

# VIETNAM

## Market Study

Opportunities for the Dutch Life Sciences & Health sector in Vietnam

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# PREFACE

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May 2019

Vietnam is developing rapidly. The country's young and vibrant population has propelled the country to achieve success as a middle-income country but also increase inequalities within the country. Alongside its rapid economic development, Vietnam's health system moves to remove barriers to achieve universal health coverage and access.

The state of Vietnam's health infrastructure is developing fast as well, but still forms a barrier to health access. Many hospitals are outdated and overcrowded and are in need of new medical equipment and more staff. Another barrier is a relative high incidence of financial hardship as a result of relative high out-of-pocket expenses on healthcare.

To achieve universal health coverage, Vietnam has set ambitious goals to expand the coverage of health funding schemes and health infrastructure in both urban and rural areas.

Vietnamese policymakers work with growing but limited domestic health budgets. Together with involved international organisations, multilateral banks, NGOs and funding institutions, Vietnam therefore looks proactively at both decent equipment to supply its health system and disruptive technologies which increase the quality, accessibility and affordability of healthcare in Vietnam.

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 Hanoi and Singapore and the Consulate-General in Ho Chi Minh City.

It aims to align the respective Life Sciences & Health sectors of the Netherlands and Vietnam. In an effort to increase mutual understanding and inspire collaboration between these countries, this report provides useful insights into the Vietnamese health system and sector and identifies potential areas of cooperation.



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# 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
- > A sustainable and long-term approach
- > Demand-driven & Context specific

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# CONTENT

**OUR APPROACH.....3**

**CONTENT.....4**

**TOP REASONS – WHY VIETNAM IS INTERESTING FOR THE DUTCH HEALTH SECTOR.....6**

**HOW DOES VIETNAM COMPARE?.....7**

**GLOSSARY OF TERMS .....8**

**LIST OF FIGURES AND TABLES .....10**

**1 ABOUT THIS REPORT.....11**

BACKGROUND & PURPOSE.....11

METHODOLOGY .....11

**2 MAPPING DUTCH INTEREST IN VIETNAM .....13**

**3 INTRODUCING VIETNAM.....15**

3.1 HISTORY & GEOGRAPHY .....15

3.2 ECONOMY .....16

3.3 SOCIO-DEMOGRAPHIC TREND .....16

3.4 HEALTH STATUS AND BURDEN OF DISEASE .....17

**4 THE VIETNAMESE HEALTH SYSTEM .....19**

4.1 HISTORICAL BACKGROUND .....19

4.2 GOVERNANCE .....19

4.3 THE VIETNAMESE HEALTH SYSTEM AND INFRASTRUCTURE.....19

4.4 HEALTH EXPENDITURE AND FINANCING.....22

4.5 HEALTHCARE PROFESSIONALS.....23

4.6 FURTHER READING .....23

**5 MARKET STRUCTURE.....24**

5.1. BUSINESS CLIMATE .....24

5.2. MARKET ACCESS .....25

5.3. MEDICAL PROCUREMENT.....26

<b>6</b>	<b><u>ALIGNING DUTCH STRENGTHS WITH VIETNAMESE OPPORTUNITIES</u></b>	<b><u>28</u></b>
6.1.	MEDICAL DEVICES	28
6.2.	MOBILITY & VITALITY	30
6.3.	HOSPITAL DESIGN & BUILD	31
6.4.	EHEALTH	33
6.5.	PUBLIC HEALTH	35
<b>7</b>	<b><u>CONCLUSIONS</u></b>	<b><u>37</u></b>
<b>8</b>	<b><u>ANNEXES</u></b>	<b><u>38</u></b>
	ANNEX 1 – LIST OF INTERVIEWEES	38
	ANNEX 2 – LEADING CAUSES OF DEATH IN VIETNAM	39
	ANNEX 3 – KEY PLAYERS IN VIETNAM’S HEALTH SYSTEM	40
	ANNEX 4 – KEY EVENTS: TRADE FAIRS, EXHIBITIONS AND FORUMS	41
<b>9</b>	<b><u>REFERENCES</u></b>	<b><u>42</u></b>



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# TOP REASONS – WHY VIETNAM IS INTERESTING FOR THE DUTCH HEALTH SECTOR



## GROWING HEALTH INFRASTRUCTURE

Vietnam's invests in large projects to develop its health system through growing domestic budgets and Official Development Assistance (ODA).

See [section 6.3](#)



## LOCAL GIANT

Vietnam is the 15th most populous country in the world with densely populated urban areas and as such dwarfs countries in its region. Vietnam strives to grow coverage of its Compulsory Health Insurance (CHI) to 80% and 95% of this population in respectively 2020 and 2025.

See [section 3.3](#) & [section 4.4](#)



## PRIMARY HEALTHCARE DEVELOPMENT

Vietnam aims to increase the utilisation of primary healthcare through investments in district and community health centres. The Vietnamese have shown interest in the Dutch Primary Care infrastructure, especially in terms of the mindset of citizens to their trust their family doctor.

See [section 4.3](#) & [section 6.3](#)



## INNOVATIVE PRIVATE HOSPITALS

Vietnam's private health sector is growing. Demands for high-quality healthcare grow rapidly as Vietnam's middle class is expected to double from 13% to 26% in 2026. The private sector is accessible and open to innovative solutions that maximize profits and attract new patients.

See [section 4.3](#)



## BROAD TECHNOLOGY DEMAND IN HEALTHCARE

As an upcoming and fast expanding health system, Vietnam requires a broad scope of solutions. Technology which might already be established in more developed health systems could be novel in Vietnamese context.

See [section 6.1](#)



## RURAL ACCESS TO HEALTH

Vietnam invests in increasing the quality and accessibility of health services for its rural population. The government welcomes solutions to help achieve this policy goal.

See [section 4.3](#) & [section 6.3](#)



## ACADEMIC COOPERATION

Vietnamese medical schools and research institutes are outward looking and already have engaged in many international partnerships.

See [section 6.5](#)



## DUTCH-VIETNAMESE CONNECTION

The Dutch have a strong anchor in Vietnam in the form of the Medisch Comité Nederland-Vietnam (MCNV) who have been active in the region for over 50 years.

See [Annex 2](#)

# HOW DOES VIETNAM COMPARE?

Table 1: Geography, Demographic, Economic, Business, and Health context in Vietnam compared to other countries.

	Netherlands	Malaysia	Singapore	Thailand	Vietnam
<b>Geography &amp; Demographics</b>					
Land Size (km <sup>2</sup> )	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
<i>% expected annual growth rate</i>	0.27	1.23	0.74	0.08	0.88
65 years and older (2019) (%)	20	7	15	13	8
<i>expected in 2050 (%)</i>	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
<b>Economic Context</b>					
GDP PPP (in bln USD) (2017)	826.2	933.28	528.14	1 236.35	648.74
<i>expected growth (2020)</i>	2%	4.8%	2.7%	3.7%	6.5%
GDP per capita (2017)	48 223	29 144	94 104	17 893	6 927
<i>annual growth rate (%)</i>	2.5	4.4	3.5	3.7	5.7
<b>(Health) Business Context</b>					
Ease of Doing Business Rank	32	15	2	27	69
Logistics Index	6	41	7	32	39
Pharmaceutical Market (mln USD-2016)	6 000	3 000	903	4 562	4 720
<i>expected growth 2016-2021 (%)</i>	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
<i>projected CAGR 2016-2021 (%)</i>	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%)
<i>Ranking</i>	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%)
<i>Ranking</i>	n/a	7	4	15	11
<b>Health Context</b>					
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	2 980.6	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).

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## GLOSSARY OF TERMS

AEM	Asian Economic Ministers
AMDD	ASEAN Medical Device Directive
B2B	Business to Business
CD's	Communicable Diseases
CDC	Centres for Disease Control and Prevention
CFS	Certificate of Free Sale
CHC	Communal Health Centres
CHI	Compulsory Public Health Insurance
CHS	Community Health Stations
COPD	Chronic Obstructive Pulmonary Disease
CSMBS	Civil Servant Medical Benefit Scheme
CUP	Contracting Units for Primary Care
DALY	Disability-Adjusted Life Year
DDG	Deputy Director General
DHS	District Hospital/health Centre
DOHA	Direction of Healthcare Activities
EEN	Enterprise Europe Network
FDW	Foreign Domestic Worker
FTA	Free Trade Agreement
G2G	Government to Government
GDP	Gross Domestic Product
GDP (PPP)	Gross Domestic Product (Purchasing Power Parity)
GPO	Group Purchasing Office
HCFP	Health Care Funds for the Poor
HDI	Human Development Index
HSA	Health Sciences Authority
HSRI	Health Systems Research Institute
IHIS	Integrated Health Information Systems
IPA	Investment Protection Agreement
K2K	Knowledge to Knowledge
LET	Law on Examination and Treatment
LSH	Life Sciences & Health
MCNV	Medisch Comité Nederland-Vietnam
MoH	Ministry of Health
NCD	Non-Communicable Disease
NEHR	National Electronic Health Record
NHCO	National Health Commission Office
NHSO	National Health Security Office
NIC	National Innovation Challenges
NKEA	National Key Economic Areas
OECD	Organisation for Economic Co-operation and Development
OOP	Out-of-pocket
PCN	Primary Care Network
PHC	Primary Health Care
PHI	Private Health Insurance
PHO	Provincial Health Office
R&D	Research and Development
RHI	Resilient Health Infrastructure
RHS	Regional Health Systems



RVO	Netherlands Enterprise Agency
SHI	Social Health Insurance
SSO	Social Security Office
TFHC	Task Force Health Care
UCS	Universal Coverage Scheme
UMC HCMC	University Medical Center, Ho Chi Minh City
UN	United Nations
VHI	Voluntary health insurance
VPRS	Voluntary Product Registration Scheme
VSS	Vietnam Social Security

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## LIST OF FIGURES AND TABLES

Figure 1: Interest by Type of Organisation .....	13
Figure 2: Interest by Strength.....	13
Figure 3: Dutch activity in Vietnam.....	14
Figure 4: Vietnam as a Potential area for Growth.....	14
Figure 5: Foreseeable Barriers in becoming active in Vietnam .....	14
Figure 6: Population pyramid of Vietnam in 2017 and projected population in 2050 .....	17
Figure 7: Vietnamese Public and Private Healthcare Organization.....	20
Figure 8: Vietnam’s milestones on the way to Universal Health Coverage.....	22
Figure 9: An Overview of medical procurement in Vietnam .....	26
Figure 10: Medical Device Sales in Vietnam.....	28
Figure 11: Vietnam’s Medical Equipment by Segments.....	29
Figure 12: Medical Record Adoption Model.....	33
Table 1: Geographic, Demographic, Economic, Business, and Health context in Vietnam. ....	7
Table 2: Main barriers experienced by the Dutch LSH-sector .....	14
Table 3: Surface area, urbanisation, climate and risk index for Vietnam and the Netherlands.....	15
Table 4: Economic Indicators for Vietnam .....	16
Table 5: Key Demographic indicators for Vietnam .....	16
Table 6: Estimated Risk factors for health in Thailand and the Netherlands.....	17
Table 7: Key indicators on Vietnam’s disease burden.....	18
Table 8: Total health expenditure between 2015-2018 in Vietnam and the Netherlands .....	22

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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 Vietnam

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 Hanoi and Singapore. It provides an analysis of the Vietnamese 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 Vietnam and that consider it a potential growth market for their organisation.

