



Ministry of Foreign Affairs

Asean Regional Factsheet:

Opportunities for the Dutch Life Sciences & Health sector

Commissioned by the Netherlands Enterprise Agency

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International.*



ASEAN

MALAYSIA
SINGAPORE
THAILAND
VIETNAM

Regional Factsheet

Opportunities for the Dutch Life Sciences & Health sector



May 2019

ASEAN in the scope of this Regional Factsheet refers to the South East Asian nations of Malaysia, Singapore, Thailand & Vietnam. These four countries show strong economic growth and have strong commitments to achieve and strengthen universal health coverage.

Traditionally, South East Asian countries are challenged by mainly (tropical) infectious diseases and under-investments in the health infrastructure, especially for mother and child care and health services for rural and remote populations. More recently, these countries are being subjected to challenges related to ageing societies and a rising burden of non-communicable diseases.

Malaysia, Singapore, Thailand & Vietnam are responding to these challenges in their own way, from their own starting point, and with their own dynamics.

Based upon four individual country reports, this Regional Factsheet provides a comprehensive comparison of the health sector developments and potential areas of opportunity for the Dutch Life Sciences & Health sector in Malaysia, Singapore, Thailand, and Vietnam.

This report was commissioned by the [Netherlands Enterprise Agency \(RVO.nl\)](http://RVO.nl) and is produced by the [Task Force Health Care \(TFHC\)](#) in cooperation with the Embassy of the Kingdom of the Netherlands in [Malaysia \(Kuala Lumpur\)](#), [Singapore](#), [Thailand \(Bangkok\)](#) & [Vietnam \(Hanoi & Ho Chi Minh City\)](#).

