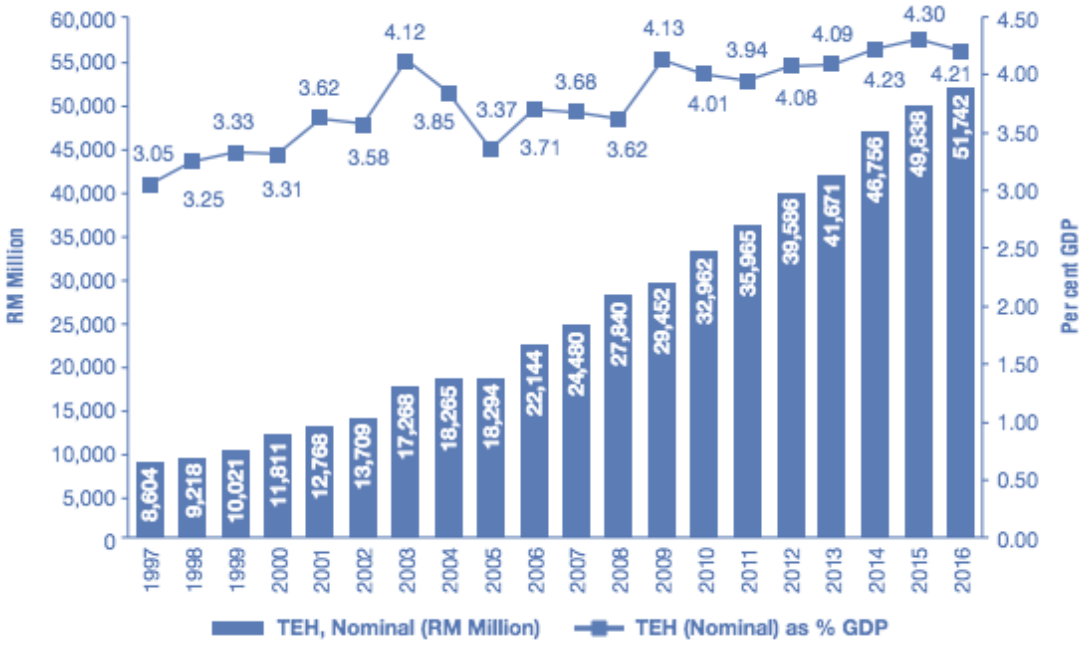
4.3 Malaysian Health Transformation Initiative

In the scope of the National Transformation Programme Annual report, Malaysian decision-makers aim to launch the Malaysian Health Transformation Initiative, which sets the goal to converge the public and private healthcare systems in order to provide a sustainable, affordable, and high quality system. In past years, the public and private healthcare systems have been able to co-exist separately and assist each other in times of need. The MOH believes that converging both systems will provide even greater benefits. The plan is still in the development stages and is seeking input from key stakeholders through a new Health Advisory Council. The initiative marks a major milestone in the development of the Malaysian health system and has the potential to significantly improve the general population's access to health services, which in turn, increases the demand for innovative healthcare solutions.

4.4 Healthcare Expenditure and Financing

In 2016, Malaysia's Total Health Expenditure (THE) was 4.21% of the GDP. This is comparatively low compared to other countries in the OECD. Malaysia has observed a long-term trend in rising healthcare costs (see *Figure 7* below). As a proportion of GDP, total health expenditure has increased from below 3% in 1997 to 4.2% in 2016 (Ministry of Health Malaysia, 2018),

Health Financing



Malaysia's public healthcare system is primarily funded through general revenue and taxation, whilst the private sector is mostly funded through private health insurance and out-of-pocket payments from consumers. Figure 8 shows the health expenditure at all hospitals by source of financing.

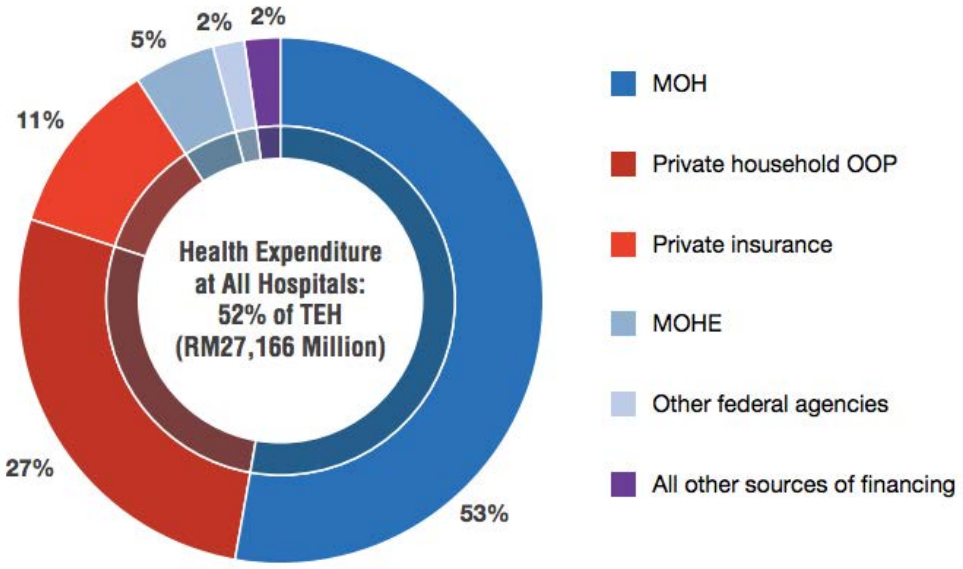


Figure 8: Total expenditure on health by source of financing, 2016 (Ministry of Health Malaysia, 2018)

Social Security

A key strength of the Malaysian health system is its success in providing broad and meaningful protection from the financial risks associated with the high cost of health care. This is achieved through a geographically widespread public delivery system, which offers universal access to a wide range of services at minimal out-of-pocket payments. The out-of-pocket payments (27%) tend to be made by people who can afford it. As a result, incidences of catastrophic and impoverishing health expenditures in Malaysia are among the lowest observed among all middle-income countries worldwide.

To further increase the social security in Malaysia the following policy initiatives are currently being deployed in Malaysia (Annex 6 provides a more detailed overview):

B40 Health Protection Fund: "mySalam"

The B40 Health Protection Fund called 'mySalam' is a national fund available to the poorest 40% of the Malaysian population, some 3.69 million people aged between 18 and 55 years. The insurance scheme offers protection against 36 critical illnesses, including cancer and Alzheimer's, during hospitalisation. The fund is managed by private insurer Great Eastern Takaful Bhd (Aziz, 2019).

B40 Health Protection for those over 50 years: "PeKa B40"

The Peduli Kesihatan scheme (PeKa B40) is the Malaysian government's effort to help older people in the bottom 40% of the population with accessing healthcare services. The government has allocated RM 100 million to introduce a pilot, which will initially cover 800 000 eligible recipients over the age of 50, nationwide. The scheme includes transport costs, health screenings, medical devices, and incentives for completing cancer treatment. PeKa B40 is managed by ProtectHealth Corporation Sdn Bhd, a non-profit company was set up under the MOH (Fong, 2019).

Private Insurance

In 2015, approximately one-third of the Malaysian population had some form of private health insurance (PHI) or employer provided health coverage (Atun, Berman, Hsiao, Myers, & Aun Yap, 2016). The top three insurers account for more than 50 percent of the market. The PHI policies currently available on the market can be grouped into four broad categories: Hospitalization and surgical insurance, Critical illness insurance, Disability income insurance and Hospital income insurance. Private insurers in Malaysia tend to not cover outpatient care. Beneficiaries often need be admitted to hospital before they are eligible to receive a reimbursement. Almost all benefits packages involve caps in benefits.

4.5 Health Infrastructure

Malaysia's health services and health system infrastructure has expanded rapidly since the 1970s, often exceeding population growth rate (Atun, Berman, Hsiao, Myers, & Aun Yap, 2016). Both the public and private sector play an important role in the health care delivery infrastructure. A list of hospitals accredited by the prominent accreditation body, the Malaysian Society for Quality in Health (MSQH) can be found here.

Public Sector

The coverage of health facilities throughout Malaysia is relatively good. Although public hospitals and clinics tend to be clustered around urban areas, there is a relative good distribution of facilities, even in remote areas. An estimated 68% of the Malaysian population live within a 30-minute drive of a type 1-2 government clinic.

Several states have substantially lower levels of access to these types of clinics, including Kelantan (54 percent within a 30-minute drive of type 1-3 clinic), Terengganu (36 percent), Sarawak (35 percent), Sabah (23 percent), and Pahang (19 percent). *Figure 9* shows the geographical distribution of government health clinics in Malaysia. *Figure 10* shows the same for government hospitals.