## Methodology

### Step 1: Identifying and mapping Dutch interest in the Vietnamese 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 Vietnam, historical data, Dutch representation in Vietnam, 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 Vietnam. Data was classified into type of organisation, strength (e.g. Medical Devices or eHealth), current or past activity in Vietnam, and their perception of Vietnam 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 Vietnam with Dutch expertise and solutions.

### Step 2: Desk Research

In order to obtain a better understanding of the Vietnam 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 Vietnamese sector.

### Step 3: Fact finding visit to Vietnam

An important element of the study was the fact-finding visit to Vietnam, whereby a delegation from TFHC, accompanied by representatives of the Netherlands Embassy in Hanoi, gained insights from key stakeholders in the Vietnamese health sector. The fact-finding visit took place over a period of one week and included 6 meetings and 2 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 Vietnam, and initiation of new relationships that will benefit from follow-up activities.



## 2 MAPPING DUTCH INTEREST IN VIETNAM

In order to gauge the degree to which the Dutch are interested in the Vietnamese 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 Vietnam identified 34 unique organisations with activity and interest in Vietnam. Past experience suggests that the number of identified organisations that are active and interested in Vietnam will grow over time.

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

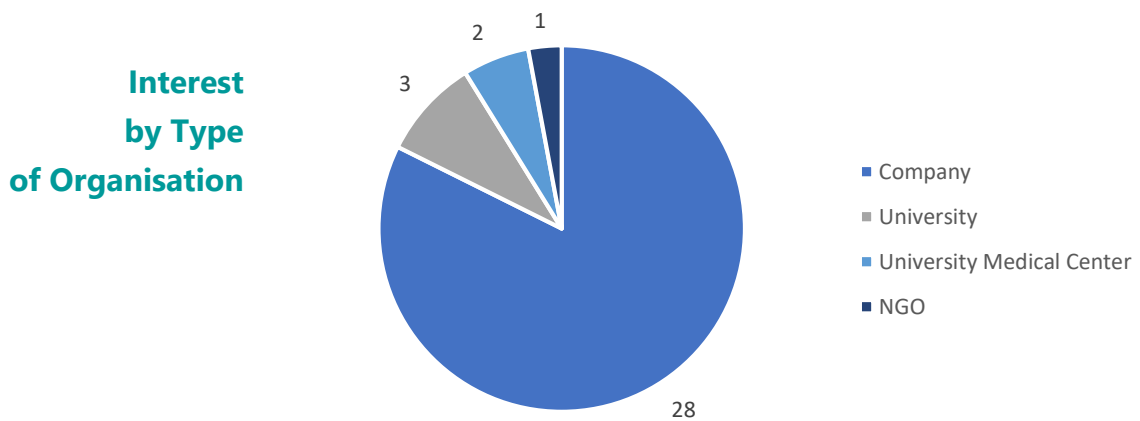


Figure 1: Interest by Type of Organisation

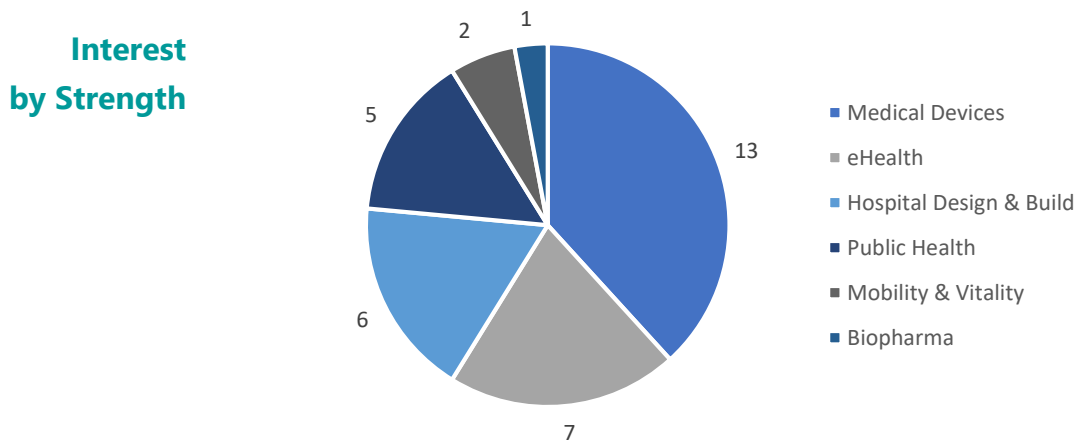


Figure 2: Interest by Strength



### Are (or were) you active in Vietnam?

*in terms of export, research, projects or otherwise*

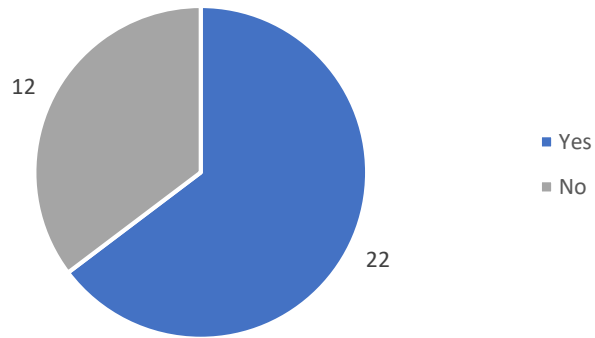


Figure 3: Dutch activity in Vietnam

### Is Vietnam a (potential) growth market for your organisation?

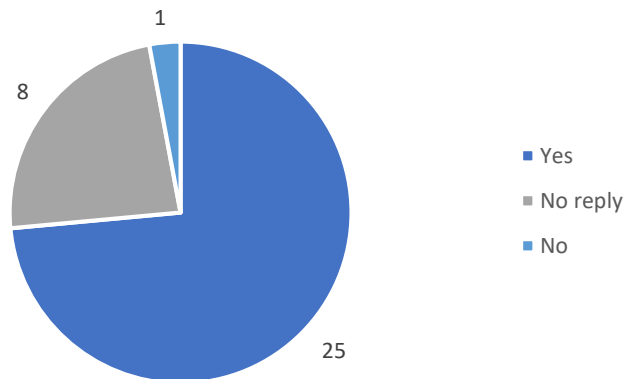


Figure 4: Vietnam as a Potential area for Growth

### Do you experience or foresee barriers in becoming active in Vietnam?

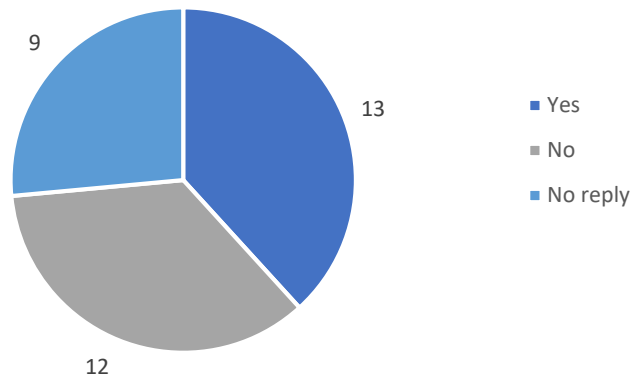


Figure 5: Foreseeable Barriers in becoming active in Vietnam

### Main barriers in becoming active in Vietnam

*Experienced or foreseen*

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

- 1 Language barriers and cultural differences
- 2 Knowledge on market entry (local regulations, import duties, etc.)
- 3 Barriers to engage with key decisionmakers
- 4 Finding a good distributor
- 5 Getting on the government list for preferred countries (for scholarships)



## 3 INTRODUCING VIETNAM

### 3.1 History & Geography

Vietnam is located in South-eastern Asia, bordering the Gulf of Thailand, Gulf of Tonkin, and South China Sea, as well as China, Laos and Cambodia. Vietnam is 331 210 km<sup>2</sup> in size and is made up of 58 provinces and 5 municipalities. Approximately 35.9% of the country is considered urbanized, with an urbanization rate of 2.98% per year (Central Intelligence Agency, 2017). Major urban populations include Ho Chi Minh City (8 million people), Da Nang (1.4 million people), and Hai Phong (1.2 million people). The capital city is Hanoi with a population size of 1 million people (Central Intelligence Agency, 2017). A large proportion of Vietnam is considered rural, with small populations of people living in the North East, North West and Central Highlands. Ethnic minorities of Vietnam mostly live in the mountainous inland provinces located in the Central highlands.

Vietnam has a tropical climate in the South and monsoonal climate in the North, with a hot, rainy season (May to September) and a warm, dry season (October to March) (Central Intelligence Agency, 2017). The country is exposed to occasional typhoons during May to January which causes extensive flooding, especially in the Mekong River delta. Vietnam ranks highly on the World Risk Index, as the 18<sup>th</sup> highest risk country out of 171 countries. This is due to a combination of high levels of exposure to natural disasters, such as droughts, earthquakes, floods, forest fires, landslides, sea water intrusion, typhoons, and volcanic eruptions, and a lack of coping and adaptive capacities (Bündnis Entwicklung Hilft, 2017).

Vietnam was colonized by France between 1858 and 1887. After the second World War, Vietnam declared independence, however, the French continued to rule until 1954 when they were defeated by Ho Chi Minh. Under the Geneva Accords of 1954, Vietnam was divided into the communist North and anti-communist South. The US was an ally to South Vietnam and provided economic and military aid to bolster the government until a cease fire was agreed upon in 1973. In 1975 North Vietnamese forces overran the South resulting in the unification of North and South Vietnam under communism rule (Central Intelligence Agency, 2017).

Table 3: Surface area, urbanisation, climate and risk index for Vietnam and the Netherlands

Geographical indicator	Vietnam	Netherlands
Surface (km <sup>2</sup> )	331,210.00	42 058
Urbanisation (%)	35.9	91.5
Climate	Tropical	Temperate
Risk index	18	50

Source: (Central Intelligence Agency, 2017; Bündnis Entwicklung Hilft, 2017)

Currently, Vietnam politics are defined by a single-party socialist republic framework. The General Secretary of the Communist Party of Vietnam is the Party leader and head of the Politburo, holding the highest position in the one-party system. The President of Vietnam is the head of state, and the Prime Minister of Vietnam is the head of government in a one-party system. Vietnam's highly centralized government system exercises leadership in all matters (Central Intelligence Agency, 2017).

Since the enactment of Vietnam's "Doi Moi" (renovation) policy in 1986, Vietnamese authorities have committed to increased economic liberalization. In practice this means the enactment of structural reforms needed to modernize the economy and to produce more competitive, export-driven industries (Central Intelligence Agency, 2017).

## 3.2 Economy

Vietnam has experienced excellent economic growth over the past 30 years since the political and economic reforms under “Doi Moi” launched in 1986. In just three decades the country has transformed from one of the world’s poorest nations to a lower middle-income country. Vietnam’s real GDP has seen very stable growth in recent years, showing growth rates ranging 6-7% between 2014-2018. This success is led by strong growth in the industry and construction sector (which contributed 48.6% to GDP and expanded by 8.85%) and robust growth in the services sector (which contributed 42.7% to GDP and grew by 7.03%). This stable trend is expected to continue in 2019 through to 2023, with Vietnam remaining one of the fastest-growing economies in the Asia-Pacific region (The Economist, 2019) (The World Bank, 2019). It has been projected that real GDP will expand by 6.6% in 2019, and 6.5% in 2020 through to 2023 (The World Bank, 2019).