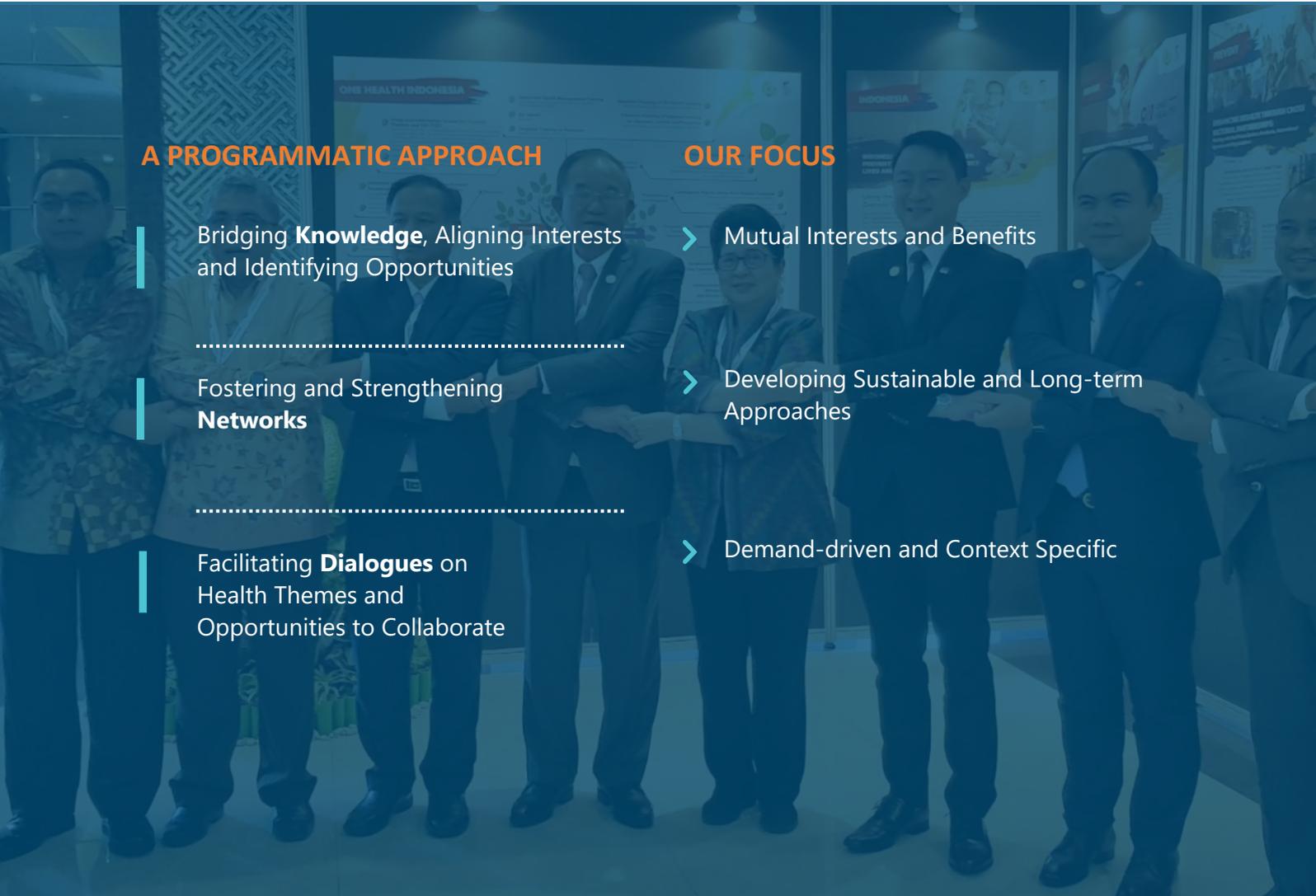
OUR APPROACH

TASK FORCE HEALTH CARE

IMPROVING HEALTHCARE TOGETHER

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

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



A PROGRAMMATIC APPROACH

Bridging **Knowledge**, Aligning Interests and Identifying Opportunities

Fostering and Strengthening **Networks**

Facilitating **Dialogues** on Health Themes and Opportunities to Collaborate

OUR FOCUS

> Mutual Interests and Benefits

> Developing Sustainable and Long-term Approaches

> Demand-driven and Context Specific

ABOUT THIS REGIONAL FACTSHEET

Background & Purpose

Aligning the interests and strengths of the Dutch Life Sciences & Health sector with the health sector dynamics in Malaysia, Singapore, Thailand, and Vietnam

A study to identify the health sector dynamics and business opportunities for Dutch LSH organisations and companies 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 Malaysia (Kuala Lumpur), Singapore, Thailand (Bangkok) & Vietnam (Hanoi & Ho Chi Minh City).

Methodology

Step 1: Identifying and mapping Dutch interest and the barriers they perceive

In order to obtain a better understanding of the interests of the Dutch Life Sciences & Health sector in Malaysia, Singapore, Thailand, and Vietnam, historical data, Dutch representation in the four countries, 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 the four countries. Data was classified into type of organisation, strength (e.g. Medical Devices or eHealth), current or past activity in each country, and their perception of the country in terms of market growth. The results are presented in the next section and are used to guide the country reports towards aligning challenges and opportunities in Malaysia, Singapore, Thailand, and Vietnam with Dutch expertise and solutions.

Step 2: Desk Research

In order to obtain a better understanding of the health sectors and their 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 health sector of Malaysia, Singapore, Thailand, and Vietnam in each individual country report.

Step 3: Fact finding visit to each country

An important element of the study was the fact-finding visit to Malaysia, Singapore, Thailand, and Vietnam, whereby a delegation from TFHC, accompanied by representatives of the Netherlands representation, gained insights from key stakeholders in all four countries. The fact-finding visit took place over a period of three weeks and included numerous meetings and round table discussions with representatives from the public and private sector, operating at the national, regional and local level. The lists of interviewees are presented in each respective country report. 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 all four countries, and initiation of new relationships that will benefit from follow-up activities.

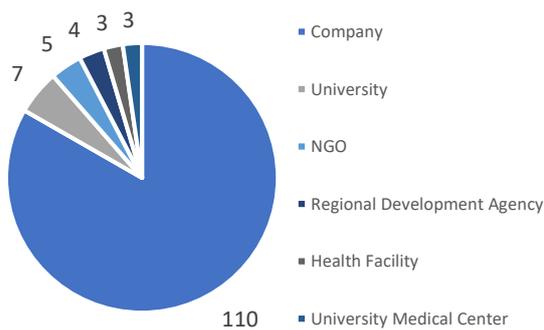
Step 4: Market Reports for Each Country + Regional Factsheet

For each country, a market report focusing on the health sector dynamics and opportunities for the Dutch LSH sector is produced. The regional factsheet highlights and compares key indicators, key health sector dynamics and overall business opportunities per Dutch strength of all four countries.

MAPPING DUTCH INTEREST

Task Force Health Care has surveyed the Dutch LSH-sector and has identified **132 unique Dutch Life Sciences & Health organisations** to be active or interested in one or more of the countries focussed on in this regional factsheet (Malaysia, Singapore, Thailand, and Vietnam). *Figure 1 and 2* show that the biggest groups consists of companies that are focused on providing smart solutions in the strengths 'eHealth' and 'Medical Devices'.