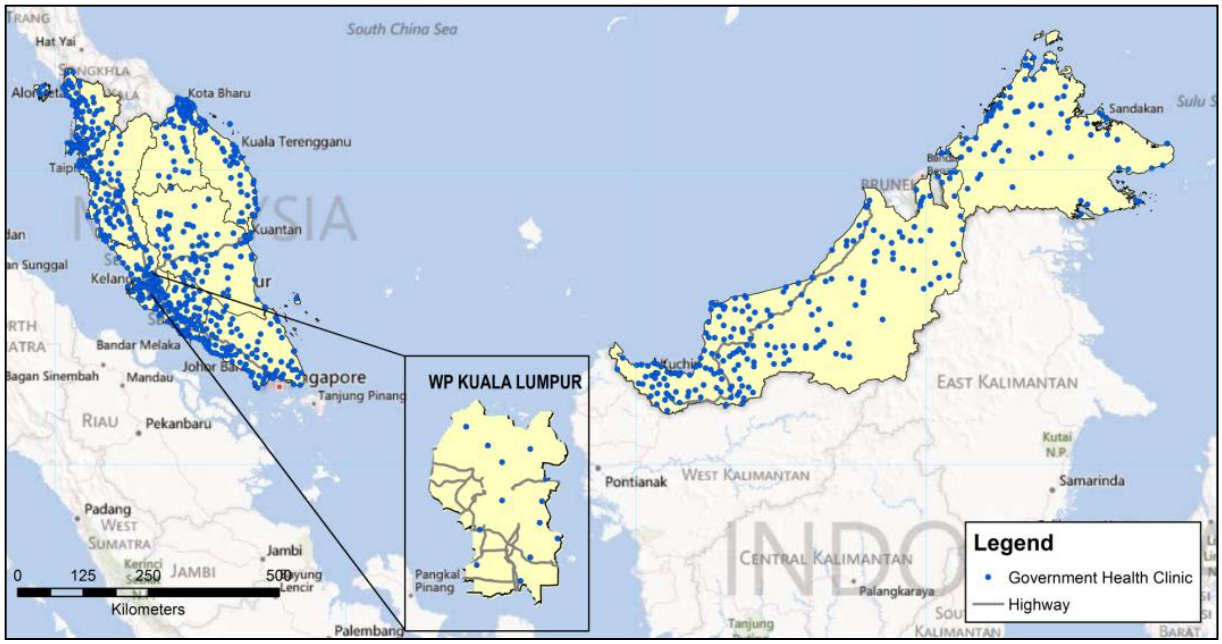


Figure 9: Distribution of government health clinics in Malaysia (Ministry of Health Malaysia, 2013)

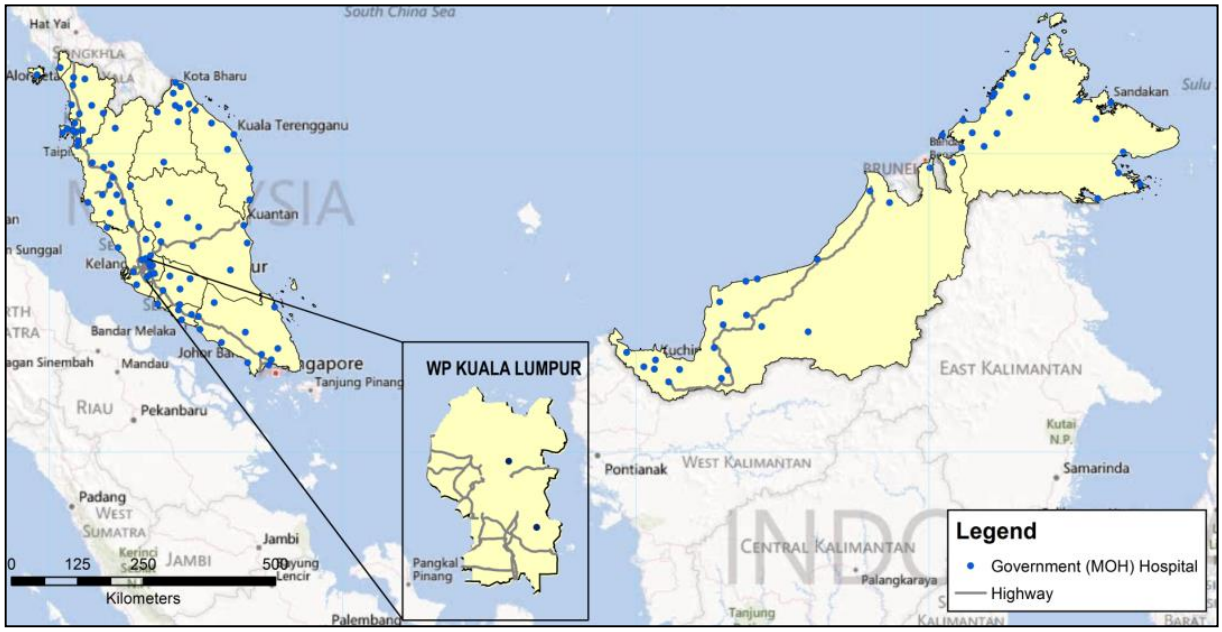


Figure 10: Distribution of Ministry of Health hospitals (Ministry of Health Malaysia, 2013)

Private Sector

Malaysia's private healthcare sector has developed and evolved alongside the government delivery system. In 2017, the private sector included 200 hospitals, 16 maternity homes, 22 nursing homes, and 7 571 medical clinics. *Figure 11* shows the geographical distribution of private health clinics in Malaysia. *Figure 12* shows the same for private hospitals.

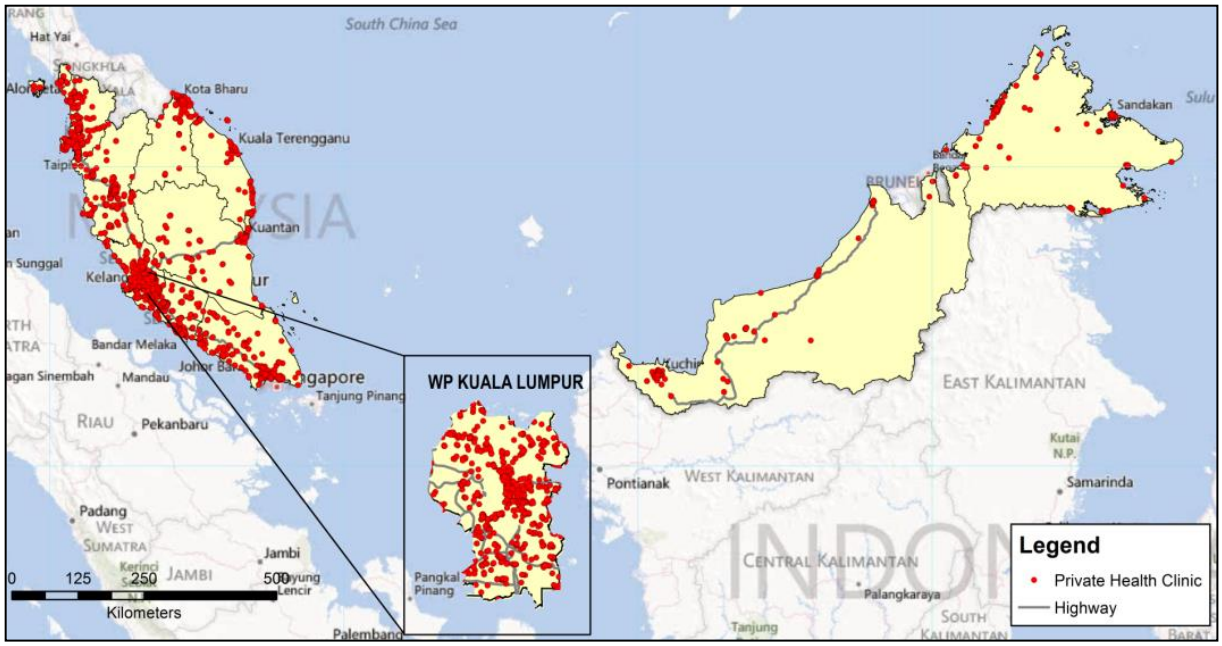


Figure 11: Distribution of private health clinics (Ministry of Health Malaysia, 2013)