Comparing Vietnam to the Netherlands, the World Bank estimates that Vietnam has a Gini coefficient of 34.8, compared to the Netherlands 28.6 (The World Bank, 2014). This reflects a moderately unequal society, which can be an indicator of inequitable access to healthcare.

Looking to the future, Vietnam is expected to pursue economic liberalization during the 2019-2023 period, by promoting international trade and restructuring state-owned enterprises (The Economist, 2019). As a result, the World Bank (2018) classifies 70% of the country’s population as financially secure. A middle class is starting to emerge, with an estimated 1.5 million Vietnamese joining this income class annually since 2014. Currently the middle-class accounts for roughly 13% of the population and is projected to double in 2026 (The World Bank, 2018).

Table 4: Economic Indicators for Vietnam

	Netherlands	Vietnam					
	2018	2016	2017	2018*	2019*	2020*	2023*
GDP PPP (bn USD)	972.45	596.04	648.74	707.62	769.67	835.33	1067.16
real growth (%)	2.8	6.2	6.8	6.6	6.5	6.5	6.5
per capita PPP (000)	56.57	6.43	6.92	7.48	8.05	8.66	10.77
Inflation rate (%)	1.4	2.7	3.5	3.8	4.0%	4.0%	4.0%
Unemployment (%)	3.9	2.3	2.2	2.2	2.2	2.2	2.2
Government net lending/borrowing (% of GDP)	0.6	-4.8	-4.5	-4.6	-4.7	-4.7	-4.7
Government gross debt (% of GDP)	53.1	59.9	58.5	57.8	57.4	57.1	58.1

Source: (International Monetary Fund, 2018)

## 3.3 Socio-demographic Trend

Vietnam is currently experiencing rapid socio-demographic change. The Vietnamese population has been growing steadily since the 1980’s and reached 95 million people in 2017. The population is expected to reach 120 million people before reaching a plateau around 2050. The population is still very young, with 60% of the population under the age of 35 years. Vietnam’s life expectancy at birth however relative quickly improved to 76 years. As Vietnam’s fertility declines, growth rates of the population start to pick up.

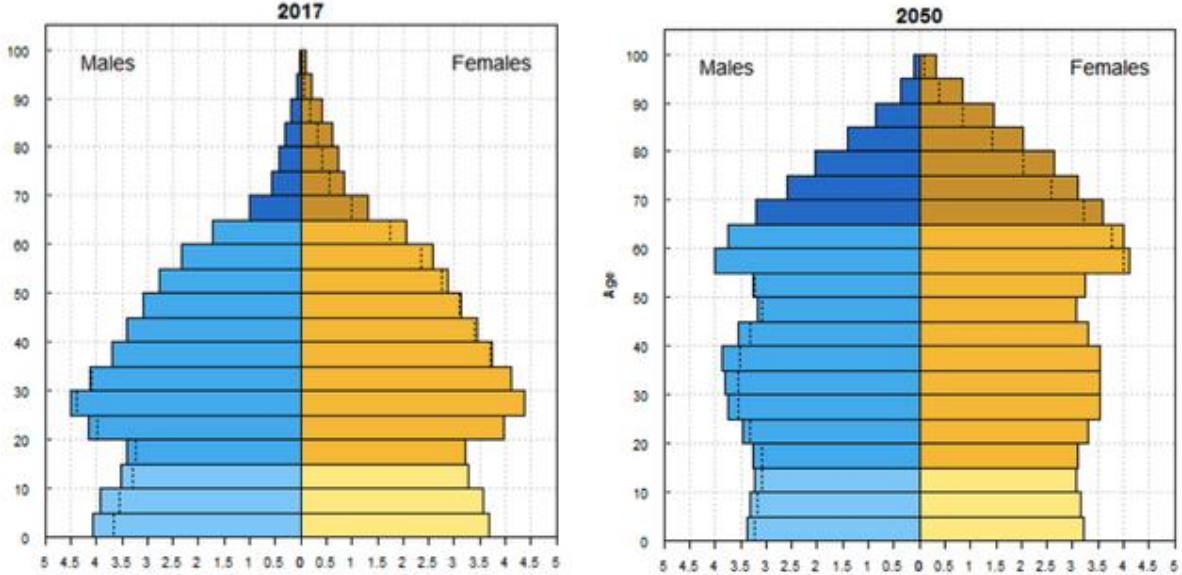
Table 5: Key Demographic indicators for Vietnam

	Vietnam				Netherlands			
	2017	*2020	*2025	*2030	2017	*2020	*2025	*2030
Population (million)	95.5	98.3	102.7	106.2	17.0	17.1	17.4	17.6
65 years or older (%)	6.7	8.1	10.1	12.4	17.9	20.0	22.1	24.5
Life Expectancy at birth	76.56	76.56	77.54	78.5	82.1	82.9	83.6	84.4
Crude birth rate per 1 000	16.2	15.2	13.4	13.4	10.6	10.6	10.5	10.3
Infant mortality per 1 000	17.0	15.0	13.0	13.0	3.0	2.0	2.0	2.0

Source: (United Nations, 2017)

The projected growth rates of the elderly population are very high. In a short period, Vietnam will become one of the fastest ageing countries in Asia as in 2050 the number of 60+ and 80+ years old are both expected to triple (HelpAge, 2019).

Figure 6: Population pyramid of Vietnam in 2017 and projected population in 2050



Source: (United Nations Development Programme, 2018).

### 3.4 Health Status and Burden of Disease

The differences between the health status of the Vietnamese and the Dutch population (which is used as a reference) are indicative of their development status. Vietnam’s life expectancy and healthy life expectancy is 76.5 and 67.5 years respectively. This is lower than the average Dutch person who has a life expectancy of 82.1 and a healthy life expectancy of 72.1 years (Institute for Health Metrics and Evaluation, 2017). The relative low average health status of Vietnam’s population is mainly caused by a relative lower access to health services and higher incidences of malnutrition when compared to the region (FAO, 2019). The main causes of death in Vietnam and the Netherlands are compared in [Annex 2](#).

Another, increasingly important factor in Vietnam is a higher incidence of unhealthy lifestyles. Of particular concern in Vietnam are high levels of tobacco use. Although Vietnam has passed tobacco laws and established regulations relating to tobacco use the enforcement of these laws and campaigns is lacking (Nguyen & Hoang, 2018). Other risk factors such as dietary risks, alcohol use, and physical inactivity are all on the increase (Hattori et al., 2018).

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

Risk factors for total population (2017)	Vietnam	Netherlands
Alcohol consumption (litres pure alcohol)	8	9
Tobacco smokers 15+ (%)	23	25
Physical inactivity 18+ (%)	25	29
Obesity 18+ (%)	2	23
Obesity 10-19 (%)	2	6

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

Currently the NCD burden is lower than in the Netherlands. With 77% of deaths in Vietnam caused by NCDs is 77% (compared to 90% in the Netherlands). The effects of NCD’s however are much severe in Vietnam as the risk of dying prematurely from an NCD is 17% (compared to 11% in the Netherlands), reflecting the developing state of the Vietnamese health system. As Vietnam displays higher scores on the risk factors for NCDs, the burden of

NCDs is expected to rise accordingly (Hattori, et al., 2018; Duong et al., 2019). From 1986 to 2008, the proportion of all hospital admissions attributable to NCDs increased from 39% to 69%, and NCD deaths rose from 42% to 63%.

Currently Vietnam's health system, especially primary healthcare providers (Commune Health Centers) have limited capacity to deal with NCD's (Duong et al., 2019). To tackle the increased NCD burden, Vietnam needs to scale up its NCD intervention programs, such that the majority of the population can receive timely treatment (Nguyen & Hoang, 2018).

Communicable diseases remain a serious problem in Vietnam. Over the past 10 years, many major infectious diseases including tetanus, typhoid, mumps etc. have been significantly reduced or eradicated (NIHE, 2019). However, the country is still a hot spot for emerging infectious diseases such as SARS and avian influenza which remain major public health problems. The prevalence of HIV/AIDS is also increasing throughout the country. Mother and child related health issues are also a health challenge for Vietnam. Vietnam burden of neonatal conditions is 40 times higher (in Disability-adjusted life years) than in the Netherlands (World Health Organization, 2018).

Table 7: Key indicators on Vietnam's disease burden

<b>Disease Burden (2017)</b>	<b>Vietnam</b>	<b>Netherlands</b>
% of death by NCD	77	90
Risk of premature death (between 30-70)	17	11
NCD burden		
<i>Cardiovascular diseases (%)</i>	31	26
<i>Cancers (%)</i>	19	32
<i>Other NCDs (%)</i>	18	23
<i>Chronic Respiratory diseases (%)</i>	6	7
<i>Diabetes (%)</i>	4	2
Suicide per 1 000	0.07	0.13
Total CD burden in DALY's (per 1 000)		
<i>Infectious and parasitic diseases</i>	1 861.7	5.9
<i>Neonatal conditions</i>	1 364.3	53.6
<i>Respiratory Infectious</i>	753.9	88.1
<i>Nutritional deficiencies</i>	202.3	15.7
<i>Maternal conditions</i>	56.4	1.3

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

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## 4 THE VIETNAMESE HEALTH SYSTEM

### 4.1 Historical Background

The Vietnamese health system was established in North Vietnam after the declaration of the independence of Vietnam in 1945. This system was extended to South Vietnam in 1975 when the country united (Le et al., 2010).

Up until 1989, health services in Vietnam were subsidised fully by the government. Since the political and economic reforms in 1986 under "Doi Moi", the Vietnamese government permitted limited private provision of healthcare, creating a dual health system in the process. After other reforms, Vietnam allowed public hospitals to charge user fees to the population.

After a range of insurance reforms, in 2005 compulsory insurance was established in Vietnam, starting a trend towards universal coverage.

### 4.2 Governance

Vietnam's public health system is decentralised. The Ministry of Health (MoH) is at the top of the management structure, with the authority to develop national directives, strategic plans and policy and disburse national budget to priority areas. It is also responsible for healthcare training and research and specialised public services.

Below the MoH lies the provincial health services. They receive technical guidance from the MoH and disburse budget to local priority areas and organizations and are also responsible for the development of local targets and priorities.

Below the provincial health services is the district health office. The district health bureau is management by provincial health services, and this is where they receive their technical guidance from. The final system level is the communal health centres. These are small clinics and community health outposts which are directly managed by district offices.

### 4.3 The Vietnamese Health system and Infrastructure

Vietnam's healthcare system functions as a mixture of public and private provision, with a dominant public side. The number of private providers is increasing, as is their market share. As of 2014, only 6% of all healthcare facilities were privately owned, yet private hospitals provide more than 60% of outpatient services and are an increasingly important component of the healthcare system (BDGVietnam, 2017).