Per type of organisation



Per strength

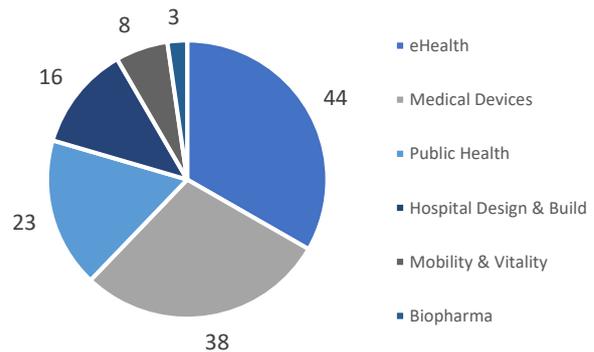
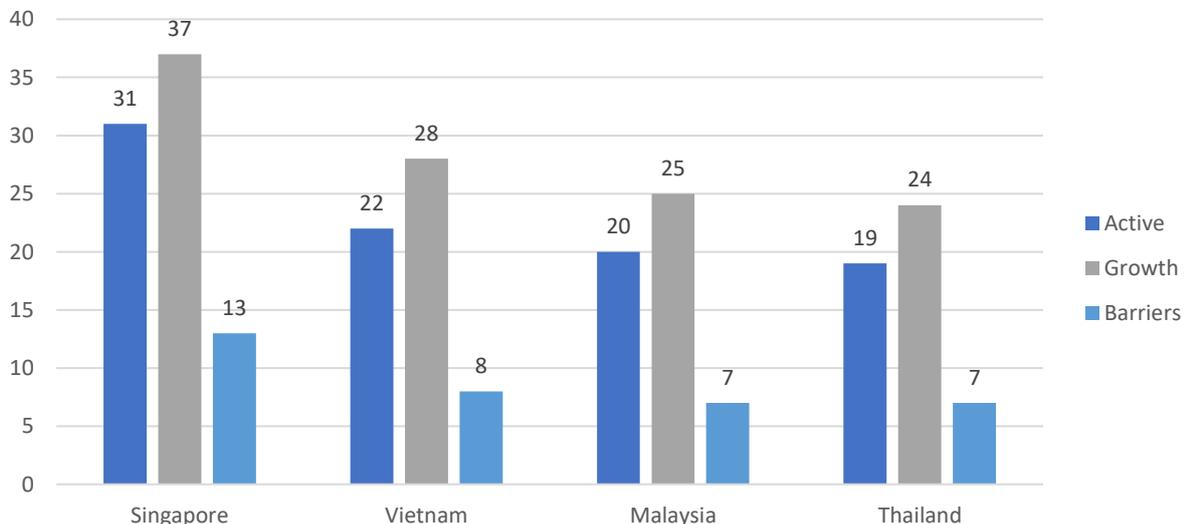


Figure 3 shows that Singapore enjoys the most attention of the Dutch Life Sciences & Health Sector and is also perceived as the market with the highest growth potential. Singapore also has the highest amount of respondents who have identified barriers to enter the market, which might be a reflection of the higher interest rate in Singapore. Vietnam, Malaysia, and Thailand show comparable scores, with Vietnam in second place in terms of Dutch activity, perceived growth potential and barriers to enter the market. The data seems to support the statement that Singapore is the entry point to the regional (ASEAN) market. There is a large overlap of the respondents that are active and interested in both Singapore and Vietnam (15 active, 22 interest), Singapore and Malaysia (19, 20), and Singapore and Thailand (15, 19). Singapore is also the country with the most respondents that are only active in one country (8).

Regional comparison of Dutch interest

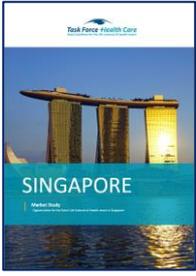
Activity, perceived Growth potential, and perceived Barriers to enter the market



COUNTRY COMPARISON

	Netherlands	Malaysia	Singapore	Thailand	Vietnam
Geography & Demographics					
Land Size (km ²)	42 058	329 847	721.5	513 120	331 212
Population (2019)	17 109 189	31 600 000	5 838 861	69 410 868	95 540 000
<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
Economic Context					
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
(Health) Business Context					
Ease of Doing Business Rank	32	15	2	27	69
Logistics Index	6	41	7	32	39
Pharmaceutical Market (mln USD-2016)	6 000	3000	903	4562	4720
<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
Health Context					
Health Expenditure (2016, bln USD)	81.7	13.2	17	25.3	14.9
Health Expenditure as % of GDP	10.69	4.4	6.1	6,2	7.3
Health Expenditure per Capita (USD)	4 746	422.7	2980.6	371	157.8
Public Health Share of HE	86.7	55.4	46.2	86.8	55.2
Type of Health System	Social Health Insurance	Universal Healthcare System	Universal Healthcare System	Universal Healthcare System	Universal Healthcare System