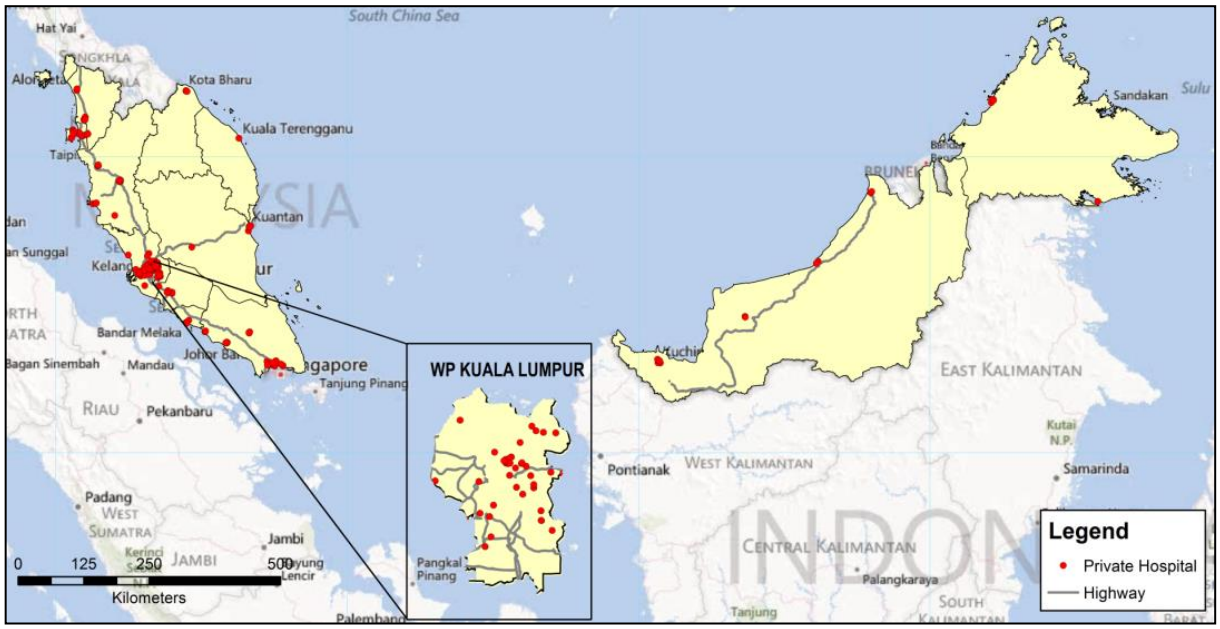


Figure 12: Distribution of private hospitals (Ministry of Health Malaysia, 2013)

Primary health services

The primary health care (PHC) system in Malaysia is a mixed system, with both public and private providers playing an important role in service provision. The public sector provides 60% of all outpatient care, but accounts for about 35% of total expenditure on primary care. Private primary care providers are clustered in urban areas, especially in the west coast of Peninsular Malaysia, whilst public primary care providers serve both rural and urban populations.

Malaysia's utilisation of outpatient care is relatively low compared to other countries in the region, with 3.9 doctor visits per person per year. The main cause is the accustomedness of the Malaysian population to seek care from secondary or tertiary care providers. Secondly, doctors in public clinics are generally not deeply involved when it comes to follow-ups, this is especially prominent when it comes to mental illness and NCDs. Thirdly, continuity of

care between specialists and primary care providers is weak, as clinic doctors are seldomly informed of a patient's outcome after a patient has been treated or diagnosed by the specialist.

Secondary and Tertiary health services

The public sector accounts for 66% of the expenditures on secondary and tertiary health care services and 75% of utilisation and beds. Private hospitals are more numerous but are smaller in size (with fewer beds on average) and manage around 25 to 33% of all inpatient admissions.

There are important geographic differences in the distribution of public and private hospitals and hospital beds. Penang, Melaka, Kuala Lumpur, Perak, and Negeri Sembilan are states with greater than national average bed density. However, Penang, Melaka, and Kuala Lumpur have greater numbers of private sector providers—with a greater ratio of private to public beds—than Perak and Negeri Sembilan (Atun, 2016).

Sources of dissatisfaction with public services have reportedly included choice of doctor, waiting time, privacy in hospitals, and to a lesser extent the amount of time spent with the doctor, while the main source of dissatisfaction with private services is treatment charges.

Mental Health provision

Most of the burden of managing mental health services in practice falls on psychiatric units in general hospitals, which manage 90 percent of all new patients, 83 percent of all follow-ups, and 75 percent of all admissions. By contrast, primary care-level mental health only provides nominal coverage, with 0.07 percent of cases seen at clinics classified as mental health cases—far lower than the expected prevalence of mental health conditions in a general clinic setting. As with other chronic conditions, there is minimal counter-referral of mental health cases (only 0.5 patients per clinic per year) from specialist care back to primary care.

Public expenditure on mental health is 1.3 percent of total government health spending, which is less than half the global median of 2.8 percent. However, despite the limited resources, 66% of the mental health budget is allocated to neuropsychiatric hospitals, which provide care to a small minority of severely affected mental health patients. A more recent development is the MENTARI approach, which is initiated by the MOH to better reach out to (underserved) communities via Community Mental Health Centres (MHN, 2019). These centres screen, diagnose and treat mental health issues and advocate to decrease the stigma on mental health. Currently, there are 20 MENTARI operating in Malaysia (at least one in every state).

4.6 Healthcare Professionals

There were 50 365 physicians in Malaysia in 2016, amounting to 1.6 physicians per 1 000 people. The number of physicians has increased substantially in a short time, as it was 36 607 in 2011. This equates to a 27% increase in the total number of physicians over 5 years. The total number of nurses in Malaysia is 103 028, which amounts to 3.3 nurses per 1 000 people. There were also 7 022 dentists which amount to 0.2 dentists per 1 000 people (World Health Organization, 2017).

	MoH	Non-MoH	Private	Total	Profession: Population
Doctors[a]	40,230[1]	3,118[2]	14,483[3]	57,831	1 : 554
Dentists[4]	5,097	639	2,862	8,598	1 : 3,728
Pharmacists[5]	6,409	190	4,960	11,559	1 : 2,773
Opticians[6]	n.a	n.a	2,491	2,491	1 : 12,866
Optometrists[6]	293	52	1,089	1,434	1 : 22,350
Assistant Medical Officers	13,904[1]	523[7]	2,847[7]	17,274	1 : 1,855
Nurses	65,709[1]	5,771[8]	34,809[8]	106,289	1 : 302
Pharmacy Assistant	4,107[1]	416[5]	1,484[5]	6,007	1 : 5,335
Assistant Environmental Health Officers	4,985[1]	n.a	n.a	4,985	1 : 6,464
Medical Laboratory Technologists	6,345[1]	n.a	n.a	6,345	1 : 5,051

Table 8: Health human resources as of December 2017 (World Health Organization, 2017)

Medical Education

The pre-service education and specialty training for health professionals in Malaysia involves multiple institutions including the Ministry of Health, the Ministry of Higher Education, the Malaysian Qualifications Agency (MQA), and professional councils or boards including the Malaysian Medical Council. Medical doctors in Malaysia must complete five years of undergraduate medical training, followed by a two-year 'housemanship' at a government healthcare facility. There is also a compulsory service requirement that doctors must serve an additional two years in the Ministry of Health following their full registration. After completing their period as house officers, doctors can choose to continue as Medical Officers (general practitioners) or to specialize by completing a master's degree or equivalent followed by in-service training.

The number of medical graduates has been increasing in recent years. This trend is driven in part by an increase in the number of private institutions offering medical training, an increase in the number of graduates from foreign medical schools and an increase in the numbers of doctors graduating from post-graduate (specialist) programmes at Malaysian public universities. The increased stream of graduates however raised a significant challenge for the Malaysian health system, a shortage of house officer places (Ministry of Health Malaysia, 2018). The government seeks to increase the capacity for house officers through shortening the training period by implementing the High Performance Housemanship Programme.

4.7 Further Reading

If you would like to expand your understanding of the Malaysian health system, the following publications provide excellent overviews and more specific readings.

- Specialty & Subspecialty Framework of Ministry of Health Hospitals under 11th Malaysia Plan
- National Strategic Plan for Non-Communicable Disease
- National Policy for Older Persons

5 MARKET STRUCTURE

Malaysia is internationally oriented and is highly committed to further develop as an international hub. Malaysia therefore welcomes international cooperation to supply new technologies to its domestic markets. To this end, has put down low thresholds and has initiated major incentives for international (medical) tourists, students and businesses to work with/in Malaysia. International cooperation goes beyond flat sales. Malaysia seeks to develop its domestic industries and therefore stimulates foreign organisations to contribute to the development of Malaysian industries through for example partnerships with local organisations.

5.1. Business Climate

Malaysia is ranked 15th place in the World Bank Ease of Doing Business Index, scoring higher than Thailand (27th) and Vietnam (69th). The Netherlands is ranked 36th place in this index.

In the early 1990s Malaysia actively invested in the liberalization of its economy. The government has implemented incentives, tax deduction schemes, free trade zones and tax holidays to maintain an attractive environment for foreign investment (Export.gov, 2018) (Govindaraju & Appukutty, 2009).

Foreign investment is important to the Malaysian economy, as the country is heavily dependent on imports. In order to enable easy access for imported goods and services, the Malaysian government has worked to create a favourable regulatory environment for foreign businesses and investors. Actions such as the instalment of the Malaysian Anti-Corruption Commission are evidence that the Malaysian government is taking a proactive stance in combatting corruption and working towards creating a world class business environment. Malaysia's infrastructure and human capital indices score favourably in international rankings, although inequality still exists across rural and urban areas (The World Bank, 2018).