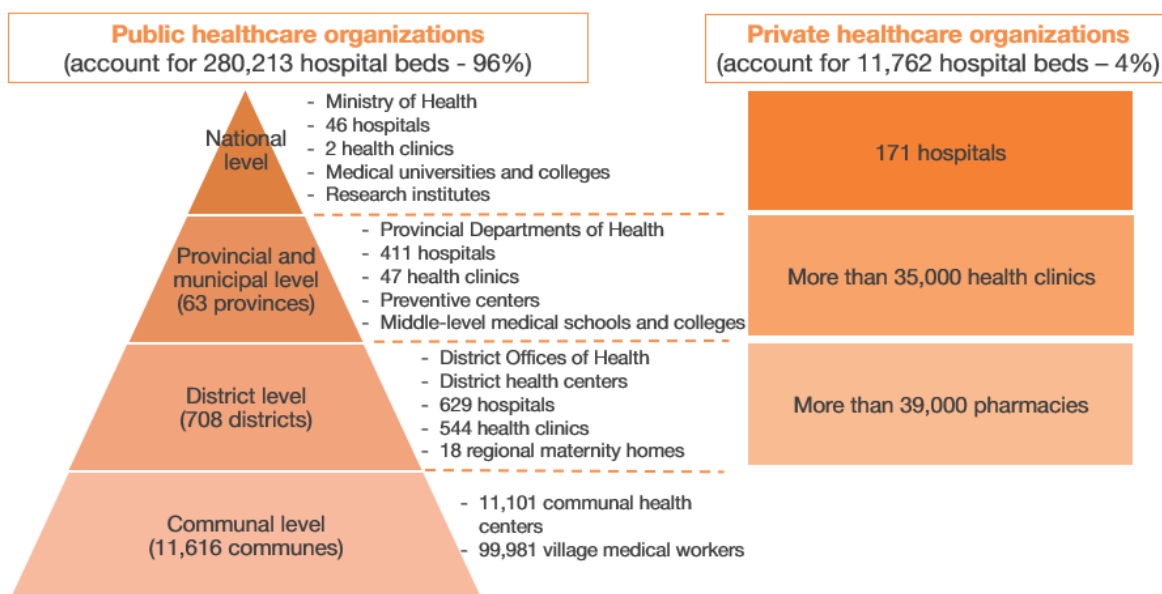


Figure 7: Vietnamese Public and Private Healthcare Organization (BDGVietnam, 2017)

## Public Sector

Vietnam's public sector has a decentralised hospital system organized into four groups (Thu, et al., 2018). At the central level – specialised and general hospitals provide secondary and tertiary care, and are active in research, functioning as teaching hospitals (Thu, et al., 2018). At the province or city level, there are several hospitals and medical centres who mostly provide secondary and tertiary care, combined with outpatient services. These also have medical colleges offering medicine, nursing, and pharmacy programs. Each province is divided into roughly 20 districts. District health centres at this level offer primary and some secondary care services. Finally, at the communal level, communal health centres (CHCs) offer primary and preventative health services.

## Large Primary Care Network

The majority of healthcare services in Vietnam is provided by a network of 10 000+ communal healthcare centres (CHCs) (World Health Organization, 2016). These healthcare centres provide basic health services to people at the community level. The centre is usually staffed with a general doctor and some ancillary staff, such as a midwife, nurse, assistant doctor of traditional medicine or pharmacist. Communal healthcare centres are generally the first point of contact for much of the population, especially in rural areas. However, many of these centres do not provide all the services they are supposed to provide. For example, recent studies have found that many services such as malnutrition programs, child health exams, and diagnosis and treatment of NCDs are not adequately delivered by CHCs. Furthermore, outpatient facilities are generally under-utilized by the Vietnamese population (Hoa, et al., 2018) (Thu, et al., 2018).

## Capacity problems in secondary and tertiary care

Vietnam has a severe shortage of hospital beds, with overall congested and overcrowded hospitals as a consequence. Like many developing countries, there are large regional variations in the number of hospital beds per capita. The North Central and Central Highlands have far fewer hospital beds per capita compared to other regions. In recent years the shortage of hospital beds has become dire, with two to three patients sharing a bed in many central and provincial hospitals (Nguyen & Cheng, 2014). Bed occupancy rates have reached 120-160%, especially in central hospitals in the larger cities. These crisis level statistics have several causes, including low quality and limited healthcare availability at many of the provincial, district and community levels. Other causes include: Increasing expectations of service quality, improved transportation from remote areas to central areas, and limited fee differences across the different administrative levels. This has resulted in a drain on resources in central and



provincial hospitals, and subsequent wastage and inefficiencies at the district and community levels (Takashima, 2017).

Many Vietnamese people feel that the quality of service provided at CHCs is subpar to that offered at private clinics and hospitals. They bypass their nearest CHC and look for treatment at the most upper level of referral, sometimes even choosing to self-pay for services at private clinics or hospitals. Ironically, this pattern of behaviour has led to poorer service at central and provincial hospitals, with extensive waiting times and shorter consultations due to extreme time pressure (Nguyen, 2017).

## Upcoming Private Sector

The Vietnamese private healthcare sector is relatively young but has taken an important position in Vietnam as main provider of outpatient care (Nguyen & Wilson, 2017). The number of private hospitals in Vietnam is on the rise. Currently, most private hospitals are small scale and located in cities and towns, yet comprise 4.2% of the total hospital beds in Vietnam. This percentage is projected to increase rapidly as domestic corporations are beginning to develop hospital and clinic chains across the country. These include Hoan My Medical Corporation and Vinmec Hospital Network by Vingroup. Hoan My Corporation currently has a total capacity of 3 407 beds across fourteen hospitals and six clinics. Whilst Vinmec Hospital Network was established in 2012 and runs as a non-profit with 600 inpatient beds in 10 hospitals across the country (Hoan My Medical Corporation, 2019) (Vingroup, 2014).

The number of private health workers account for 16.5% of the total national health workforce. However, human resources in the private health sector are indirectly subsidised as there are many dual positions in the public and private sectors and many physicians are graduates from public universities which are partially financed by the government (Nguyen & Wilson, 2017).

## Hospital Build and Expansions

Vietnam grew its health infrastructure with the build of 119 new hospitals, mostly at the provincial and district level between 2012-2015, (planned) renovation of a large number of public hospitals and the establishment of a network of 60 satellite hospitals and 15 key hospitals in 41 provinces / cities. Most of these projects are nearing completion (BDGVietnam, 2017). The expansions however do not suffice to cater to Vietnam's increasing health demand.

In the [Plan for People's Health Protection, Care and Promotion 2016-2020](#), Vietnam plans to complete ongoing projects and announced more expansions. These expansions include the establishment of provincial and regional centers for disease control and investment in some new facilities such as: Southern Orthopedics Hospital, Southern Endocrinology Hospital, Biomedical Research Institute, etc.

Vietnam prioritises the use of counterpart funding for ODA and Public-Private Partnerships to realize its ambitious health infrastructure expansions. The completion of all planned infrastructure developments which starts in 2016-2020 (expected to be completed in 2025) requires external support of 176.148 billion dong or 7 billion USD.

## Implementation of Direction of Healthcare Activities (DOHA)

To stop overcrowded health facilities to become more congested, Vietnam works to implement Direction of Healthcare Activities (DOHA). This approach requires healthcare facilities at higher government administration levels to support those at lower levels through better allocation of patients. Patient referrals are designed to manage the healthcare situation where staff have insufficient resources (facilities, equipment, and diagnosis and treatment capacity) to manage patients' clinical conditions.

Generally, Vietnam looks to steer patients to enter the health system at their registered primary health facility, which is usually the local community health centre. If required, the community health centre can then refer them to a high level of provider such as a district, provincial or central hospital (Pekerti, et al., 2017) (Hoa, et al., 2018).

## 4.4 Health Expenditure and Financing

### Health Expenditure: The Numbers

Vietnam's total health expenditure was 16.1 billion USD in 2017 and an estimated 17.2 billion in 2018. This is approximately 7.3% of its GDP respectively. A major factor contributing to Vietnam's health expenditure growth is the implementation of compulsory health insurance in 2015.

Table 8: Total health expenditure (THE) between 2015-2018 in Vietnam and the Netherlands

Total Health Expenditure (2017)	Vietnam	Netherlands
THE 2015 (billion USD)	13.9	92.9
Gov budget (billion USD)	7.6	16.7
THE 2016 (billion USD)	14.9	95.5
Gov budget (billion USD)	8.2	16.7
THE 2017 (billion USD)	16.1	97.5
Gov budget (billion USD)	-	16.4
THE 2018 (billion USD)	17.2	-
Gov budget (billion USD)	-	17.3

Source: (BMI, 2017; Statistics Netherlands, 2017; Ministerie van Volksgezondheid, Welzijn en Sport, 2018).

### Health Financing: Compulsory Insurance and voluntary insurance

Vietnam has made great strides in expanding health insurance coverage. After introducing compulsory insurance in 2015, Vietnam now aims to grow the coverage rate of health insurance, setting the goals of reaching 80% of the population in 2020 and 95% in 2025 (Public Disclosure Authorities, 2015). Find out more about Vietnamese health insurance [here](#).

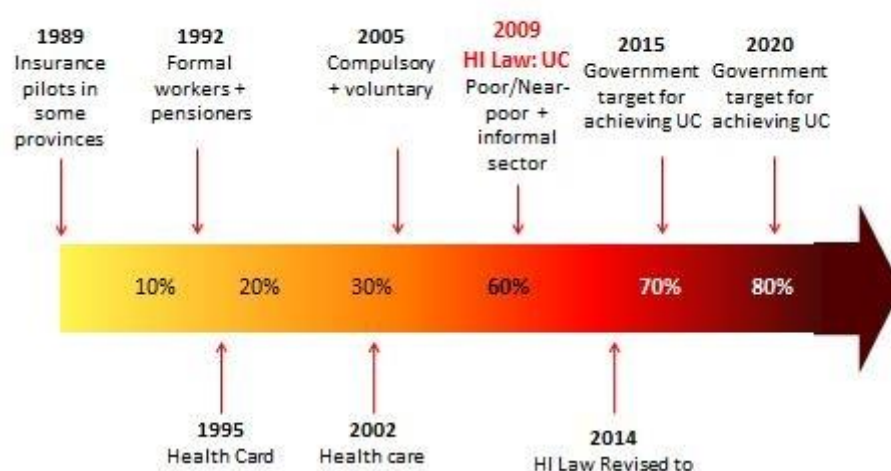


Figure 8: Vietnam's milestones on the way to Universal Health Coverage (The World Bank, 2014)

The current compulsory public health insurance system (CHI) consists of two programmes, one being the Social Health Insurance scheme (SHI) and the other being the Health Care Funds for the Poor (HCFP). The SHI scheme caters to workers in both the public and private sector, and covers roughly 11% of the population, whilst the HCFP targets the poor, ethnic minorities, and disadvantaged communities (18%). SHI is financed through a 3% payroll tax (2% employers and 1% employees). HCFP was introduced in 2003 and has the same benefit package as the SHI.

HCFP is financed through general government revenues (75%) and provincial resources (25%) (Ekman, et al., 2008) (Public Disclosure Authorities, 2015).

Since the introduction of the HCFP programme there has been a substantial increase in the amount of resources allocated to health care for the marginalized populations of Vietnam. The majority (75%) of the costs of the programme are covered by central government funds. These funds are transferred to the various provinces where management boards are responsible for purchasing health insurance cards from Vietnam Social Security (VSS) and for organizing the implementation of the programme at the provincial level. The provinces are also obligated to fund the balance by means of their own resources or contributions (Ekman, et al., 2008).

Next to CHI, Voluntary health insurance (VHI) is an essential component of Vietnam's public health insurance scheme since it was introduced in 1994. VHI focuses on the dependents of those who are already covered by CHI, as well as farmers, self-employed individuals, and students. This amounts to 11% of the total population. The benefit package of VHI is identical to the CHI programmes, including exemptions (Ekman, et al., 2008). VHI is financed through private premium contributions based on ability to pay.