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

	Malaysia	Singapore	Thailand	Vietnam
Market intelligence				
Country reports				
TFHC view	Hidden gem with increased public and private investments	Healthcare frontrunner and a benchmark and entry point for the ASEAN region	Growing health hub with a strong private sector and public sector prioritizing rural areas	Emerging health sector developments focusing on efficient use of limited healthcare resources
Key characteristics & developments				
Healthcare Access & Quality Index	67/100	86/100	71/100	66/100
Health governance	Centrally governed through MoH	Central governed through MoH with hospitals managed through three hospital clusters	Ministry of Public Health (service provider) and the National Security Office (purchaser managing health budget)	MoH and 3 decentral levels
Health system	Dual system with developed/ upcoming public health services and a strong private sector (both small facilities and major groups)	Highly developed public health system with limited private sector (mainly primary care)	Dual system with developed/ upcoming public health services and a strong private sector (both small facilities and major groups)	Dual system with public sector dominance. private sector prominent in outpatient services but showing some development in secondary and tertiary care
Health financing	Universal Health Coverage & private insurance	Subsidised health services and co-payment through three M's	Three schemes: social health insurance, public servant insurance (CSMBS) and Universal Coverage Scheme	Single payer & voluntary health insurance (11%), still high OOP expenditure
Public sector developments and priorities	Development of primary healthcare, rural healthcare and health information infrastructure	Focus on primary and community-based care in a response to chronic and elderly care. Advancing health information system.	Improving sustainability of the 2002 UHC and reaching the rural areas	Health system strengthening: management and human capital
Private sector developments and priorities	Expanding to cater for the growing demand for quality care and targeting medical tourism	Primary and senior care providers focusing on expanding their services and efficiency	Expanding to cater for the growing demand for quality care and targeting medical tourism	Newly upcoming private hospitals
Health infrastructure	Good coverage and capacity in urban areas and a relative large number of excellent private health facilities. Some rural areas are underserved	Three public hospital clusters managing excellent hospitals	Well-performing (public and private) facilities in urban areas. Some underserved rural areas	Limited capacity and only a small number of excellent health facilities. Many rural areas are underserved
Number of hospitals	344	23	1 410	1 346
Health workforce	Sufficient yet maldistributed between urban and rural areas with future shortages predicted due to rapid ageing	Currently strong yet insufficient for senior/home care. Large shortages (manpower crunch) expected in the near future	Sufficient yet maldistributed between urban and rural areas with future shortages predicted due to rapid ageing	Growing yet insufficient/maldistributed in most areas of care

OPPORTUNITIES

Whilst each country report elaborates in more detail upon the opportunities per Dutch strength within the respective country, this regional factsheet provides a comprehensive and comparative overview of the of the opportunities in Malaysia, Singapore, Thailand and Vietnam.

Opportunities compared

	Malaysia	Singapore	Thailand	Vietnam
Opportunities per strength				
Medical Devices <i>Including Diagnostics, Therapeutics, Medical supplies, Robotics</i>	●●○ Large and growing public and private market	●○○ Consolidated market open for innovative solutions	●●○ Large and growing public and private market	●○○ Potentially large but sluggish market characterized by underinvestment
Hospital Build <i>Including Finance, Planning, Design, Build, Maintenance, Operations and Equipment</i>	●●○ Focus on upgrading existing facilities and rural areas. Steady growth of private hospitals and elderly care facilities	○○○ Small infrastructure which is currently finalising a large investment cycle.	●○○ Focus on upgrading existing facilities and rural areas. Steady growth of elderly care facilities	●●○ Investments in regional and private hospitals yet a difficult market to enter. Funded primarily by ODA investments.
eHealth <i>Including Health Information Management Systems, Big data, Interoperability, Telemedicine, Monitoring, eLearning, Serious Gaming, Artificial Intelligence</i>	●●○ Strong focus on developing a national data infrastructure and keen interest in telemedicine	●●● Open to co-create digital health solutions that benefit quality	●●○ Strong focus on telemedicine and recent start to enhance data infrastructures	●○○ Digitalisation is in its infancy yet piloting telemedicine solutions
Public Health <i>Including Health Systems Strengthening, Communication & Community Involvement, Capacity building, Training & Education</i>	●●○ Focus on health financing and improving the health workforce	●●○ Strong focus on prevention, sustainable financing models and workforce challenges related to an ageing society	●●○ Strong focus on primary health system strengthening and expanding health workforce	●●○ Strong focus on achieving and improving UHC
Mobility & Vitality <i>Including Rehabilitation, Elderly Care, Long-term Care, Mental Health, Healthy Living, Nutrition</i>	●○○ Growing awareness and (private) investments in high-end senior facilities	●●● High demand for (community-level) senior care solutions	●○○ Growing awareness and (private) investments in high-end senior facilities	○○○ Topics like healthy ageing and senior care are still in its infancy in the public sector