The appointment of a local agent is essential if one decides to do business in Malaysia. Whilst direct sales from abroad are technically possible, preference is often given to suppliers with a strong local presence. This is especially true of the public sector, where government tenders will often select the supplier with the highest local profile. Other major factors, aside from the price of a product, generally centre on the level and scale of after-sales service provided. In the public sector, products are generally evaluated by the Ministry of Health Health Technology Assessment Section (MaTHAS) before an order is placed. The Malaysian government does not purchase refurbished medical equipment, although there are no restrictions in the private sector.

Text Box 1: **Key Characteristics of Malaysian Business Culture and Market**

- Generally open and pragmatic market.
- Social and target driven health system
- Preference for suppliers with long-term commitment to Malaysia.
- Quality and price are prominent considerations.
- Strong relationships and personal trust are of utmost importance when doing business.
- After-sale support is extremely important.
- Once recognized and approved, the adoption of new medical technology in especially Malaysia's private hospitals tends to be high.

Given the market size, most potential distributors request exclusive rights to sell the product. They will also likely ask for distribution rights for the regional South East Asian countries, since Malaysia can serve as a gateway into the

region. Careful selection of a distributor's organisational culture, product range, and network in Malaysia and other South-East Asian countries is therefore important to consider

5.2. Market Access

Product Registration & Reimbursement: In-Country Representative

In order to obtain market authorization in Malaysia, organisations with medical devices must register with the Malaysian Medical Device Authority (MDA)This can be done electronically through the web-based Medical Device Centralised Online Application System (MeDC@St). One requires a local *Authorized Representative* to complete the registration process.

Medical devices are classified as Class A (low risk), Class B (low to moderate risk), Class C (moderate to high risk) and Class D (highest risk). This is similar to the classification scheme used in the European Union.

Pharmaceutical and health supplements registration now lies with the National Pharmaceutical Regulation Agency (NPRA). Registration takes place through a *Product Registration Holder* a locally incorporated company, corporate or legal entity, with permanent address and registered with Companies Commission of Malaysia.

If an exporter does not have a local presence in Malaysia, local partners which meet the requirements can be appointed as Authorised Representative and/or Product Registration Holder who would be made responsible for managing the registration process and serving as legal representative in all dealings related to the review and approval. It is recommended to use an independent third party to register products. This will allow for easier transfers should one wish to change the local partner. It can become difficult to change a partner if one's distributor if they hold the product's license.

Text box 2: **Tips for Market Entry**

- Look for market potential and identify partners through Malaysia's concise policy plans and documentation.
- Connect with Key Opinion Leaders, Medical Associations, Medical Societies, and professors of renowned universities in order to get feedback on the market potential. This can be achieved via meetings, tests, or pilots (while protecting your knowledge carefully).
- Reach out to Key Opinion Leaders and Key Purchasers in the market (prior to attending promotional events).
- Conduct in-depth market research (prior to product registration).
- Conduct a proactive partner search that validates the pre-qualifications of the partner needed.
- Proactively plan meetings with Malaysia's health decision-makers in order to cater to their very busy schedules.
- Prepare presentations and documentation to showcase your product/service.

Regional Development Through Foreign Investment

Malaysia's proactive economic development policies emphasize foreign investment as a key priority for social and economic development. Furthermore, it has been stated that government procurement should stimulate growth in local industries and encourage and support the evolvement of Bumiputera (indigenous) entrepreneurs. The Malaysian government has established numerous agencies (including MATRADE and MIDA) who work to increase the attractiveness of Malaysia's business climate to foreign companies. These agencies have a large portfolio of economic incentives available. Foreign investment in the form of establishing a physical business in Malaysia is therefore preferred.

Useful Organisations For Market Entry and Further Information

Useful organisations to explore and enter the Malaysian health system and market are listed in Annex 7. Key events are listed in Annex 8.

- The Netherlands Enterprise Agency (RVO.nl) encourages entrepreneurs in sustainable, agrarian, innovative and international business. It helps with grants, finding business partners, know-how and compliance with laws and regulations.
- The Netherlands Embassy in Kuala Lumpur, promotes and supports cooperation between Malaysia and the Netherlands.
- The Medical Device Authority (MDA) Malaysia is responsible for the registration of medical devices in Malaysia.
- EU-Malaysia Chamber of Commerce & Industry (EUMCCI)
- Malaysia External Trade Development Corporation, is a national trade promotion agency under the Ministry of International Trade and Industry
- Malaysian Investment Development Authority, the government's principal agency to oversee and drive investment into the manufacturing and services sectors in Malaysia
- ASEAN Business Advisory Council Malaysia
- State Level Investment Promotion Agencies: full list
- Malaysian Dutch Business Council (MDBC): forges business ties between Malaysia and the Netherlands.

5.3. Medical Supply Chain & Government Procurement

In the public sector, Malaysian hospitals are permitted to issue their own tenders for purchases up to RM 50 000 (USD 13 736). Larger tenders are controlled by the MOH and published in the local press. An exciting development in hospital procurement are healthcare reforms initiated by Malaysian government to make the medical supply chain and tender processes more transparent and accessible. One way in which the Malaysian aims to accomplish this are reducing the direct negotiation between hospitals and suppliers.

All contractors intending to participate in local tenders must be registered with the Government. Foreign contractors in medical technology can register with the Companies Commission of Malaysia (SSM) while contractors construction can register with the Construction Industry Development Board (CIBD). International tenders will only be invited for supplies and services if there are no locally produced supplies or services available. For specific works, if local contractors do not have the expertise and capabilities, tenders may be called on in a joint venture basis between local and foreign contractors to encourage the transfer of technology. International tenders for works may only be called when local contractors do not have the expertise and capability, and a joint venture is not possible. Equipment and pharmaceuticals are stored and distributed through Hospital Pharmacy Stores (HPS), which are key facilities in the MOH's supply chain. They function as distribution warehouse for all inventories required for patient care services.

When it comes to the private sector, hospitals have their own procurement divisions or use external consultants. Hospital managers are often the major decision-makers when it comes to purchasing in the private sector, although some hospital chains purchase items centrally. Private hospital groups generally work with their own group purchasing associations.

Overview of Malaysian tender and procurement portals

- Ministry of Works – Tender Notice
- Ministry of Health Tender Procurement (only available in Malay)
- MYPROCUREMENT portal
- MyGovernment

6 ALIGNING DUTCH STRENGTHS WITH MALAYSIAN OPPORTUNITIES

6.1. Medical Devices

The strength 'Medical Devices & Supplies' encompasses solutions which improve health delivery. Organisations within this strength offer solutions for diagnostics, treatment and related processes, and typically partner with providers of primary, secondary and tertiary care services and/or intermediate organisations.

Trends

With an estimated market value of USD 1.2 billion in 2016 (BMI, 2017), Malaysia's medical device market is the second largest market of the ASEAN 4 countries (Singapore, Malaysia, Thailand and Vietnam). Malaysia's medical device market shows a fast growth rates with a CAGR of 9.7% (US 5.0%, China 3.9% and Netherlands 3.5%). This trend expected to continue in and beyond 2019. reaching a value of USD 1.9 million by 2021 (BMI, 2017).

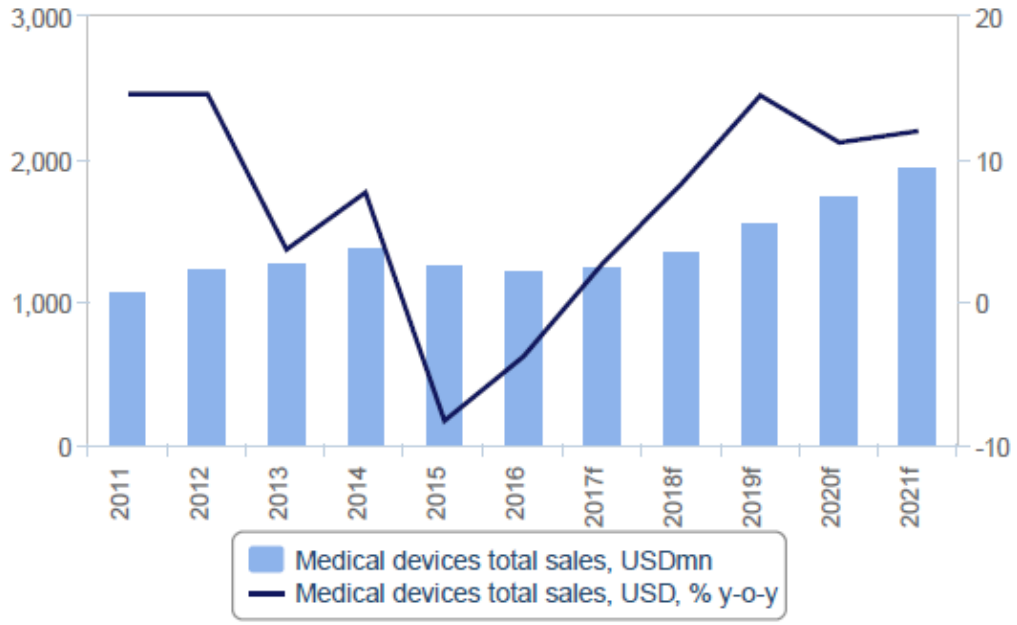


Figure 13: Projected Medical Device Sales Between 2011-2021

An increased demand for healthcare services has resulted in the growth of the Malaysian medical device market. Both public and private health providers have expanded their facilities and are investing in equipment and procedures that result in operational efficiencies. Public hospitals are implementing innovative management strategies, such as the Lean Technique, and recently cut waiting times by 50% in 17 public hospitals. Malaysia is a global medical tourism destination, creating an incentive for private healthcare providers to invest in innovative technologies which maximise health outcomes and increase patient comfort.

