

Ministry of Foreign Affairs

# Market Studies: Opportunities for the Dutch Health sector in Chile

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Netherlands Enterprise Agency





# Market Studies Opportunities for the Dutch Health sector in Chile

# EXECUTIVE SUMMARY

#### October 2019

Chile's health system is known in the region as reasonably well-functioning, well-organised, and effectively governed. Nevertheless, big differences exist between the public and private systems in terms of accessibility and timely care provision, resulting in unequal care admission between lower- and higher income groups and urban and rural populations. The government currently spends around 8% of GDP on healthcare. In 2018 the size of the health market was estimated at 404 million USD characterized by a strong import base (95.9%). Around 80% of the population is covered under public insurance and around 20% (approximately 2.6 million people) pay into the private sector insurance system. Chilean households, with an out-of-pocket (OOP) expenditure of 35%, have the fifth highest OOP payments among OECD countries.

Persistent unavailability of public hospital beds has led the Chilean government to announce the biggest investment in hospital build in Chile's history of US\$1.2 bn for 2020. The hospitals are part of a wider US\$10bn plan to have 25 projects completed by 2022, while another 25 would be under construction.

Smoking rates are high in Chile, alcohol consumption is rising, and cancer mortality is high compared to cancer incidence. However, Chile's biggest health challenge currently is obesity, with approximately 34.4% of adults categorised as obese, and 44.5% of children categorised as overweight or obese. Another urgent challenge is its ageing population with the percentage of people over 65 expected to reach 24.9% by 2050, equalling the Netherlands in this regard.

Policy and care service models for the elderly are lacking. Whilst the Chilean government has recognized the need for the development of policy and is planning a revision of its system, the private sector has stepped into the existing gap to set up such care facilities.

Despite a number of projects related to health IT, the lack of interoperability remains one of the major challenges in implementing successful health IT systems in Chile. This is especially challenging across Primary and Secondary lines of care. Additionally, there is a general human resource capacity problem which could be solved using telemedicine, especially in rural areas. There is consensus on the urgent need to incorporate technologies and improvements in both public and private hospitals. The current Minister of Health recently installed a completely new department for Digital Health within its Ministry, tasked with amongst others, a telemedicine project and a 'Digital Hospital' project.

Above developments in the Chilean health system and sector provide opportunities for Dutch companies and organisations. The Dutch have experience with an ageing population and have one of the highest digital health penetrations worldwide. This has provided a highly fertile context for innovative healthcare solutions. Due to geographic distance and the relatively small market size, amongst other factors, not many Dutch LSH companies have identified Chile as an export-focus country yet. However, market participation figures show great potential for growth. The friendly business climate, reliability of payments, easy product registration, and recent announcements on huge hospital build investments might provide Dutch companies an unexpected successful and accessible new market, providing an interesting steppingstone to other Latin American markets at the same time.

This report was commissioned by the <u>Netherlands Enterprise Agency (RVO.nl)</u> and is produced by the <u>Task Force Health Care (TFHC</u>) in cooperation with the <u>Netherlands Embassy in Santiago</u> <u>de Chile</u>. It aims to align the respective Life Sciences & Health sectors of the Netherlands and Chile. In an effort to increase mutual understanding and inspire collaboration between these countries, this report provides useful insights into the health system and sector and identifies potential areas of opportunity.



# **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 wellbeing internationally and in a sustainable and demand-driven manner, with the use of Dutch expertise. We are 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

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



#### Easy Access

In Chile, there is no need for registration of medical devices. This makes Chile an easy access market and an excellent access point to the rest of Latin America for first-time exporters to the region. <u>See Chapter 4</u>



# Growth in Elderly Care Facilities

Chile's population over age 65 is expected to reach 24.9% by 2050 and is currently in lack of public elderly care programmes and facilities. Dutch experience and knowledge can contribute to building a sustainable elderly care and healthy living policy in Chile fostering a market for smart solutions in elderly care.

See Section 5.2



# R&D Budgets

Chile is a cooperative country when it comes to investing in its health sector. It welcomes foreign companies and organisations to participate (together with Chilean counterparts) in the provision of innovative solutions and provides excellent subsidy schemes to make this happen. See Section 4.2



### **Reliable Customers**

In the experience of Dutch entrepreneurs, Chilean counterparts (both public and private) are reliable business partners and payers. See <u>Chapter 4</u>



## **Public Hospital Build**

The biggest investment in hospital build in Chile's history for 2020 (10 public hospitals) provides opportunities for Dutch participation. The hospitals are part of a wider US\$10bn hospital investment plan entailing a total of 75 new hospitals to be developed and constructed in the near future. <u>See Section 5.4</u>



# Developing Primary Care

The current government has presented plans for the further development of networks of primary care facilities all over the country, including increasing rural coverage and efficiency of the health system through telemedicine solutions. See Section 5.3



#### **ICT For Health**

There is a great focus on solutions that can increase efficiency and productivity due to a persistent issue of long waiting lists and accessibility in the public system. The current Minister of Health recently installed a completely new department for Digital Health focussed on these issues. According to HIMSS Analytics (2018), the Netherlands has the highest ICT penetration in Hospitals and clinics.

