

# MARKET OPPORTUNITY

## Singapore



### OVERVIEW

- Healthcare expenditure in Singapore is expected to grow to nearly €37 billion by 2030 at a CAGR of 5.9%, driven by inflation in healthcare costs and a rapidly ageing population. 27% of Singapore's population will be over 65 years old in 2030.<sup>1</sup>
- Singapore has a strong set of medical device regulations that are often cited by neighbouring countries. Medical devices are categorised by level of risk and have to be registered with the Health Sciences Authority.
- There is strong government financial backing and dedicated infrastructure to foster the industry in Singapore, including Medtech Hub, Biopolis, and Tuas Medical Hub, which provide the bio-cluster community with a plug-and-play environment. This is supplemented by the fast-growing start-up environment in Singapore and Singapore's Smart Nation initiative.
- With a rapidly ageing population, Singapore will need assistive medical technologies and therapeutics that can help tackle the "silver tsunami".



- Country:** Singapore
- Capital City:** Singapore
- Population:** 5.6 million (2017 est.)
- GDP per capita:** €50,559 (2017 est.)
- Currency:** Singapore Dollar (SGD)
- Official Languages:** English, Malay, Tamil, Standard Mandarin

### Key Business Opportunities

- Diagnostics:** Companies involved in medical diagnostics can leverage on the A\*STAR-led S\$60 million Diagnostics Development Hub that brings together various skills experts to accelerate innovation, particularly in the sub-segments of **immunochemistry, point-of-care devices, and molecular diagnostics** in addressing strategic global indications dealing with the Asian phenotype.
- Population Health Management (PHM):** Companies developing products in PHM which includes **telehealth, telemonitoring and other healthcare informatics** solutions will benefit from an investment programme between Philips and EDBI to alleviate the pressures of Singapore's ageing population while upholding quality of care and Singapore's position as one of Asia's digital health hubs.
- Functional Ageing:** Companies with medical solutions catered towards functional ageing will be able to tap on the Centre for Healthcare Innovation and Medical Engineering (CHIME) and the Silver Community Test-bed programme launched by Singapore's government to launch and test-bed **age-friendly assistive devices** in a real-life home setting.
- Obesity and Chronic Diseases:** Companies with solutions that seek to manage obesity-related and chronic diseases will be able to tap into demographic and lifestyle trends of increasing incidences of **hypertension and diabetes**.
- Cybersecurity Solutions:** Companies developing cybersecurity solutions for IoT-enabled medical devices and patient data management will be able to find opportunities amidst rising concerns for privacy of patient data.

### Sector Characteristics

- Foreign manufacturers dominate the competitive landscape. There are few domestic competitors in the field.
- To improve the quality and attractiveness of the local medical devices market, Singapore launched its Technical Reference (TR) for medical device manufacturing.
- The Singapore government has dedicated a budget of about €2.5 billion to develop the health and biomedical sciences sector from 2016-2020.<sup>2</sup>

Product Type	CAGR <sup>3</sup> (2012-2017)
Orthopaedics & Prosthetics	27.8%
Patient Aids	8.7%
Consumables	7.8%
Other Medical Devices	5.9%
Diagnostic Imaging	3.7%
Dental Products	2.2%

#### Sources:

- DBS Asian Insights – The Future of Singapore: Growing old with you, 2016
- Research, Innovation & Enterprise 2020 Plan
- BMI Research (2016); Singapore Medical Devices Report Q4 2018.

# Market Opportunity Singapore

## Healthcare & Medical Technologies



### Multinational Key Players: Medical Devices

		Revenue (€ billion)
1	<b>Medtronic PLC</b> Endotracheal tubes, catheters, bandages	1.9
2	<b>Baxter International Inc</b> Disposable syringes, blood tubing, collection sets	1.8
3	<b>Becton Dickinson</b> Skin antiseptics, syringes, needles, and ventilators	1.0
4	<b>Zimmer Biomet Holdings Inc</b> Orthopedic surgical and joint replacement	0.8
5	<b>Edwards Lifesciences Corp</b> Surgical gloves, patient ergonomics products	0.2