All children under the age of 6 (11% of the population) are provided with free health care in Vietnam (Ekman, et al., 2008). This is funded through general government revenues.

## Coverage issues

Recent studies have suggested that although in theory most patients in Vietnam have universal health cover and are entitled to 80-100% coverage, this is not being realized in practice. Empirical data shows that the majority of patients are reimbursed less than 50% of their actual expenditures. The key issue is that health care services are very expensive, including equipment, drugs, care and facilities. When a patient receives healthcare services, there is a high probability that the patient will leave with debt once having received treatment (Pekerti, et al., 2017) (Hoa, et al., 2018).

## 4.5 Healthcare Professionals

The current Vietnamese healthcare workforce is insufficient to meet the needs of the population. There are especially severe shortages of highly specialized physicians in fields such as cancer, palliative care and mental health. Maldistribution of health workers between urban and remote areas is also a challenge (Takashima, 2017).

Vietnam currently has 400 000 health workers in the public sector including. Doctors, assistant doctors, nurses and medical technicians account for 80% of the health workforce. The density of doctors in Vietnam is 7.61 per 10 000 people (2013). The nurse-to-doctor ratio has increased from 1.19 in 2008 to 1.34 in 2012 (World Health Organization, 2016) (Takashima, 2017).

## 4.6 Further Reading

If you would like to expand your understanding of the Vietnamese health system, the following publications provide excellent overviews.

- [Plan for People's Health Protection, Care and Promotion 2016-2020](#): In this report, Vietnam's government reviews past achievements and announces plans for further development of Vietnam's health system.
- [Viet Nam's Voluntary National Review on the Implementation of the Sustainable Development Goals](#): In this publication, the Vietnamese government reviews its progress on the 2030 Agenda for the Sustainable Development Goals.
- [Implementation of national action plans on noncommunicable diseases in SE Asia](#): This publication provides an assessment of the implementation status of the recommended best-buy noncommunicable diseases interventions in seven Asian countries: Bhutan, Cambodia, Indonesia, Philippines, Sri Lanka, Thailand and Viet Nam.

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## 5 MARKET STRUCTURE

Vietnam is not a market for inexperienced exporters. Organisations preparing to enter the Vietnamese market must plan strategically and be persistent and consistent with face-to-face follow-up. Building relationships is critical to success.

### 5.1. Business Climate

Vietnam is ranked 69<sup>th</sup> place in the World Bank Ease of Doing Business Index (2019), scoring lower than other countries in the region, such as Malaysia (15<sup>th</sup>), Thailand (27<sup>th</sup>), and Singapore (2<sup>nd</sup>). The Netherlands is ranked 36<sup>th</sup> place in this index.

Vietnam's low score is influenced by its unpredictable regulatory environment and ineffective protection of intellectual property. However, the country is working hard to implement a comprehensive anti-corruption framework and improve transparency and predictability in its economic regime. These initiatives have seen Vietnam move up 14 places in the World Bank's Index in recent years. Vietnam climbing the rankings can be explained by the country's strong economic growth, and relatively low cost of living and cost of doing business.

Vietnam's business culture revolves around strong business relationships. Thus, time and personal contact is needed to work towards deals and face to face introductions and calls are preferred over email. The society is hierarchical, and therefore the best way to engage with an organisation is to speak with the person who has the most authority. The Vietnamese are extremely polite and rarely voice negative feedback.

In order to conduct business in Vietnam, organisations need to work through a legal business entity with an import license. Most international suppliers therefore appoint a dedicated local distributor which fit this requirement. An additional benefit for international suppliers is that Vietnamese buyers prefer to deal with a local entity to handle all aspects of distribution, from delivery to post-sale services. Good representatives should be able to provide immediate access to an established marketing network and have an in-depth understanding of the regulatory context.

#### Text box 1: Key characteristics of Vietnamese Business Culture and Market

- Hierarchical society in which the Ministry of Health has a lot of authority over the health system.
- Strong connections to the international community (in healthcare) through international organisations.
- Public and private health sector are distinct worlds with vastly different KPI's (social vs. profit driven).
- Preference for Western products and services, but through Vietnamese channels.
- Strong connection with France. A large number of Vietnamese doctors still studies in France.
- Openness to foreign expertise and businesses.
- Price is an important considerations in procurement.
- Strong relationships and personal trust are of utmost importance when doing business.

## 5.2. Market Access

### Medical devices

Vietnam's MoH is responsible for determining the guidelines for medical device purchase for all health systems in Vietnam. The Department of Medical Equipment and Construction is responsible for medical devices specifically. The Ministry of Science and Technology performs regulatory functions for domestic manufactured medical devices.

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

- Use of a translator is recommended.
- Consult international reports and tender databases for current developments.
- Connect with the Embassy of the Kingdom of the Netherlands in Vietnam and Dutch organisations such as the MCNV in order to get feedback on the market potential.
- Reach out to Vietnamese stakeholders and international organisations (World Bank, WHO etc.)
- Conduct in-depth market research (prior to product registration).
- Conduct a proactive partner search that validates the pre-qualifications of the partner needed.
- Proposals should reflect a vision of how your export facilitates the development and growth of local knowledge and industries.

The highest legal document on the management of medical devices in Vietnam is Decree 36. Under Decree 36, medical devices that are imported into Vietnam require registration for marketing authorization (MA) licenses. Before they are made accessible to purchasers. Products that are imported into Vietnam need to demonstrate approval from major international regulators (e.g. the FDA, EU MDD or Japanese MHLW), and compliance with international standards in order to gain wide acceptance with purchasers. A key legislation was issued in 2014, relating to import tax exemptions for components to be used in the manufacture or assembly of advanced medical equipment. Under this legislation, for some devices, taxes will be waived for five years starting from the date of manufacture/assembly of the medical device.

### Pharmaceuticals

The Vietnamese government aims to gradually replace imported pharmaceuticals and increase the share of locally procured pharmaceuticals to 80% (Export.gov, 2018). This objective is launched in 2014 in Decision 68, Vietnam's national strategy to shape its pharmaceutical industry between 2020-2026.

Out of decision 68 Vietnam's 2016 Law on Pharmacy was formed, the primary legal framework for the registration, sale, and distribution of pharmaceuticals. The Law on Pharmacy and other introduced policies create uncertainties for foreign suppliers as the products types which are reserved for domestic production were unspecified. Future amendments and policies are expected to provide guidance.

Recently, the new Decree 155, is expected to make it easier for foreign pharmaceutical suppliers to enter the Vietnamese market. The Decree loosened requirements for foreign business in the registration of pharmaceuticals and simplified procedures. Find more information [here](#).

### Useful Organisations for Market Entry and Further Information

Useful organisations to explore and enter the Vietnamese health system and market are listed in [Annex 3](#). Key events are listed in [Annex 4](#).

- The [Embassy of the Kingdom of the Netherlands in Vietnam](#), promotes and supports cooperation between Vietnam and the Netherlands
- 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.

- [EuroCham Vietnam](#) is one the principle voices of the business community in Vietnam

## Overview of tender and procurement portals relevant for Vietnam

- [Asian Development Bank \(ADB\)](#)
- [The World Bank Group \(WBG\)](#)
  - [International Finance Corporation \(IFC\)](#)
- [UNDP Viet Nam](#)

### 5.3. Medical Procurement

The four main categories of purchasers in Vietnam are large government-funded hospitals (accounting for 80% of the market), foreign-owned hospitals and clinics, local private hospitals, and research and educational institutions. A number of medical education and research institutions are eager to experiment with innovative new systems and health care solutions. The Vietnamese government used to be the main channel through which procurement takes place. However, as Vietnam’s health system becomes decentralised and more self-reliant, purchasers are becoming more autonomous in organising procurement. A major development was the dissolution of the Public Assets Procurement Centre in HCM city. Private hospitals are permitted to organise their own procurement.

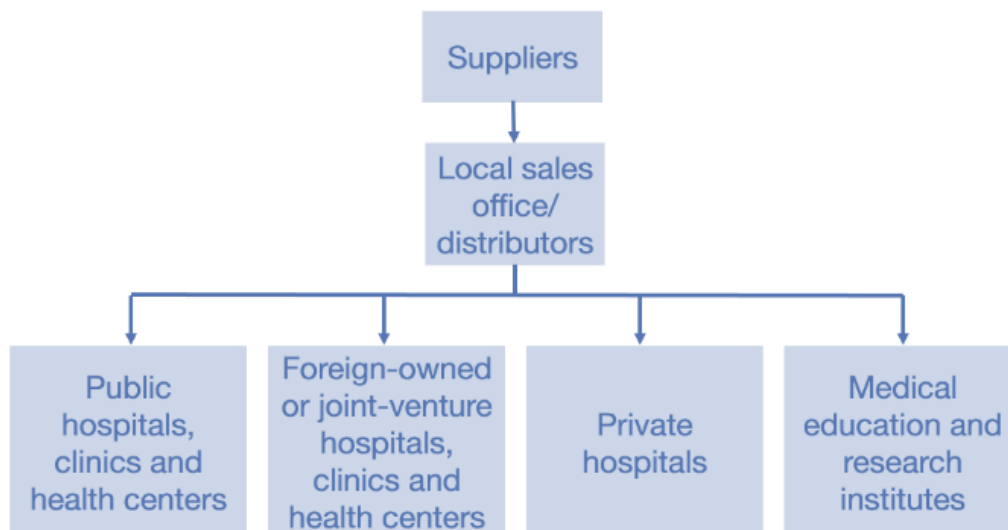


Figure 9: An Overview of medical procurement in Vietnam (BDGVietnam, 2017)

The Netherlands-Vietnamese relationship in healthcare is positive but may be less prominent than Vietnam’s relationship with countries which donate Official Development Assistance and are the countries of origin of international hospitals which operate in Vietnam.

The majority of health infrastructure projects and procurement of medical equipment (approximately 80%) in Vietnam is funded by foreign aid organisations (IBP, 2015). The share of funds from the Netherlands in these projects has decreased as the Netherlands transformed its relation with Vietnam from an “aid relation” to a “trade relation” in 2012. Vietnam currently still receives Official Development Assistance from the US, France, Japan, Australia etc. This may cause Vietnamese stakeholders to be more receptive to solutions coming out of these markets. The Netherlands however has a good reputation in Vietnam. The Medisch Comité Nederland-Vietnam (MCNV) is a household name for many decisionmakers in healthcare in Vietnam.

Many private hospitals which are foreign-owned are also internationally oriented. Private hospitals such as the Hanoi French Hospital and other hospitals which belong to internationally-operating groups may have a preference/requirement to work with specific suppliers for example from their country of origin.



## EU – Vietnam Free Trade Agreement

The EU-Vietnam Free Trade Agreement (FTA) and the EU-Vietnam Investment Protection Agreement (IPA) facilitate growth in trade between the European Union (EU) and Vietnam. The FTA is expected to be signed in June/July 2019, with ratification by the European Parliament EP by the newly elected EP at the end of 2019 or early 2020. Depending on the priorities set by the EP.

The agreements ensure simplified requirements for market authorisation for European organisations in Vietnam. Furthermore, the agreement implements the use of international standards, practices and guidelines for pharmaceutical products or medical devices in trade between Vietnam and the EU. Find more information [here](#).