Malaysia has a strong medical industry, focused on the production of medical supplies such as gloves and catheters. A lot of the local production is exported and Malaysia remains to rely on a very high import share of 81.2% for medical devices. The Netherlands is currently a small player in the Malaysian medical device market, with a 1.6% share of the market. Malaysia relies heavily on the import of medical devices from the United States (18.5%), Singapore (17.9%), and China (16.9%).

Opportunities

Malaysia's medical devices market is growing steadily as a result of a growing health demand and utilisation in both public and private health services. Malaysia is open to cooperate on:

- Strong demand for solutions that contribute to increasing the efficiency and productivity in health care delivery as patient volumes will increase and available health workforce will decrease in the near future.
- Strong demand for solutions that contribute to provide primary and geriatric health services.
- Strong demand for cutting-edge technologies that contribute to quality and an improved patient experience in Malaysia's advanced private health facilities, such as minimally- and non-invasive treatments.
- Strong demand for solutions that strengthening the surveillance, monitoring and treatment of infectious diseases, such as the (re)emerging antimicrobial resistant bacteria, vector borne diseases and vaccine preventable diseases.
- Demand for medical devices & supplies that contribute to providing emergency services mainly in rural areas. The ambition of the Government of Malaysia is to (also) involve the private sector more into these types of services.

Text box 3: **Peka B40 to give an impulse to Malaysia's medical device market**

The launch of Peka B40 in January 2019 is expected to lead to a demand for technology to perform lab tests like blood tests, diabetes control, cholesterol tests, urine tests, kidney function tests, as well as mental health checks and breast and prostate examinations. Learn more.

** The pilot Peka B40 Screening Programme is a nationwide health screening programme which serves an estimated 800 000 recipients out of the B40 group (Bottom 40% of income-earners) aged 50 and above. The programme provides free health screenings for 36 ilnesses. Besides government hospitals, the MOH works with private clinics and laboratories to execute the programme.*

Market Entry Considerations

- To access the Malaysian market, it is recommended (and sometimes required) to partner with a local business partner.
- The landscape of medical device suppliers and distributors in Malaysia consists of a variety of organisations. Large multinationals such as Abbot, B. Braun and Medtronic are active. Malaysia however also houses a thriving community of mainly local small to medium sized distributors. The Malaysia Medical Device Association MMDA and Association of Malaysian Medical Industries (AMMI) can help get in touch with distributors.
- Section 5.3 provides an overview of the largest tender portals for medical devices & supplies.
- Malaysia has installed a favourable business climate with many incentives available for foreign medical device manufacturers and suppliers. The Malaysian Investment Development Authority (MIDA) provides more information.
- Malaysia looks to enrich its local industries and economy with foreign expertise and technology. Business proposals which contribute to knowledge and resource transfer to Malaysia are therefore preferred and sometimes even required to do business in Malaysia. This is especially true for doing business within the public sector.
- Approval in one of the recognized reference markets (US, European Union, Australia, Japan or Canada) can leverage approval in Malaysia, resulting in a simplified registration process.

6.2. Mobility & Vitality

Mobility & Vitality encompasses solutions which help people live and age healthily. Dutch organisations within this strength offer solutions in areas such as mobility aids and monitoring systems and typically partner with organisations which deliver elderly care, primary health care, rehabilitation services and care to vulnerable groups, such as mental health and special needs patients.

Trends

Malaysia's life expectancy has continued to grow since the 1980's, with a life expectancy of 75.5 and a healthy life expectancy of 66.6. This is slightly below the OECD average, but the progession is showing a positive trend. Improved health outcomes, along with rapid economic development have resulted in following trends that impact the market for solutions in the domain of 'mobility & vitality':

- **An emerging ageing population:** Although Malaysia is ageing less rapid compared to Singapore, Thailand and Vietnam (see *How does Malaysia Compare*), ageing and the (partly) related rise in non-communicable diseases are key (policy) concerns. A major challenge is deploying sustainable financing models to strengthening senior care services and addressing the burden of non-communicable diseases. Most Malaysians currently do not have access to senior and long-term care facilities, due to limited capacity in the public and NGO sector. A senior official at the Ministry of Health aptly stated ***"Most developed countries became rich before they became old, this unfortunately is not the case in Malaysia"***. Private facilities and privately owned retirement villages (Textbox 4) currently only cater for the needs of the more prosporous part of the population. A more recent trend is the government seeking to increase the accessibility for the general population to private health providers though the promotion of public-private partnerships (Oxford Business Group, 2019) (Section 4.3).
- **An increasing burden of non-communicable:** The increased burden of lifestyle and age-related diseases has increased the demand for healthcare services. Healthy living and ageing (with involvement of the community) in order to prevent the population from entering the health system is are government priorities. Examples of policies and strategies that have already been implemented are the Peka B40 Screening Programme (Section 6.1), a soda tax, and the National Strategic Plan for Non-Communicable Disease which promotes healthy lifestyles (Tan, 2018).
- **Towards strengthening Mental Healthcare:** A more recent priority in Malaysia is the expansion of the capacity of mental health specialists and psychiatric departments in government hospitals, which are currently not well-equipped to deliver the mental health services (Lin, 2017). The 2016 report on Malaysian Mental Healthcare Performance provides a more in-depth review of the current status of mental health.

Opportunities

Preparing Malaysia's health system for its emerging ageing society and growing burden of non-communicable (chronic) diseases is a top priority for both Malaysia's public and private health sector. Malaysia is open to cooperate on:

- Strengthening the ability and capacity of Malaysia's public health facilities (specifically primary healthcare facilities) to provide health services to an ageing population with an increasingly higher burden of non-communicable (chronic) diseases.
- Strengthening the ability and capacity of Malaysia's public health facilities that are planning to deliver mental health services.
- Improving the ability of the Malaysian health system to perform efficient health screenings, especially the 423 GP clinics who have registered under the Peka B40 Screening Programme.
- Implementing solutions in Malaysia's emerging homecare market which enable Malaysians to heal and age within their community and at home.

- Providing high quality health services to Malaysia's higher income groups. This group with a relative higher health literacy is willing to invest in homecare solutions and fitness programmes to age healthy. Private health providers are targeting this segment of the market with luxury senior care facilities.

Text box 4: **Retirement villages flourish on rising demand**

Four retirement villages lead Malaysia's effort to facilitate healthy and happy ageing. The Green Leaf (Sepang), AraGreens Residence (Ara Damansara), Green Acres (Ipoh) and Eden-on-the-Park (Kuching) are multi-residence housing facilities intended for senior citizens. The facilities provided include meals, gatherings, recreation activities and some form of health or hospice care. Learn more.

Market Entry Considerations

- Malaysia's Mobility & Vitality sector is comprised of a wide selection of health providers including government welfare homes, private nursing homes, private care centres, voluntary aged-care organisations and charitable organisations for care related to especially children, disabled and senior citizens. Government welfare homes are generally approached through the Ministry of Health and/or the Ministry of Women, Family and Community Development (KPWKM) while the private health providers can be approached directly.

6.3. eHealth

The Dutch has strengths in the eHealth sphere, which encompasses solutions which help connect actors in health systems, often through the exchange and storage of health information. Organisations within this strength offer solutions in health information exchange, interoperability, telemedicine, serious gaming and personal health monitoring. These organisations typically partner with health care providers and consumers.

Trends

Malaysia has a developed information infrastructure, which delivers an output which rivals many OECD-countries with an average fixed broadband speed ranking 82nd place and mobile speed ranking 32nd in the world (Speedtest, 2019). This information infrastructure is highly utilised with 80.1% of the population using the internet compared to 76.2% in the US, 84.4% in Germany and 93.2% in the Netherlands (The World Bank, 2017).