### Domestic Key Players: Medical Devices

		Revenue (€ millior)
1	<b>Biosensors International Group</b> Cardiovascular, Endovascular, Cardiac Imaging	289.8
2	<b>Q &amp; M Dental Group Singapore</b> CAD CAM Digital Dentistry	81.6
3	<b>Medtecs International Corp</b> Endotracheal Tube, Catheter Insertion Tray	57.9
4	<b>UG Healthcare Corp Ltd</b> Surgical, vinyl gloves, face masks	36.7
5	<b>QT Vascular Ltd</b> Haemodialysis machines, peritoneal dialysis	11.7

### Product Categories

#### Market Size (2018)

	Product Area	Value (€ million)	% of Total
1	Other medical devices	218.7	39.16%
2	Consumables	95.6	17.12%
3	Diagnostic imaging	91.5	16.39%
4	Patient aids	65.0	11.64%
5	Orthopaedics	60.4	10.82%
6	Dental products	27.2	4.88%

#### Exports (2018)

	Product Area	Value (€ million)	% of Total
1	Patient aids	1,776.4	29.08%
2	Other medical devices	1,719.7	28.15%
3	Diagnostic Imaging	980.3	16.05%
4	Consumables	840.8	13.76%
5	Orthopaedics	766.2	12.54%
6	Dental products	25.3	0.41%

#### Imports (2018)

	Product Area	Value (€ million)	% of Total
1	Other Medical Devices	1,224.4	36.59%
2	Patient aids	677.2	20.24%
3	Diagnostic Imaging	614.0	18.35%
4	Consumables	560.0	16.74%
5	Orthopaedics	213.7	6.39%
6	Dental products	56.6	1.69%

# MARKET OPPORTUNITY

## Vietnam

### OVERVIEW

- Demographic changes, an increase in disposable income, and steady economic growth have led to a growing demand for healthcare services in Vietnam. Healthcare expenditure in 2017 reached €14 billion and accounted for 7.5% of GDP. Healthcare spending is forecasted to grow at a CAGR of 12.5% between 2017 and 2021.
- Overcrowding, medical staff shortages, and obsolete medical equipment are major challenges for Vietnam's healthcare sector.
- Partnerships are sought with foreign companies with solutions for healthcare services, new medical devices and pharmaceuticals.
- Between 2016 and 2020, spending on medical devices and private healthcare will grow steadily at 9.3% and 7.2% respectively. The medical devices market forecasts growth from €857 million in 2016 to €1.2 billion in 2020, while private healthcare spending is predicted to grow from €5.8 billion in 2016 to €7.6 billion in 2020.
- Pharmaceutical sales are predicted to grow the most quickly (at a CAGR of 10.5%), from €4.9 billion in 2018 to €6.1 billion in 2020.

### Key Business Opportunities for EU Companies

- 1. Medical Equipment.** Companies that manufacture and/or sell medical equipment and devices have strong partnership opportunities. The Vietnamese government strongly encourages the import of medical equipment and has lowered import duties and removed quota restrictions. Strong areas of growth include operating theatres, orthopaedics, emergency equipment, sterilising equipment, monitoring equipment, and diagnostic equipment such as CT scanners, ultrasound machines, MRIs, and X-ray machines.
- 2. Healthcare Infrastructure.** Companies involved in healthcare infrastructure, particularly for hospitals, may also find public procurement opportunities. The government has increased the national healthcare budget to invest in medical infrastructure and public hospitals. Total expenditure in healthcare infrastructure is projected to grow at 9.5% CAGR.
- 3. Private Healthcare Sector Investment.** Private healthcare expenditure is expected to grow at a CAGR of 7.5%. The government's new masterplan is encouraging the creation of privately funded hospitals and clinics. This new private healthcare infrastructure is positioned to service the high-end segment. This is a key opportunity for companies that are able to provide advanced healthcare technologies such patient data analytics and IoT for health.