See Section 5.3



## **Focus on Quality**

In the experience of Dutch companies and Chilean distributors active in Chile, public hospitals are encouraged to look for quality instead of price. Budgets are available within both private and public healthcare providers to invest in innovative solutions. See <u>Chapter 4</u>

# **HOW DOES CHILE COMPARE?**

Table 1: Geographic, Demographic, Economic, Business, and Health Context in Chile compared to other Countries. Accumulated data from: World Bank Group Data (2019), World Health Organisation (2018), Healthdata.org (2019), BMI Medical Devices reports, IMS Market Prognosis (2016), International Trade Administration (2016)

	Brazil	Chile	Colombia	Mexico	Netherlands
Land Size (km²)	8 515 767 049	756 950	1 109 500	1 972 550	33 690
Population (2019)	212 000 000	18 000 000	49 853 630	132 343 600	17 109 189
expected annual growth rate (%)	0.8	1.4	1.5	1.1	0.6
65 years and older (%) expected in 2050 (%)	9.6 22.7	12.2 24.9	9.1 21	7.6 20.2	19 25
Maternal Mortality Rate (100 000 births)	58	17	71	38	7
Life Expectancy at Birth	76	80	75	77	82
Life Expectancy Global Rank (2017)	125	51	95	92	25
Economic Context					
GDP (current million USD) 2018	1 868 626	298 231	330 227	1 223 808	913 658
expected growth (2020)	1.1	4	2.7	2	2
GDP per capita (USD)	8 920 8	15 923 4	6 651 3	9 698 1	52 978 4
annual growth rate (%)	0.3	2.6	1.1	0.9	2.54
(Health) Business Context					
Ease of Doing Business Rank	109	56	65	54	32
Logistics Index	56	34	58	51	6
Pharmaceutical Market (bln USD-2016)	20 547	3 520	3 140	16 190	6 000
Expected growth 2016-2021 (%)	8.6 5 500 0	8.6 800 1	6.0 1 197 1	5.1 4 655 3	0-0.5 3 486 1
Medical Device Market (mln USD – 2016) Expected growth 2016-2021 (%)	5.2	9.0	8.5	4 033 3	5.0
Medical Device Import from the Netherlands 000s USD	24 329	13 670	9 787	p/2	
Ranking	24 329 17 <sup>th</sup>	12 <sup>th</sup>	9787 16 <sup>th</sup>	n/a n/a	-
Medical Device Export to the Netherlands 000s USD (%)	n/a	737	n/a	69 879	-
		5 <sup>th</sup>	- (-		
Ranking Health Context	n/a	5	n/a	4	-
Health Expenditure (bln USD)	155.3	2.8	21.1	64.2	81.7
Health Expenditure as % of GDP	11.77	8.53	7.4	6.1	10.69
Health Expenditure per Capita (USD)	1 015 93	1 190 55	358	461 79	4 746 01
Public Health Share of HE	469/	F1 F0/	75.5	53.1	06.7
Type of Health System	46% Social Health	51.5% Social Health	75.5 Social Health	52.1 Social Health	86.7 Social Health Insurance
	Insurance and supplementary private	Insurance and supplementary private insurance	Insurance and supplementary private insurance	Insurance and supplementary private insurance	
Top Three Causes of Death 1.	insurance Ischemic heart	Ischemic heart	Ischemic heart	lschemic heart	Ischemic heart disease
2.	disease Stroke	disease Stroke	disease Stroke	disease Chronic kidney disease	Alzheimer's Disease
3.	Lower respiratory infect	Alzheimer's disease	Interpersonal violence	Diabetes	Lung cancer

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# **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 Chile

This market report was commissioned by the Netherlands Enterprise Agency (RVO). It is delivered by Task Force Health Care (TFHC), in close cooperation with Transfer LBC. It provides an analysis of the Chilean healthcare sector, business opportunities and recommendations for organisations active in the Dutch Life Sciences and Health sector.

## Methodology

# Step 1: Identification and mapping of Dutch interest in the Chilean health sector, and perceived barriers

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

### Step 2: Desktop Research

In order to obtain a better understanding of the Chilean health sector and its dynamics, a literature review was conducted. A range of documentation was looked at, 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 Mexican sector.