The Malaysian health information infrastructure is still in a preliminary stage and developing slowly. Malaysia's MOH sees inadequate planning of health information systems, a shortage of subject matter experts, and the required scale of investments as the main causes for this lagging development (MDD, 2016). The 'Malaysia Health Information Exchange initiative' (MyHiX) was Malaysia's first step to implement a digital health strategy. The initiative was started in 2008, but was only implemented in 8 healthcare institutions in 2017. In that same year, Malaysia launched a new initiative called the Malaysian Health Data Warehouse (MyHDW) to use big data for analysis and decision-making, with the potential of reducing costs, reducing waste, and optimising the use of limited resources (Lum, 2019).

Many facilities have been investing in their own IT-systems, causing health information exchange and interoperability to be a major challenge. A lack of communication between the private and public sector has further increased a discrepancy between health information systems in Malaysia (Lum, 2019). Nonetheless, the Malaysian MOH aims to implement an electronic medical record in 145 government hospitals and 1 700 health clinics within the next 3-5 year. An ambition which Minister of Health Datuk Seri Dr Dzulkefly Ahmad repeated recently (May 2019).

Telemedicine has been a keen interest to Malaysian decision-makers since the Telemedicine Blueprint 1997 was launched. The MyHealth Portal is one of the first initiatives by the MOH and is used to improve the health literacy of the population by providing information on health issues, the health system, and education on prevention. Other uses of telemedicine are hampered by insufficient health information infrastructures, and lagging policies and legislation that does not empower telemedicine providers to enter the market. The MOH is currently working on better legislation and stimulates telemedicine pilots. As a result, telemedicine in primary care units is becoming more and more prevalent in Malaysia, especially in rural areas where patients have to travel long distances to meet health professionals.

Text box 5: **Malaysian telehealth pioneer grows platform to 100+ doctors and 200+ pharmacists**

One of the first telehealth providers in Malaysia, DoctoronCall, provide medical consultations through phone and video calls at low fees of only RM20. Learn more.

Opportunities

The Malaysian government has set ambitious plans to make use of health information technologies to increase quality, accessibility and affordability. Malaysia is open to cooperate on:

- Solutions that contribute to health information storage, management and exchange. Key priorities are development of the Malaysian Health Data Warehouse and the involvement of all public hospitals in health information exchange.
- Solutions that contribute to the realization of Malaysia's Electronic Health Record within the next 3-5 years.
- Solutions that contribute to safe and secure health information exchange in the face of cyber security.
- Solutions in the area of telemedicine that contribute to the accessibility of healthcare services in all areas (including more rural and remote areas) and alleviate pressure on Malaysia's health system (health at home).
- Solutions that empower the private sector to reach their rather tech-savvy (potential) clients, for instance with mobile apps to browse for doctors, online scheduling of appointments and mobile payment of health services..

Market Entry Considerations

The government is the central party in Malaysia's eHealth market. Key organisations and departments to engage with in order to co-develop in Malaysian eHealth through pilots and R&D grants are the:

- Ministry of Health Telehealth Division
- Malaysia Innovation Foundation (YIM)
- National Institutes Of Health (NIH)

6.4. Public Health

The Netherlands has key strengths in the sphere of Public Health. This refers to the identification and implementation of policy and practice in the health system which improves access, coverage, quality, or efficiency (health system strengthening). Organisations within this strength offer solutions in health financing, supply chain management, and emergency responses. Organisations typically partner with government, public health agencies and NGOs (The World Health Organization, 2019).

Trends

Malaysia's public health system has made remarkable progress in increasing the health status and outcomes for the Malaysian population by establishing an extensive health infrastructure as well as funding schemes and programmes, making health care services more accessible for all (United Nations, 2017).

As Malaysia's population grows and ages, the demand for high quality health services continues to rise, increasingly exceeding the supply of the health infrastructure, leading to a number of challenges and trends in Malaysian healthcare:

- **Exploring new Health Financing Models.** A first trend are efforts to adjust the traditional health financing model to best serve an increased and shifting health demand in Malaysia. Because of the large informal sector in Malaysia, health financing models cannot easily rely on structural funds or risk pooling (Verma, Hassali, & Saleem, 2015). The Malaysian government is looking to make its universal healthcare coverage more robust by switching from directly subsidising provision to subsidising the purchase of services on behalf of the entire population.In order to increase health outcomes, Malaysian decisionmakers have shifted focus to prevention and early detection of non-communicable diseases by launched initiative such as the Peka B40 Screening Programme.
- **New Management Strategies.** A second trend is the implementation of new management strategies to increase the efficiency of Malaysia's public hospitals. The introduction of Lean Management in government hospitals through the LEAN Project has shown promising results when pilots were started from 2013 onwards.
- **Public-Private Cooperation.** A third trend in Public Health in Malaysia, as mentioned under section '4.3' is the Malaysian Health Transformation Initiative through which the Malaysian public and private sector are moving to cooperate closer to open -up private health providers for the general population. The government is expected to set-up an independent Health Advisory Council which advise the ministry on strengthening healthcare delivery
- **Strengthening the health workforce.** A fourth trend and challenge for the Malaysian health system are shortages/maldistributions of its health workforce. Malaysia is one of the few South-East Asian nations to not have an acute large shortage of health professionals but rather a shortage of specialists and GP's. Graduates are slowly growing. An increased number of graduates however does not directly translate into a growing number of doctors as Malaysia experiences a shortage of housemanship places. To increase the number of graduates and houseman officers, Malaysia engages with universities around the world, notably in the UK, and the private sector to develop student exchanges programmes and actual health campuses such as NUMed Malaysia and the Cambridge-Sunway partnership on medical education. Furthermore the private sector, which offers higher wages than the public sector has a large pull on the best talent coming out of medical schools (Lum, 2019). Retention of public sector doctors is therefore an important issue. Strategies to retain personnel are for example the introduction of *Full Paying Patients* which allows specialists in public hospitals to practice in a private wing on a part-time basis (Quek, 2009). Lastly, the attraction/build of a health workforce educated to deliver health services to medical tourists is a challenge for Malaysia's private hospitals. Doctors and nurses which are fluent in Arabic, Chinese, Japanese and native languages of other major medical tourist segments are in high demand.

Opportunities

After expanding its health infrastructure to reach relative good coverage throughout the country, Malaysian health decisionmakers are focused on increasing the performance of their health infrastructure and making the health system future-proof in a context of increasing and shifting health demand. Malaysia is therefore open to cooperate on:

- Implementing innovative health financing schemes and policies which prepare health services for Malaysia's shifting health demand.

- Transforming its dual health system to accommodate cooperation between public and private health providers.
- Improving the efficiency of hospital management and operations in Malaysia.
- Growing and retaining the Malaysian health workforce.
- Building up a health workforce specialised in medical tourists.

Market Entry Considerations

The Malaysian stakeholders in Public Health are very open to engage with organisations which could provide solutions for challenges to Malaysia's health system. Key organisations to engage with on public health challenges are:

- Ministry of Health of Malaysia (MOH)
- Malaysia Healthcare Travel Council (MHTC)
-

6.5. Hospital Design & Build

The strength 'Hospital Design and Build' encompasses solutions which help public and private health systems to expand and improve health infrastructure. Organisations within this strength offer solutions in design (architecture), engineering, build, planning of operations and maintenance, and project management. Providers of such solutions typically partner with public or private hospital project developers and assigned project managers.

Trend

Malaysia's health infrastructure has expanded drastically in the last decades, reaching a proper coverage across the country. Both public and private sector continue to invest in new hospitals and expanding existing ones. MOH announced 3 major specialist hospital projects, 2 minor specialist hospital projects, 5 non-specialist hospital projects and 2 special medical institutions. MOH also intents to invest in 10 regional health centres in Pusat Dara Negara and Perbutanan Forensik. A list of project announcements can be found in the 11th Malaysia Plan (2016 – 2020) – Speciality & Subspeciality Framework – Table 15 (MDD, 2016).

Malaysia's private health providers are expanding mainly through high-end facilities, targeting the growing middle class and medical tourism (international patient wings). Large hospital groups such as KPJ Healthcare and Columbia Asia Hospitals are currently primarily focused on expanding their health facilities rather than building new facilities. The private sector does however show some growth. Projects can be found in Textboxes 5 and 6.

The government of Malaysian is positive about the growth of the private sector (MPC, 2014). Cooperation between the public and private sector is an important strategy for the government to increase the accessibility of health services. This is highlighted in the Malaysian Health Transformation Initiative and will provide an incentive for the private sector to continue to invest in the health infrastructure.

Text box 6: **SELGATE Corporation to build 10 new private hospitals in the state of Selangor**

The new hospitals alleviate the congestion in the region's government hospitals as they will target patients from the medium-income group who are from the M40 category while the B40 group (about one million of the population) will be able to access these facilities through state programmes. Learn more.