### Sector Characteristics

- Vietnam's medical devices market is one of the fastest growing in the South East Asian (ASEAN) region, due to the recent efforts to improve hospitals.
- Orthopaedics and prosthetics are among the product categories experiencing the highest growth. There is growing demand for devices related to cancer, diabetes, cardiovascular disease, sterilisation and infection control, and diagnostic and operating devices. The use of devices and technologies in telemedicine is an emerging trend in Vietnam and is also experiencing strong growth.
- To obtain high-quality healthcare services that are not available in-country, approx. 40,000 Vietnamese nationals travel overseas yearly for their medical needs. Vietnam's Ministry of Health estimates overseas spending on healthcare by this group at about €2 billion.



- Country:** Vietnam
- Capital City:** Hanoi
- Population** 95.5 million (2017 est.)
- GDP per capita:** €6509 (2018 est.)
- Currency:** đồng (VND)
- Official Languages:** Vietnamese

#### Sources:

- Business Monitor International Ltd (2017) Vietnam Healthcare and Medical Devices Report.
- MedTech Intelligence Vietnamese Market Report (2016).
- PwC analysis
- US, Export Govt – Vietnam Healthcare Commercial Guide (2018)
- Vietnamese Ministry of Health – Vietnam Healthcare Sector Report (2017)

# Market Opportunity Vietnam

## Healthcare & Medical Technologies



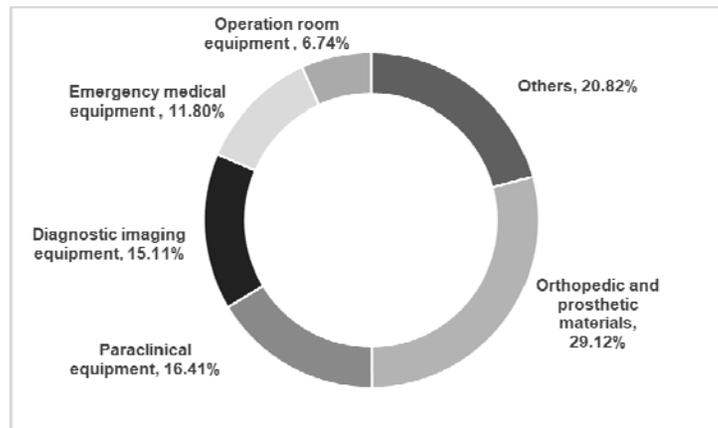
### OVERVIEW

- Vietnam depends on imports for medical devices. Approximately 90% of medical devices in Vietnam are imported. Almost half of imports come from the United States, Japan, Singapore and China.
- Local producers are only able to provide basic medical supplies such as beds and disposables.

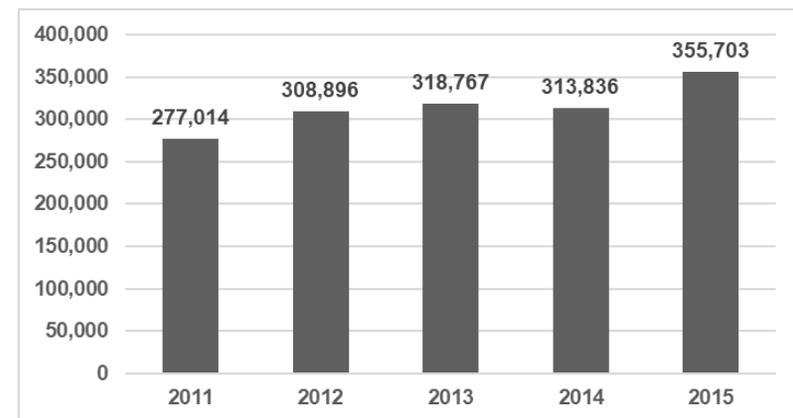
### Four main groups of medical purchasers:

- 1. Government-funded hospitals**, the largest group, account for 70% of purchases in the medical device market.
- 2. Local private hospitals**, a growing segment, are expected to experience the largest growth.
- 3. Foreign-owned hospitals and clinics** tend to purchase devices from the sponsoring country.
- 4. Medical education and research institutions** account for a smaller demand.

Market share of medical equipment by application (%)



Medical devices import value (in thousand €)



Sources:

1. Ministry of Health – Vietnam Healthcare Sector Report (2017)
2. ITC Trademap Vietnam Medical Device Report (2011 – 2015)
3. PwC analysis