### Step 3: Fact-finding visit to Chile

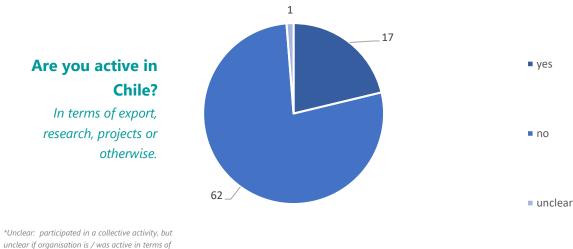
An important element of the study was the fact-finding visit to Santiago de Chile, whereby a delegation from TFHC, accompanied by representatives of Transfer LBC gained insights from key stakeholders in the Chilean health sector. The fact-finding visit took place over a period of two days and included 11 meetings with representatives from the public and private sector, operating at the national, regional and local level. The list of interviewees is presented in <u>Annex 1</u>.

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 Chile, and initiation of new relationships that will benefit from follow-up activities.

#### **MAPPING DUTCH INTEREST IN CHILE** 1

In order to understand the degree to which the Dutch are interested in the Chilean market, an online survey was sent out to Health organisations and companies in the Netherlands. The survey was also shared with multiple Dutch network and cluster organisations in order to extend its reach. From the combined data of the 80 respondents to the survey, we identified 43 individual organisations with activity and/or interest in Chile. This interest ranges from already actively trying to enter the market by reaching out to potential clients to doing initial research such as reading reports or attending relevant events.

Looking more specifically at the data from the 80 respondents, 17 are already active in Chile (see figure 1). Figure 2 shows that 34 organisations see Chile as a potential growth market, of which 8 are already active (24%), and 26 not yet active (76%) (see figure 3). Combining the 17 already active organisations and the 26 organisations who are not active yet but who do see Chile as a potential growth market, we come to a total of 43 individual organisations with activity and/or interest in Chile.



unclear if organisation is / was active in terms of export, research, projects or otherwise.

Figure 2: Dutch activity in Chile according to Interest Survey

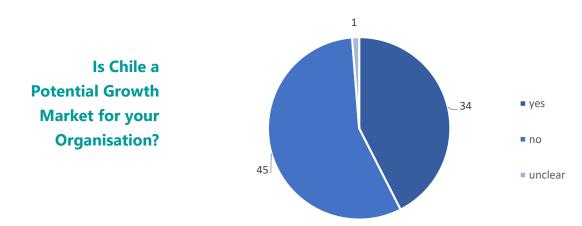
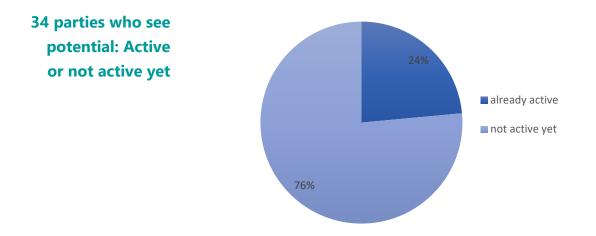


Figure 1: Chile as a Potential Growth Market, according to Interest Survey



*Figure 3: Interested parties divided by already active and not yet active* 

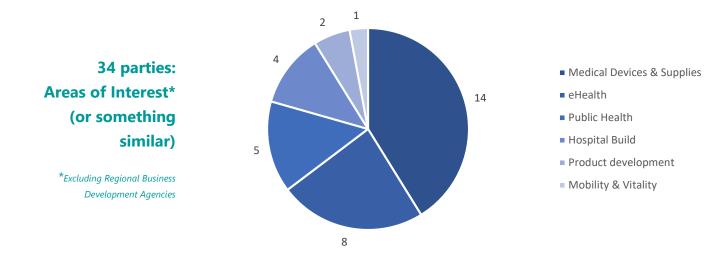


Figure 4: Interested parties' areas of interest



Figure 5: Perceived barriers to becoming active in Chile

#### Long-Distance Business

In Chile, it is important to build relationships with future clients or project partners. Face-to-face contact, during lunch, drinks or dinner results in more trust and understanding. Showing your face regularly proves your sincerity in working with them. It is important to keep reminding your Chilean counterparts when you expect a response or if you are working on a proposal. However, making or staying in contact can sometimes be difficult, making long-distance business challenging. The flight from the Netherlands to Santiago de Chile is long (~18 hours) but traveling within Chile is relatively cheap. It is generally acceptable to use WhatsApp as a means of communication, and this form of communication often works better than email.

#### Lack of Funding/Financial Support

Over the last years up to very recently, Chile's political and economic stability, open trade regime, high degree of public safety and security, relatively orderly administrative procedures and highly developed infrastructure have provided foreign suppliers with one of the best business climates in Latin America. However, new foreign suppliers may find it challenging as procurement in Chile's healthcare market largely occurs through public tenders which are supplied by a consolidated market of established distributors and providers.