Text box 7: **Sunway BHD to build 6 new hospitals and upgrade Sunway Medical Centre to cater to increased demand of medical tourists**

Sunway BHD pledges an investment of RM1 billion to build 2 hospitals in Penang and hospitals in Cheras, Petaling Jaya, Johor and Ipoh. The planned hospitals are primarily aimed at attracting medical tourists around the globe. The existing Sunway Medical Centre will be expanded from 245 to 620 beds. Sunway BHD aspires to expand this hospital to a total of 1 100 beds to become a teaching hospital. Learn more.

Opportunities

- Multiple public hospital projects are current being developed and it is expected that more projects will follow in the upcoming years. A list of government project announcements can be found in the 11th Malaysia Plan (2016 – 2020) – Speciality & Subspeciality Framework – Table 15 (MDD, 2016). Most infrastructure tenders will be listed on portals mentioned in section 5.3.
- Partner with private investors for the design and build of private hospitals.
- Partner with private investors for the design and build of elderly care facilities.

Market Entry Considerations

- The current government under Tun Dr Mahathir bin Mohammad is reviewing all ongoing and future health infrastructure projects which have been started by the previous government. The original health infrastructure development plans set-out in the 11th Malaysia Plan (2016-2020) and the MOH's Strategic Plan are being adapted to better-align with the new government's vision for Malaysia (Export.gov, 2018).
- MOH has sharpened procurement rules and protocols and operates a list of 'authoritative contractors' after several negative experiences with hospital contractors (Borneo Post, 2017), most notably the Bera project in 2015,. The MOH Planning Division manages this list and also provides educational activities. The ministry could therefore be a logical first contact.
- Malaysian hospital build stakeholder advise to partner with local, experienced, and well-connected companies that have a proven track-record in winning public and private tenders. As mentioned in chapter 5, government procurement guidelines value the inclusion of the local hospital build industry. A joint venture with a local organisation might be a preferred way of working.
- In the private sector, hospital groups can be approached directly. An overview of major private hospital groups can be found in (Section 4.5)

7 CONCLUSION

This report has highlighted the top reasons for Dutch companies and organisations to be interested in the Malaysian healthcare market. The report has also spelled out the trends, opportunities, and market entry considerations in five main areas of interest of the Dutch health sector: Medical Devices (& Supplies), Mobility & Vitality, eHealth, Public Health and Hospital Build.

As emphasized in this report, Malaysia has made great strides to develop its health system with a relatively good capacity and coverage of its infrastructure across the country as a result.

The increased utility of health services in Malaysia has however resulted in increasing costs of healthcare which are spurred further by Malaysia's shift in health challenges from infectious diseases and mother & child care related issues, to an increasing (chronic) disease burden related to lifestyles and an ageing society.

In this context, Malaysia's new government seeks to further develop its health system, having pledged significant investments to increase insurance coverage (with a special focus on vulnerable groups) and health infrastructure (particularly in remote areas of Malaysia). Next to these steps Malaysia focuses on increasing utilisation of its primary healthcare, increasing the reach and capacity of its rural health network (through telemedicine), improving healthy lifestyles of its population and further developing its health information exchange with the Malaysian data warehouse at its core.

Malaysia's large and developed private sector meanwhile is stimulated by its competitive region to position Malaysia as the medical hub of the region and so remain the main provider of care to Malaysia's growing middle classes while attracting more medical tourists. The private sector therefore has a high incentive to improve the quality and affordability of its services.

An exciting development in Malaysian healthcare is the Health Transformation Initiative which grows public-private partnerships which could lead to large increases in Malaysian health services utilisation and therefore stimulate demand for medical technology.

Both public and private Malaysian decisionmakers are very receptive to international expertise and especially welcome partners which are willing to invest in Malaysia. This attitude in combination with recent developments, make the Netherlands a logical partner as the Netherlands is a frontrunner in the digitalisation of healthcare, renowned for its long-term care and primary healthcare system and related innovative approaches, and home to multiple high-ranked university medical centres and (related) research infrastructures and spin-off companies.

Next steps

This report marks an important step to strengthen the bilateral healthcare relationship between Malaysia and the Netherlands. Together with the Netherlands Embassy in Kuala Lumpur and the Embassy in Singapore, future steps and activities will be identified to further connect Malaysia and Dutch healthcare stakeholders and build towards sustainable healthcare relationships. Please get in touch with the Netherlands Embassy and TFHC for more information.

8 ANNEXES

Annex 1 - List of Interviewees

During the fact-finding visit to Malaysia, a delegation from TFHC, accompanied by representatives of the Netherlands Embassy in Kuala Lumpur gained insights from key stakeholders in the Malaysian health sector. The fact-finding visit took place over two separate visits totalling a period of one week and included 10 meetings and 3 round table discussions with representatives from the public and private sector, operating at the national, regional and local level. These organisations are listed in chronological order below:

1. Ministry of Health (MOH)
    A. Policy & International Relation Division
    B. Planning Division
    C. Family Health Development Division
2. Putrajaya Hospital
3. National Cancer Institute
4. Columbia Asia Bukit Rimau
5. Pantai Hospital Kuala Lumpur
6. KPJ Ampang Puteri Specialist Hospital
7. Prince Court Hospital Kuala Lumpur
8. Galen Centre for Health and Social Policy
9. MATRADE
10. Malaysia Healthcare Travel Council
11. Roundtable 'Business and R&D in Malaysia'
    A. Invest KL
    B. MedSpark
    C. Pharmaceutical Association of Malaysia (Phama)
    D. Clinical Research Centre
12. Roundtable 'How to do business in Malaysia'
    A. Scionex Sdn. Bhd.
    B. OSA Technology Sdn. Bhd.
    C. Implantex (M) Sdn. Bhd.
    D. ASEAN Business Advisory Council Malaysia
    E. Malaysian Investment Development Authority
    F. Malaysia Medical Device Association
    G. Zuellig Pharma Sdn Bhd
    H. LKL International Berhad
    I. LAC Medical Sdn Bhd
13. Roundtable 'Financing health innovations'
    A. ASEAN Business Advisory Council Malaysia

B. Malaysia Digital Economy Corporation (MDEC)

C. LAC Medical Sdn Bhd

D. SD Global Tech

E. NAZA

Annex 2 – Leading Causes of Death in Malaysia

Health indicators	Malaysia	Netherlands
Life expectancy 2017 (Healthy)	75.5 (66.6)	82.1 (72.1)
Leading causes of (2017):		
Death	1. Ischemic heart disease 2. Lower respiratory infection 3. Stroke 4. Road injuries 5. Alzheimer's disease 6. COPD 7. Chronic kidney disease 8. Lung cancer 9. Colorectal cancer 10. Cirrhosis	1. Ischemic heart disease 2. Alzheimer's disease 3. Lung cancer 4. Stroke 5. COPD 6. Colorectal cancer 7. Lower respiratory infect 8. Breast cancer 9. Pancreatic cancer 10. Falls
Premature death	1. Ischemic heart disease 2. Lower respiratory infection 3. Stroke 4. Road injuries 5. Neonatal disorders 6. Lung cancer 7. Chronic kidney disease 8. Self-harm 9. Congenital defects 10. HIV/AIDS	1. Lung cancer 2. Ischemic heart disease 3. Stroke 4. Alzheimer's disease 5. COPD 6. Colorectal cancer 7. Breast cancer 8. Self-harm 9. Lower respiratory infect 10. Pancreatic cancer
Disability	1. Low back pain 2. Headache disorder 3. Diabetes 4. Depressive disorders 5. Age-related hearing loss 6. Anxiety disorders 7. Other musculoskeletal 8. Neonatal disorders 9. Neck pain 10. COPD	1. Low back pain 2. Headache disorders 3. Diabetes 4. Neck pain 5. Depressive disorders 6. Anxiety disorders 7. Age-related hearing loss 8. Falls 9. COPD 10. Oral disorders

Sources: (World Health Organization, 2017) (Institute for Health Metrics and Evaluation, 2018)

Annex 3 – Charges in Malaysian Wards

Class	Daily Ward Charges			
Category	Malaysian Citizen			Non-Citizen
	Excecutive	Air-Conditioned	Non Air-Conditioned	
VIP	RM 225	-	-	-
1 bedded	RM 180	RM 120	RM 90	RM 320
2 bedded	RM 150	RM 90	RM 60	RM 240
4 bedded	-	RM 60	RM 45	RM 200
2	-	RM 40	RM 25	RM 180
3	-	RM 3.00		RM 160