## 6 ALIGNING DUTCH STRENGTHS WITH VIETNAMESE 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 981 million in 2016 (BMI, 2017), Vietnam's medical device market is the third largest market of the ASEAN 4 countries (Thailand, Malaysia, Vietnam and Singapore). *Figure 10* shows the rapid growth of Vietnam's medical device market and shows a fast relative growth rate with a CAGR of 9.4% (US 5.0%, China 3.9% and Netherlands 3.5%). This trend is expected to continue in and beyond 2019, reaching a value of USD 1.5 billion by 2021 (BMI, 2017). Vietnam's health system is highly dependent on imports (91% is imported) due to a small domestic industry. The Netherlands is currently a relatively small player in Vietnam's medical device market, ranking as 16<sup>th</sup> biggest exporter with 1.2% of Vietnam's market compared to the numbers 1. US (17.3%), 2. Japan (15.9%) and 3. Germany (13.3%) (BMI 2017).

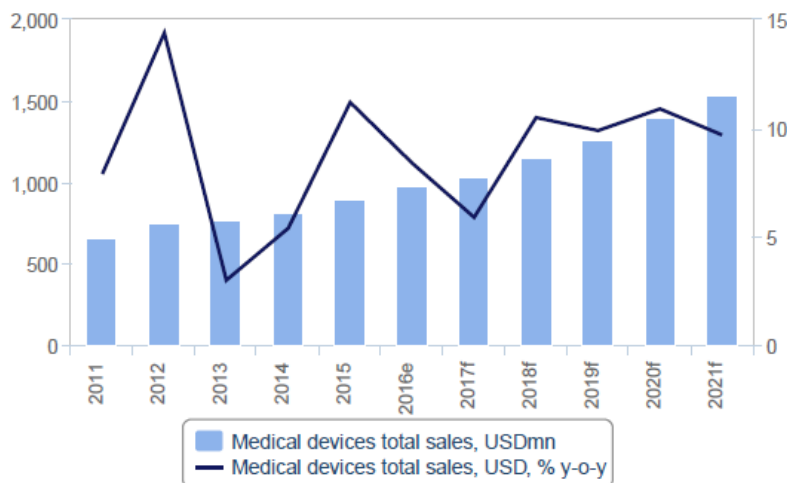


Figure 10: Medical Device Sales in Vietnam (BMI, 2017)

Drivers for Vietnam's growing market are major upgrades of health facilities. A particular large project was the Satellite Hospital Project (2013–2020) which massively increased the demand for medical equipment of lower level health facilities, as they were required to diagnose and treat more complex health issues ([Textbox 4](#)). More procurement of large amounts of new equipment follows out of the [Plan for People's Health Protection, Care and Promotion 2016–2020](#) and the growth of private hospitals in Vietnam.

Applications for medical technology can be found in challenges raised by communicable diseases in tropical Vietnam ([Section 3.4](#)). Vietnam has managed to significantly improve its health outcomes on treatment of infectious diseases. Nevertheless, a number of major challenges remain/re-emerge such as cholera, measles and tropical diseases.

Solutions aimed at preventing/treating non-communicable (chronic) diseases, are also forecast to growth ([Section 3.4](#)).



Figure 11: Vietnam's Medical Equipment by Segments (Ipsos Business Consulting, 2017)

### Text box 3: Philips to equip Hong Duc General Hospital II (ANP Producties, 2019)

Philips will provide the Hong Duc General Hospital II with diagnostic equipment (medical imaging) and solutions for IT and patient monitoring solutions. Furthermore, Philips will strengthen the hospital by training the personnel and develop new operation procedures. [Read more.](#)

## Opportunities

- Rapidly growing market with a high import share and demand for all types of medical equipment.
- Vietnam's 2020 vision demands growth of quality and capacity in operating theatres, orthopaedics, emergency equipment, sterilizing equipment, monitoring equipment, and diagnostic equipment such as CT scanners, ultrasound machines, MRI, and X-ray machines.
- Medical technology which targets persisting/re-emerging communicable diseases.
- Medical technology which targets more frequent lifestyle and age-related conditions.

## Market Entry Considerations

- Price is a key consideration in Vietnamese health facilities. Vietnam's national Plan for People's Health Protection, Care, and Promotion (2016-2020) states that the country is mainly focused on efficiently expanding the access and coverage of its health system. The country hopes to achieve this by using its funds wisely to invest in equipment which adds value to its health services.
- Besides price, medical device suppliers may have to compete with loaned and gifted medical devices (through intergovernmental and non-governmental organisations) in some segments.
- Vietnam's developing health system offers opportunities for both innovative technologies but also basic devices.
- Vietnam's upcoming private sector puts more emphasis on the quality than affordability of medical devices. Private hospitals are interested in high-end devices to provide excellent care for Vietnam's higher income groups.
- Vietnam experiences a shortage of trained healthcare professionals. Many healthcare professionals have studied abroad but may have limited experience with especially innovative equipment. Organisations entering the market should have a plan of operation to empower local staff to use medical devices. Vietnam aims to educate more 'medical technologists' to empower health facilities in the use, storage and maintenance of medical equipment (MoH, 2016).

- A barrier for Dutch involvement in Vietnam's foreign private hospitals might be a preference of these hospitals for the preferred suppliers by the overarching group (Vietnam Consult & Trading B.V, 2015). Internationally operating private hospitals which are active in Vietnam may prefer to procure medical devices from their country of origin.
- A newer upcoming trend sees Vietnam's public hospitals move more to co-creation (Ipsos Business Consulting, 2017). One way in which hospitals creatively source for medical devices and other solutions is demonstrated by UMC HCMC: **"We (UMC) hosts workshops to invite manufacturers and distributors to our hospital. Many of our doctors are also in contact with local manufacturers to access the newest technology."**

## 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

Even though neighbouring health systems are seen as more developed, the Vietnamese healthy life expectancy of 67.8 is relatively high compared to other countries in the region, Thailand 66.8 and Malaysia 66.6. This positive trend is expected to continue, as Vietnam's young population and vibrant economy develops further. The development of Vietnam gave an impulse to new trends which have started the development of a market for solutions in the domain of 'mobility & vitality':

- **"Vietnam is getting old before it gets rich"** (The Economist, 2018). In about 30 years when the bulk of the Vietnamese population (60% currently < 35 years old) reaches their 60s, the 60 and 80+ year old segments in the population will triple. To address ageing of the Vietnamese population, Vietnam has constructed a policy framework of the Law on the Elderly (2009), National action plan on elderly people for 2011-2020/2030 and Decree 67. Following these strategies, Vietnam aims to improve the health, security and participation of the elderly population. Major initiatives include the adaptation of health facilities to have separate rooms for the elderly, prioritising elderly in healthcare facilities, providing the poor elderly population with free health insurance cards, increasing the insurance coverage across the elderly population (70% is estimated to live in rural areas) and providing monthly allowances to elderly who are lonely and have no income.

Besides government, Vietnam's civil society is heavily involved in assisting the elderly. The Vietnam Association of the Elderly (VAE) is an example of a major player with more than 8.3 million members and around 1 100 affiliated older people associations (OPA) which organise activities and care for the elderly (Helpage, 2019).

Civil society is also the main provider of long-term care in Vietnam. Currently most Vietnamese age at home and there already exists a shortage of nursing homes/long-term care facilities in Vietnam. Read more on long-term care [here](#). Free home care is delivered through approximately voluntary 1300 Intergeneration self-help clubs (ISHC). Vietnam aims to expand to 3200 ISHC in 45 provinces by 2020. Other home care providers include local and international voluntary organisations and paid volunteers.

Private nursing homes, paid homecare services and home helpers are growth segments.

- **Prevention and control of an increasing burden of non-communicable (chronic) diseases.** The burden of non-communicable diseases in Vietnam is increasing quickly ([Section 3.4](#)). Vietnam already booked great progress by executing screening and treatment services to about 600 000 people with hypertension,

236 000 people with pre-diabetes and diabetes, and 10 000 people with chronic obstructive pulmonary disease and asthma (WHO, 2011). Highlights of the latest national Vietnamese NCD strategy (2015-2025) include: investments in strengthening primary healthcare system to deal with NCD's and reducing the prevalence of risk factors amongst the Vietnamese population through health promotion (SumDK, 2016).

- **Addressing mental health in Vietnam.** As Vietnam develops, its health system puts mental health issues higher on the agenda. Vietnam has instituted its National Mental Health Programme in 2002 which provides guidance to Vietnam's developing mental health services and industries. The public sector is expected to show marginal growth in upcoming years. This growth is criticised as Vietnam has a relative narrow definition of mental illnesses and covers an estimated 30% of the country, mainly urban areas (Mah, 2018). The private sector (mainly for less severe mental health issues) is also expected to grow as the Vietnamese middle class grows. A barrier to utilisation is the stigma on mental health services. This stigma is illustrated by the Vietnamese word for psychiatrist "*Bác sĩ tâm thần*", which in English directly translates to "*doctors who treat madness*" (Mah, 2018). Telemedicine solutions are a possible solution to increase the utilisation of mental health services ([Section 6.4](#)).

## Opportunities

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

- Equipping Vietnamese health facilities (district health centres and Centres for Preventive Medicine) to better accommodate NCD health demands.
- Equipping the growing segment of (private) nursing homes.
- Enabling Vietnam to continue massive screening programmes for non-communicable diseases.
- Empowering Vietnam's civil society to deliver homecare/long-term care.

## Market Entry

- The Vietnamese 'mobility & vitality' market is made up of a large public sector which procures equipment both directly and through government tenders.
- Other large stakeholders are international organisations and non-governmental organisations, which assist the Vietnamese government in strengthening healthcare in the country.
- Next to traditional health providers, voluntary organisations and faith-based organisations play important roles in the market as both potential clients and ambassadors.
- Most stakeholders in Vietnam's 'mobility & vitality' market depend on external budgets and carefully consider the added value of technology.
- The majority target groups of the MoH in Vietnam's 'mobility & vitality' market live in rural areas (70% of older people live in rural areas).
- Organisations which could help to enter Vietnam's mobility & vitality' market are:
  - Vietnamese Ministry of Health
    - General Department of Preventive Medicine (GDPM)
    - International Cooperation Department (ICD)
  - [Vietnam Association of the Elderly \(VAE\)](#)
  - [Vietnam Non-communicable Diseases Prevention and Control Alliance \(NCDs-VN\)](#)

## 6.3. 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.

## Trends

The Vietnamese health infrastructure is much larger than the Dutch health infrastructure, with more than 15 times as many hospitals. In terms of quality Vietnam's health infrastructure is in a developing stage. This is reflected in the Health Access and Quality Index (66 out of 100), a comparable score to Malaysia 67, Brazil 65 and Azerbaijan 64 and scoring lower than the Netherlands score 90. The capacity of Vietnam's health system is lower in terms of beds per capita than most OECD-countries with 2.5 hospital beds per 1000 people compared to 6 per 1000 on average in the OECD (World Health Organization, 2009).

- **Vietnam's hospitals are overcrowded.** Whilst Vietnam has a relatively high capacity in terms of total number of hospital beds compared to other ASEAN nations, there are severe issues of overcrowding. This is caused due to long average stays and very high occupancy rates (PWC, 2012). In order to address this issue, the Vietnamese Ministry of Health launched the Plan For people's health protection, care, and promotion (2016-2020). The Plan outlines large investments in Vietnam's health infrastructure ([Section 4.3](#)). Furthermore, Vietnam looks to better allocate patients by smart referrals and exchanges.
- **Vietnam has a shortage of nursing homes.** In 2018, Vietnam's deputy head of the Department of Social Assistance stated that the country's infrastructure for elderly care was very weak (Vietnamnet, 2018). In order to tackle this issue, Vietnam looks to invest in the development of more professional nursing homes. There exist some uncertainties in the tempo of the development of nursing homes in the public sector, which will likely lag behind the rapidly ageing Vietnamese population. Private nursing homes are expected to be a growth segment in Vietnam.