Opportunities in perspective

Medical Devices

It is projected that the medical devices markets in Malaysia, Singapore, Thailand and Vietnam will grow in the upcoming years. Growth is driven by progress on the implementation of UHC policies, growing middle classes, ageing populations, and medical tourism. The increasing demand outgrows capacity building of the country's health infrastructures, leading to an increasing demand for solutions to increase the efficiency of health providers. For all four countries, the import share touches 80 to 90 per cent of the domestic market. It should be noted that the public sectors in Malaysia, Thailand and Vietnam are mainly concerned with providing affordable access to healthcare for their populations and price might be a key consideration. The private sector, particularly well-established in Thailand and Malaysia, compete for patients from higher income groups and medical tourist in a highly competitive regional market that tends to value Western-brands and quality over costs. Singapore is a rather consolidated and quality driven market. All four countries are keen to develop their domestic medical devices industry to become an industrial hub and gateway for foreign suppliers to the region.

Hospital Build

The hospital build markets for major new public health facilities in Malaysia, Singapore and Thailand seem to have reached the end of an investment cycle, with large-scale projects having come to an end or being finalised between 2020 and 2025. Vietnam forms an exception as it has announced major projects funded mainly by Official Development Assistance (ODA). The biggest efforts in Vietnam however are major upgrades of the bed capacity and equipment of its district and community level hospitals. Improving the capacity and quality of the existing health infrastructure are prioritised by the other three countries. Malaysia and Thailand particularly look to increase the capacity and coverage of their health facilities in rural areas. Singapore on the other hand is mainly concerned with increasing its long-term care infrastructure and aims to finish major expansions in 2020. The large and dynamic private sectors in Malaysia and Thailand also look into developing nursing homes for affluent seniors in the region. Next to long-term care, private hospitals in Malaysia and Thailand show growth as they are anticipating the rising demand for high quality care in the region (upcoming middle classes and increased number of incoming medical tourists). Private health providers to a lesser extent started to penetrate the subdomains of the health market in Singapore (smaller, and already well-developed) and Vietnam (potentially large, yet underdeveloped health market).

eHealth

Singapore is the continental leader when it comes to the implementation of a health information (management) system. Singapore is very proactive to further their use of data sharing and intelligence, has its own high-quality developers and requires a co-creation market entry approach. eHealth markets in Malaysia, Thailand and especially in Vietnam are in a more early development stage. Telemedicine is seen as a promising solution to increase the accessibility and efficiency of (primary) health services and expand coverage in remote areas in Malaysia, Thailand and Vietnam. Pilots of telemedicine in all four countries are currently undertaken.

Public Health

As more and more citizens enter the fast developing health systems of Malaysia, Singapore, Thailand and Vietnam, all countries have efficient and effective use of its health infrastructure set as a top priority. Three major cross-cutting themes which are being addressed in the four countries are experiments to come to sustainable financing models, international partnerships to boost local health workforces (particularly specialised in long-term (home) care) and finally stimulating the utilisation of primary healthcare facilities, which currently are resulting in many unnecessary hospitalisations and avoidable waiting times in secondary and tertiary health facilities. To address these themes Singapore, Malaysia and Thailand are willing to partner with foreign expertise while Vietnam to a larger extent is able to make use of international donor funds.

Mobility & Vitality

Malaysia, Singapore, Thailand and Vietnam show rapid growing investments in health services to prevent and lower the burden of age-, lifestyle- (chronic) and mental health-related diseases, whether it is at home, in the community or in hospitals. Population segments at which investments are directed differ between the 4 countries. Singapore as the first rapid ageing society in the region, makes uses of an universal approach through an innovative combination of investing in special health infrastructure, community-involvement and enabling ageing and healing at home through new service models and technology. The Thai and Malaysian public sector show progress and have put prevention and lowering the newly emerging disease burden as key priorities. They are currently in an earlier stage of development, leaving a vacuum which has been filled by the private sector which targets higher income groups in the regional market (including Singapore) through high-end health facilities, services and nursing homes. To a much lower extent, the same situation applies to Vietnam, where stakeholders are more focused on more elementary primary health system strengthening.

Agenda

For more information on upcoming activities:

www.tfhc.nl/agenda/

www.rvo.nl/actueel/evenementen

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