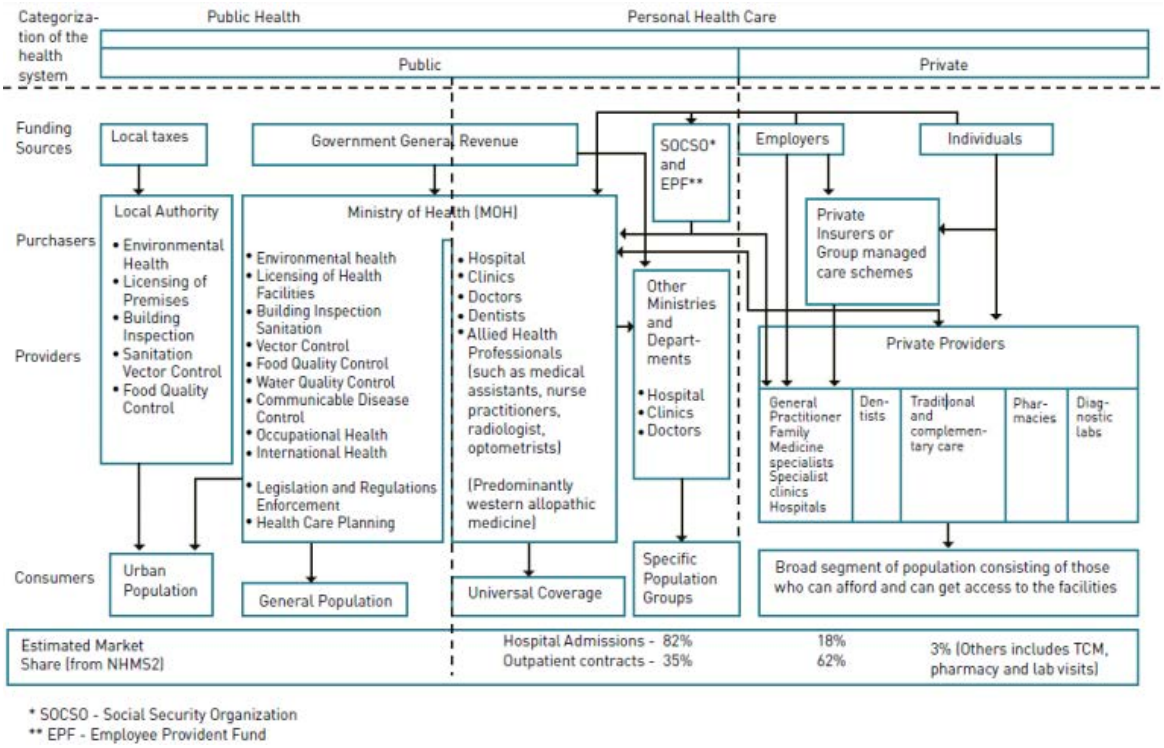
Source: (Ministry of Health Malaysia, 2019)

Annex 4 – Out-patient and specialist clinic charges

Charges	Out Patient Department	Specialist Clinic
Malaysian Citizen	RM 1.00	i. Referred by Government Medical Officer Clinic visit after discharged from ward RM 5.00 for subsequent visit excluding charges for investigation Investigations are charged according to first class rate ii. Referred by Private Practitioner RM 30.00 for first visit RM5.00 for subsequent visit excluding investigation charges Investigations are charged according to first class rate iii. Clinic visit after discharged from ward RM 5.00 for every visit including investigations charges
Non-Citizen	RM 40.00 (excluding investigations or procedure)	RM 120.00 (excluding investigation or procedure)

Source: (Ministry of Health Malaysia, 2019)

Annex 5 – Organisation of the Malaysian Health System



Source: (Ministry of Health Malaysia, 2019)

Annex 6 – Malaysian Health Insurance Schemes

	Public services	SOCSO	Employee Provident Fund	Peka B40	mySalam B40 insurance scheme	Private insurance
Input	Taxation and supplemented by low co-payment	Employer contributions	Savings fund (Pensions)	Programme of RM 100 million	Private seed fund of RM2 BN	Premiums (citizens and employers)
Eligibility	Citizens of Malaysia	Working citizens and permanent residents (excl. government employees, self-employed and their spouses and domestic servants)	Working citizens and permanent residents	Eligible B40 recipients (lower income group)	Eligible B40 recipients (lower income group)	-
Output	Access to subsidised public health facilities	Employment injury insurance & Invalidity pension scheme	Max. 10% personal savings can be allocated to medical expenses, provide	Sponsored health screenings	One-off payments of RM8.000 and a max of RM700 annually when diagnosed with one or more of 36 specific critical illnesses	Access to private health facilities
Challenge	Roughly 85% of Malaysia's workforce does not reach the income threshold to pay taxes.		-	Out-patient services and prevention in many cases not covered		

Sources: (Iskandar, 2017) (Fong, 2019) (Ministry of Women, Family and Community Development Malaysia, 2006) (Perkeso Prihatin, 2019)

Annex 7 - Key Players in Malaysia's Health System

Organisation	Function	Website
Ageing Asia	Ageing Asia Innovation Forum, is an annual business of ageing platform to access investment and partnership opportunities in Asia Pacific	URL
ASEAN Business Advisory Council Malaysia (ASEAN-BAC)	ASEAN-BAC's activities are primarily focused on reviewing and identifying issues to facilitate and promote economic cooperation and integration.	URL
ASEAN Federation of Medical Device Industry	ASEAN Federation of Medical Device Industry represents a come together among Medical Device Industry Associations in the Southeast Asia Region, and it comprises of 8 trade associations	URL
Association of Private Hospitals of Malaysia (APHM)	an Association representing over 100 private hospitals and medical centers in Malaysia.	URL
Asia Pacific Medical Technology Association	Regional medical technology association	URL
Companies Commission of Malaysia (SSM)	The main activity of SSM is to serve as an agency to incorporate companies and register businesses as well as to provide company and business information to the public.	URL
Construction Industry Development Board (CIBD)	The Board advises the Federal and the State Governments, as well as other stakeholders on matters affecting or connected with the construction industry.	URL
Clinical Research Malaysia	facilitates the entry of industry-sponsored research into Malaysia	URL
EU-Malaysia Chamber of Commerce & Industry (EUMCCI)	Promotes and supports EU business interests in Malaysia	URL
Federation of Private Medical Practitioners Association (FPMPAM)	A national body representing over 5.000 doctors in private practice in Malaysia	URL
Galen Centre for Health and Social Policy	An independent public policy research and advocacy organisation committed to a free market approach in the development of patient-centric and community-focused health and social sectors.	URL
Gerontological Association of Malaysia (GEM)	Advocacy agency promoting population ageing issues in Malaysia	URL
Invest KL	Investment promotion agency in Kuala Lumpur	URL
*State Level Investment Promotion Agencies	Other Investment Promotion Agencies	URL
Malaysia Digital Economy Corporation (MDEC)	Promotes and facilitates Malaysia's digital economy	URL
Malaysia External Trade Development Corporation	Malaysia's national trade promotion agency	URL

Malaysia Healthcare Travel Council (MHTC)	MHTC facilitates and promotes the healthcare travel industry of Malaysia	URL
Malaysia Healthy Ageing Society (MAHS)	Advocacy agency promoting population ageing issues in Malaysia	URL
Malaysia Medical Device Association (MMDA)	Represents and supports local and foreign manufacturers and distributors involved in the distribution and sales of medical devices and related healthcare products and equipment within Malaysia	URL
Malaysian Investment Development Authority (MIDA)	MIDA assists companies which intend to invest in the manufacturing and services sectors, as well as facilitates the implementation of their projects.	URL
Medical Device Authority Malaysia (MMDA)	Implements and enforces the Medical Device Act 2012 (Act 737) by registering medical devices etc.	URL
Malaysian Society for Quality in Health (MSQH)	Conduct a voluntary quality accreditation program for Malaysian health care organisations.	URL
Mental Illness Awareness and Support Association (MIASA)	MIASA is a mental illness NGO founded by patients for patients.	URL
National Council of Senior Citizens Organisations of Malaysia (NACSCOM)	A not-for-profit federation of 40 affiliate senior citizens organisations in Malaysia with a membership of +- 20.000 senior citizens	URL
National Institutes of Health (NIH)	A network of prominent Ministry of Health (MOH) research institutes	URL
Pharmaceutical Association Malaysia (Phama)	Association representing 45 member companies in Malaysia	URL

Annex 8 - Key Events: Trade Fairs, Exhibitions and Forums

Organisation	Main function	Upcoming date(s)	Country	Venue
Ageing Asia Innovation Forum	Forum where developers, healthcare operators, and investors identify social and economic opportunities	14 – 15 May 2019	Singapore	Sands Expo and Convention Centre
Medical Fair Asia	Regional hospital, medical and pharmaceutical exhibition	11 – 13 Sep. 2019	Singapore or Thailand	Takes place in Bangkok and Singapore
Malaysia International Dental Exhibition and Conference	International exhibition and conference on dental equipment (500+ exhibitors)	11 – 14 Jul. 2019	Malaysia	Kuala Lumpur Convention Centre
APHM International Healthcare Exhibition	Exhibition on developments in Malaysia's health sector	29 – 31 Jul. 2019	Malaysia	Kuala Lumpur Convention Centre
View other events here				

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Task Force Health Care
Dutch platform for the life sciences & health sector

Netherlands Enterprise Agency

Agenda

For more information on upcoming activities:

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