### Text box 4: **Satellite Hospital Project (2013–2020)**

A major investment in Vietnam's health infrastructure is the Satellite Hospital Project. This project aims to upgrade the technical capacity for examination and treatment in provincial hospitals designated as satellite hospitals through technical skills transfer by central or core hospitals. The first phase, from 2013 to 2015, prioritized investment in 48 provincial hospitals as satellites of 14 core hospitals. In the second phase from 2016 to 2020 more hospitals will be constructed and expanded. [Learn more.](#)

## Opportunities

After reaching the end of a major investment cycle in 2020, there is still a lot of movement within Vietnam's hospital build market as the health demand and utilisation within the country grows rapidly. In the [Plan for People's Health Protection, Care and Promotion 2016-2020](#) Vietnam announces a number of large investments:

- Vietnam aims to build provincial and regional centers for disease control, regional testing centers;
- New facilities which have been planned are: Southern Orthopedics Hospital, Southern Endocrinology Hospital, Biomedical Research Institute, etc.
- By 2020, there is a need to construct 1,192 Community Health Stations (CHS) and renovate of 1,239 dilapidated, downgraded or severely deteriorated CHS.
- Vietnam aims to build approximately 25 district health centres (DHC)
- The Vietnamese MoH indicates it sees more potential upgrades in facilities which have missed the investment cycle in the period 2008-2017.



## Market Entry

- Access to the Vietnamese hospital design and build market is primarily dominated by ODA funded project, requiring international tendering ([Section 5.2](#)).
- The dependency on ODA-funding can also be a limitation for Vietnam’s Health system. The Vietnamese MoH reports that not all projects planned before 2016 have been completed due to lack of funding. An example are the planned investment in CHS in disadvantaged areas.

## 6.4. eHealth

The Dutch has strengths in the eHealth sphere, which encompasses solutions that 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

Vietnam has a developing digital infrastructure system, which delivers lower output compared to many OECD-countries with its average fixed broadband speed ranking 66<sup>st</sup> place and mobile speed ranking 73<sup>th</sup> in the world (Speedtest, 2019). This information infrastructure is underutilised, 46.5% of the population using the internet compared to 76.18% in the US, 84.40% in Germany and 93.20% in the Netherlands (The World Bank, 2017). This relatively low number of internet users is skewed by the unequal presence of digital infrastructure in Vietnam, with good performing infrastructure in urban Vietnam and developing infrastructure in the rural areas.

- **Vietnam’s health information system is in an early stage.** Currently the health information system is underfinanced and copes with an underdeveloped regulatory framework. After introduction of Vietnam’s HIS Development Strategic Plan for the period 2014-2020, the Vietnamese government made some progress with the development of “software programs” for hospital statistical reporting and management ([Plan for People’s Health Protection, Care and Promotion 2016-2020](#)).
- **Vietnam sets ambitious goals to realise Electronic Health Records (EHRs).** As of 2018, Vietnam has implemented a pilot with electronic health records in 8 provinces and set the goal to implement an electronic health record for every Vietnamese citizen in 2019 (Nhan Dan, 2018).

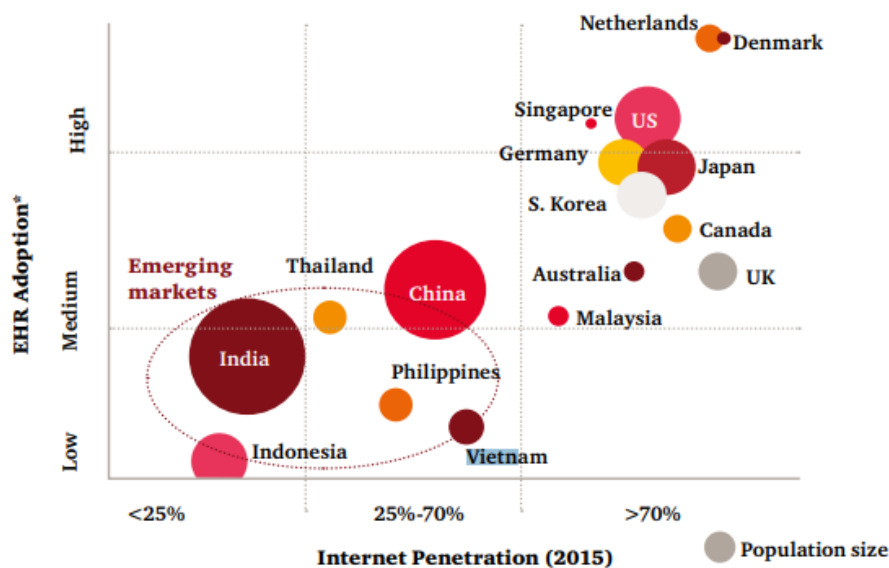


Figure 12: Medical Record Adoption Model (PWC, 2017) Data: Statista, HIMMS Analytics Electronic Medical Record Adoption Model

- **Vietnam actively pilots telemedicine solutions.** Telemedicine is seen as a key technology to increase the accessibility, quality and affordability of Vietnam’s health system. Both in urban and rural areas hospitals and local companies implement telemedicine on smaller scale. In 2017 Vietnam improved the regulatory environment for telemedicine by issuing the Management of Distance Medicine. The legislation allows Vietnamese patients to connect with Vietnamese medical facilities from abroad (Lexology, 2018) (Lam, et al. 2018). Critics indicate that Vietnam’s regulatory framework is coming along but still needs to develop to allow for the optimal use of telemedicine/eHealth initiatives.
- **Closing the gap between mental health demand and supply.** Mental health demands are on the rise in Vietnam ([Section 6.2](#)). Mental health services, especially in the private sector, are expected to be expanded as a result. The Vietnamese population however experiences the stigma on mental health services as a barrier to see a mental health professional. Telemedicine solutions which allow discreet session with mental health professionals therefore have potential in Vietnam.

#### Text box 5: **National launching of the Viet Nam Animal Health Information System (VAHIS)**

VAHIS is an on-line animal disease reporting system which enables faster and more accurate flow of disease information to decision makers. It replaces the current paper-based reporting system and allows for real-time analysis of animal diseases situation. VAHIS connects animal disease information from communal, provincial and regional animal health authorities to decision makers.

VAHIS is a cooperation between the Vietnamese Ministry of Agriculture and Rural Development (MARD), the Food and Agriculture Organization (FAO) of the United Nations Viet Nam and the United States Agency for International Development (USAID). [Read more.](#)

#### Text box 6: **FPT Corporation to continue decreasing the administrative burden of Vietnamese hospitals (VAHIS)**

FPT.eHospital software has provided technology solutions for more than 200 hospitals and medical clinics around Vietnam. The software succeeded in cutting the time needed to process payments for hospital fees and health insurance procedures from 30 minutes per patient to three to five minutes. The Ministry of Health (MoH) signed a cooperation agreement in mid-August with the FPT Corporation on applying and developing medical information technology for the national hospital network in the 2018-2028 period. [Read more.](#)

## Opportunities

Vietnam has booked some progress on the development of its health information infrastructure and has set ambitious goals in the near future. Vietnam is open to cooperate on:

- The development of Vietnams Electronic Health Record, which is announced to launch in 2019.
- The implementation of telemedicine as a tool to enable healthcare at home and increase accessibility of health services in both urban and rural areas.

## Market Entry

- Vietnam’s MoH is the main stakeholder on the eHealth market.
- The Plan for People’s Health Protection, Care and Promotion 2016-2020 reports the main barriers (shortcomings and limitations) for the development of Vietnam’s health information system. The most prominent barrier is the lack of focal points for the dissemination of data in the health sector. Furthermore, Vietnam’s health information system is underfunded and the regulatory environment is underdeveloped. As Vietnam develops its health information system, these barriers are expected to become less severe.

## 6.5. 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

In terms of 'Public Health' related challenges, Vietnam is currently focussing on two major challenges:

- **Improvement of mother and child health.** Vietnam has made impressive advancements in reproductive health and maternal childcare (UNFPA, 2016). Although Vietnam's maternal health services compare relatively well with other nations with similar GDPs (per capita) there is still much potential to be gained in terms of increasing health outcomes. Access to health services in remote and rural areas remain an issue. In the Plan for People's Health Protection, Care and Promotion 2016-2020 the Vietnamese government seeks to address the maternal mortality ratio and infant mortality rate in some mountainous areas which are 3-4 times higher than those in lowland and urban areas, and almost twice as much as the national average.
- **Communicable disease monitoring and surveillance.** Vietnam has significantly improved its health outcomes on treatment of infectious diseases ([Section 3.4](#)). Nevertheless a few major challenges remain/re-emerge such as cholera, measles and tropical diseases. Vietnam executes screening programmes and has adopted the "[One Health](#)" method to great effect (PBS, 2015).

#### *Text box 7: Event-Based Surveillance at Community and Healthcare Facilities (CDC, 2018)*

Vietnam's Ministry of Health in collaboration with the US Centers for Disease Control and Prevention, launched a pilot project in 2016 focusing on community and hospital event-based surveillance. The pilot was implemented in 4 of Vietnam's 63 provinces. [Read more.](#)

- **Vietnam aims to increase the utilization of its primary healthcare.** Since 2013, Vietnam has been working to expand and improve community health centres (CHC). The main goal is to steer health demand away from secondary and tertiary care to primary care (community health centres) as currently too many patients opt to bypass the referral from a CHC and prefer to self-pay in order to access services directly at private clinics or hospitals. Patients believe the quality of services at CHC's is of too low a standard (Hoa, et al. 2018). (UNFPA, 2016) Vietnam makes use of primary care assessment tools to measure and create awareness of the quality of these health centres.
- **Shortages and maldistributions in Vietnam's health workforce.** Vietnam's fast developing health infrastructure is confronted with general shortages of doctors and nurses ([Section 4.6](#)). Vietnam's Ministry of Health is working with a limited budget but is trying to increase the number of students in medical schools. Vietnam's medical schools have engaged in many international partnerships to develop Vietnam's workforce. Next to a general shortage, a major issue in Vietnam is the maldistribution of the health workforce, which is concentrated in urban areas. To stimulate establishment of the health workforce in its rural areas, Vietnam initiated a range of incentives for doctors in rural areas which have proven successful. The most important policy consist of long-term education opportunities through free/subsidised access to further specialised medical education for doctors in rural areas (Vujicic, et al., 2010) (Nguyen, et al., 2016).

#### Text box 8: VHC mobile health clinic 2019 (Gullo & Vu, 2018)

Vietnam Health Clinic (VHC) is a not-for-profit organisation which travels Vietnam to provide health services in underserved areas. VHC's upcoming mobile health clinic will be in the summer of 2019. VHC is currently recruiting healthcare professionals and student members to join the trip help them as providers and personal interpreters. [Read more.](#)

- **Growing and balancing Vietnam's health workforce in the public and private sector.** Vietnam's private is growing in size ([Section 4.3](#)) leading to a growing demand for excellent personnel. Vietnam's government sees the upcoming demand of the private sector as a potential challenge, as the public sector may struggle to retain personnel. Working in the public sector is of high prestige in Vietnam, as these doctors work with a much higher volume of patients than private sector doctors. The gap between the public and private sector however decreases and private facilities are able to offer increasingly attractive wages and labour conditions to the health workforce.

#### Text box 9: Vinmec Simulation Center (Gullo & Vu, 2018)

Vinmec private healthcare system recently established a work placed-based simulation centre in association with its flagship, JCI accredited hospital in Hanoi. The centre has initially focused on advanced life support, communication, invasive and non-invasive diagnostic skills and nursing skills training in partnership with MSR, an Israeli-based medical simulation centre. The centre has trained simulated patients, future trainers and physicians and nurses and has clocked over 1292 man hours with its various simulators. The centre is now poised to further expand its 'train the trainers' program, provide undergraduate training for nursing and medical students and continue to expand its workplace-based training to healthcare professionals. [Read more.](#)

- **Vietnam's health workforce as a future economic resource.** Even though Vietnam currently experiences a shortage of health professionals, Vietnam's Ministry of Health also recognises opportunities for its domestic health workforce as an economic resource in the future. The plan (For people's health protection, care and promotion 2016-2020) explores pathways through which Vietnamese nurses can fill demands in countries in the region.

## Opportunities

Vietnam is open to cooperate on:

- Improving health outcomes on mother and child health, particularly in rural areas.
- Improving health outcomes on communicable diseases.
- Growing Vietnam's health workforce in both the public and private sector.
- Attracting and retaining Vietnam's rural health workforce.

## Market Entry Considerations

- Key domestic partners to engage with in the Vietnamese public health strength are:
  - [Ministry of Health of Vietnam \(MoH\)](#)
  - [Vietnam Public Health Association \(VPHA\)](#)
  - [Vietnam Health Clinic \(VHC\)](#)
- Key international partners are:
  - [Asian Development Bank \(ADB\)](#)
  - [The World Bank Group \(WBG\)](#)
    - [International Finance Corporation \(IFC\)](#)
  - [Japanese International Cooperation Agency \(Jica\)](#)
  - [NGOs \(List\)](#)

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## 7 CONCLUSIONS

This report has highlighted the top reasons for Dutch companies and organisations to be interested in the Vietnamese healthcare market. The report 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, Hospital Build, eHealth, and Public Health.

Vietnam's health system has made major progress since the political and economic reforms under 'Doi Moi', with significant upgrades of the health infrastructure, growth of the health workforce and expansions of compulsory insurance coverage.

The progress made by the Vietnamese health system has led to significant improvements of the (healthy) life expectancy of the Vietnamese. It however also increased the costs of healthcare and caused major congestion in public hospitals as health demand grew significantly.

This health demand is only expected to grow as today, Vietnam's young population will age rapidly and is confronted with a growing double disease burden (NCDs for higher income groups and CDs mainly in rural areas) and shrinking but persisting inequalities in access to healthcare between urban and rural areas.

Vietnam's health decisionmakers in the public sector aim to further develop the Vietnamese health system and make use of a limited but growing domestic budget and official development assistance to make smart investments. Meanwhile, as Vietnam's middle class is growing rapidly, an upcoming private health sector grows to supply high quality services in Vietnam.

Vietnam reaches out to international organisations and suppliers to execute a broad scope of concrete projects as highlighted in [Section 6](#). Prominent activities include capacity building in district and commune health centres, equipping private hospitals and elderly care and mental health providers, growing Vietnam's workforce, co-developing Vietnam's developing health information system and combatting communicable diseases in rural Vietnam.

The Netherlands Life Sciences & Health Sector as a frontrunner in the digitalisation of healthcare, renowned for its long-term care system and related innovative approaches, and home to multiple high-ranked university medical centres and (related) research infrastructures and spin-off companies, can be of value to solve a number of challenges with which the Vietnamese health system is confronted.

### Next steps

This report marks an important step to strengthen the bilateral healthcare relation between Vietnam and The Netherlands. Together with the Netherlands Embassy in Hanoi and the Consulate-General in HCMC, future steps and activities will be identified to further connect Vietnamese and Dutch healthcare stakeholders and build towards sustainable healthcare relationships. Please get in touch with the Netherlands Embassy and TFHC for more information.

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## 8 ANNEXES

### Annex 1 – List of Interviewees

An important element of the study was the fact-finding visit to Vietnam, whereby a delegation from TFHC, accompanied by representatives of the Netherlands Embassy in Hanoi gained insights from key stakeholders in the Vietnamese health sector. The fact-finding visit took place over two separate visits totalling a period of one week and included 6 meetings and 2 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)
2. Department of Health HCMC
3. Vinmec International Hospital (Time City)
4. Hanoi Medical University
5. University Medical Center HCMC
6. Roundtable 'Latest Trends & Developments in Healthcare in Vietnam'
  - a. Phòng khám gia đình Việt Úc Detec
  - b. FPT Group
  - c. Vabiotech Vaccines Center
  - d. BookingCare
7. Roundtable 'Adoption of Innovation, including eHealth, in Healthcare'
  - a. BNVDTP
  - b. Family Medical Practice Vietnam Columbia Asia
  - c. Genetics Research Institution
  - d. Van Khang SOS Ltd
  - e. Children's Hospital 1
8. KNCV & MCNV



## Annex 2 – Leading Causes of Death in Vietnam

Health indicators (2017)	Vietnam	Netherlands
Life expectancy	76.5	82.1
Healthy life expectancy	67.5	72.1
Leading causes of: Death	<ol style="list-style-type: none"> <li>1. Stroke</li> <li>2. Ischemic heart disease</li> <li>3. Lung cancer</li> <li>4. COPD</li> <li>5. Alzheimer's disease</li> <li>6. Diabetes</li> <li>7. Cirrhosis</li> <li>8. Road injuries</li> <li>9. Lower respiratory infections</li> <li>10. Tuberculosis</li> </ol>	<ol style="list-style-type: none"> <li>1. Ischemic heart disease</li> <li>2. Alzheimer's disease</li> <li>3. Lung cancer</li> <li>4. Stroke</li> <li>5. COPD</li> <li>6. Colorectal cancer</li> <li>7. Lower respiratory infect</li> <li>8. Breast cancer</li> <li>9. Pancreatic cancer</li> <li>10. Falls</li> </ol>
Premature death	<ol style="list-style-type: none"> <li>1. Stroke</li> <li>2. Ischemic heart disease</li> <li>3. Road injuries</li> <li>4. Lung cancer</li> <li>5. Cirrhosis</li> <li>6. HIV/AIDS</li> <li>7. Neonatal disorders</li> <li>8. Congenital defects</li> <li>9. Lower respiratory infection</li> <li>10. Diabetes</li> </ol>	<ol style="list-style-type: none"> <li>1. Lung cancer</li> <li>2. Ischemic heart disease</li> <li>3. Stroke</li> <li>4. Alzheimer's disease</li> <li>5. COPD</li> <li>6. Colorectal cancer</li> <li>7. Breast cancer</li> <li>8. Self-harm</li> <li>9. Lower respiratory infect</li> <li>10. Pancreatic cancer</li> </ol>
Disability	<ol style="list-style-type: none"> <li>1. Low back pain</li> <li>2. Headache disorders</li> <li>3. Diabetes</li> <li>4. Age-related hearing loss</li> <li>5. Other musculoskeletal</li> <li>6. Depressive disorders</li> <li>7. Blindness and vision impairment</li> <li>8. COPD</li> <li>9. Neck pain</li> <li>10. Stroke</li> </ol>	<ol style="list-style-type: none"> <li>1. Low back pain</li> <li>2. Headache disorders</li> <li>3. Diabetes</li> <li>4. Neck pain</li> <li>5. Depressive disorders</li> <li>6. Anxiety disorders</li> <li>7. Age-related hearing loss</li> <li>8. Falls</li> <li>9. COPD</li> <li>10. Oral disorders</li> </ol>

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

## Annex 3 – Key Players in Vietnam’s Health System

Organisation	Function	Website
Hanoi Medical University (HMU)	The oldest university of Vietnam	<a href="#">URL</a>
HCM Medical Equipment Association (HMEA)	The association has more than 100 official members from the training units, hospitals and clinics, businesses and individuals active in the medical equipment industry in Ho Chi Minh City	<a href="#">URL</a>
Medisch Comité Nederland-Vietnam	is an international network organisation working on health, nutrition, sustainable production and mainstream education for children with disabilities? MCNV works from offices in Vietnam, Lao PDR and The Netherlands.	<a href="#">URL</a>
Ministry of Health of Vietnam (MoH)	The Ministry of Health is the government ministry responsible for the governance and guidance of the health, healthcare and health industry of Vietnam	<a href="#">URL</a>
Ministry of Planning and Investment Portal: Foreign Investment Agency (FIA)	Vietnam's investment promotion agency	<a href="#">URL</a>
National Institute for Hygiene and Epidemiology (NIHE)	Research institute on the prevention and control of non-communicable diseases.	<a href="#">URL</a>
Vietnam Association of the Elderly (VAE)	A national organisation of volunteers of around seven million members participating in 11,000 grassroots associations of older people in Vietnam.	<a href="#">URL</a>
Vietnamese Association of Midwives (VAM)	Professional association for nurses and midwives in Vietnam.	<a href="#">URL</a>
Vietnam Medical Association (VMA)	Medical association	<a href="#">URL</a>
Vietnam Medical Equipment Association	A socio-professional organisation of organisations and individuals who work in the field of science, engineering, management, production and business, maintenance and repair	<a href="#">URL</a>
Vietnam Nurses Association (VNA)	VNA is a national association representing nurses, medical technicians and midwives employed by the Government of the Socialist Republic of Vietnam.	<a href="#">URL</a>
Vietnam Public Health Association (VPHA)	A social, professional organisation of volunteers who work in Public Health field.	<a href="#">URL</a>
Vinmec Group	Vinmec is a leading private non-profit Vietnamese healthcare system.	<a href="#">URL</a>

## Annex 4 – Key Events: Trade Fairs, Exhibitions and Forums

Organisation	Main function	Upcoming date(s)	Country	Venue
<b>Analytica Vietnam</b>	Trade fair for laboratory technology, analysis, biotechnology and diagnostics	03 - 05 Apr. 2019	Vietnam	SECC Saigon Exhibition & Convention Center
<b>Vietnam Medi-Pharm</b>	Platform to show the recent achievements of Vietnam's Pharmaceutical and Medicine Industry to the world	08 -11 May 2019	Vietnam	Friendship Labour Cultural Palace
<b>Hospital Management Asia (HMA) Conference 2019</b>	Annual event to share knowledge on hospital management hospital aimed at owners, C-level executives, directors and industry leaders	11 – 12 Sep. 2019	Vietnam	National Convention Center of Vietnam
<b>Medical Fair Asia</b>	Regional hospital, medical and pharmaceutical exhibition	11 – 13 Sep. 2019	Singapore or Thailand	Takes place in Bangkok and Singapore
<b>Pharmed &amp; Healthcare Vietnam 2019</b>	Exhibition on pharmacy and pharmaceutical products medical supplies and equipment	11 – 14 Sep. 2019	Vietnam	SECC Saigon Exhibition & Convention Center

View other events [here](#)

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## Agenda

For more information on upcoming activities:

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## Publication

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