Public hospitals show a willingness to invest in the best products in terms of quality as budgets allow for this degree of freedom. Innovations in the public market tend to be disseminated quickly, with Chilean public



hospitals actively sharing knowledge and making recommendations on solutions amongst each other. Obtaining a positive reference in one Chilean hospital is therefore crucial to market success (OHL, Philips and UC Christus, interviews 2019). Within Chile, specialised <u>CePis (pilot centres for Health)</u> promote pilot projects in, for instance, hospitals (more info <u>see Section 5.1)</u>

#### Language

The national language in Chile is Spanish, and overall, the country ranks in the middle of the English Proficiency Index (EPI) of <u>Education First</u> (ranked 46 out of 88 countries/regions, 5<sup>th</sup> in the region). Nevertheless, high-level functionaries in the main cities do understand and speak intermediate to high levels of English. Younger generations, especially those receiving some form of higher education, tend to be proficient in English. It is a good show of respect and a convenient ice-breaker to learn a few Spanish phrases. When the purpose is to have a more complex or technical conversation, it is always advised that one bring along an interpreter or ask your counterpart to bring one to the meeting if your Spanish is not proficient.

### Regulations

It is interesting to see that regulations are to be found in the top 5 perceived barriers by Dutch Life Sciences & Health companies responding to the survey. Looking closer at the data, we found that the companies mentioning regulations as perceived barriers for Chile are not active in the country yet.

In Chile, there is no need for registration of medical devices except for some supplies such as examination gloves, surgical gloves, condoms, hypodermic needles, syringes for single use, and some IVD reagents. The reason for mentioning regulations as a perceived barrier can therefore indicate unfamiliarity with the country. In general, regulations are perceived and experienced as a barrier in Latin America as a continent, making Chile an exception. The overall reputation of Latin America in this sense can negatively influence the perception of Chile. But precisely because of the difficulties in regulation in the other countries in the region, the Chilean healthcare sector is attractive for companies investing for the first time in Latin America, not only to gain experience in the region, but also as a base from which to supply to other markets. Read more in Section 5.3.

### **Technological Maturity**

Chile's transition from paper administration to digital administration has been perceived as slow by some Dutch companies. Chile has recognized this situation and is pro-actively working to change the country's perception of technological transition. The Ministry of Health recently installed a specific Digital Health department tasked with specifically this issue. The Chilean government also published a strategic programme for the implementation of telemedicine with the main objective being to improve access and equity in people's integral health (read more in <u>Section 3.6</u>).

# **2** INTRODUCING CHILE

## 2.1 History & Geography

Chile achieved independence from Spain in 1810, and by the 1830's emerged as a relatively stable authoritarian republic. However, during the 1960-1970's severe left-right political polarization took place, resulting in a 16-year-long military dictatorship. In 1990 this regime came to an end, after it lost a referendum in 1988. The military dictatorship was succeeded by a coalition which governed through four presidencies until 2010. Chile is now a presidential republic, with president Sebastián Piñera taking office in March 2018. The modern sovereign state is now amongst the most economically, socially stable and prosperous nations, with a high-income economy and generally high living standards (Central Intelligence Agency, 2017). Chile is 756 102 km<sup>2</sup> in size. It is divided into 15 regions and 53 provinces. The country stretches across a large geographic area, extending across 38 degrees in latitude.

### 2.2 People and Demography

There are currently an estimated 18,050,000 million people living in Chile (Central Intelligence Agency, 2017). This population is expected to grow with a compound annual growth rate (CAGR) of 0.75% (Central Intelligence Agency, 2017). The population is expected to reach 20 million people by 2030 before peaking at 21 million in 2045 (Figure 2) (United Nations, 2019). The Chilean population is relatively young, with just 12.2% of the population over the age of 65. However, this number is expected to reach 24.9% by 2050, equalling the percentage in the Netherlands (United Nations, 2019). Figure 6 shows a population pyramid for 2017 versus 2050, demonstrating the change in population demographics, with an increasing elderly population.



Figure 5: Population Pyramid in 2017 and projected Population Pyramid in 2050 (United Nations, 2019)

The majority of the Chilean population live in urban areas (87.6%), with the rate of urbanization sitting at 0.87% annually (Central Intelligence Agency, 2017). This has important repercussions for the health sector since the health demands and economic status of people living in rural versus urban areas are often quite different.

#### 2.3 Economy

Chile has one of Latin America's fastest growing economies. It is now considered a high-income economy thanks to a solid macroeconomic framework, which has enabled the country to reduce the population living in poverty from 30 percent in 2000 to 6.4 percent in 2017 (World Bank, 2019). Exports of goods and services account for approximately one-third of the GDP, with commodities making up some 60% of total exports. Copper is Chile's top export and provides 20% of government revenue (Central Intelligence Agency, 2017). Chile is still considered a highly unequal society, with a Gini-coefficient of 46.6. This is very high compared to the Netherlands Gini-coefficient of 28.2 (World Bank, 2019).

	Netherlands	Chile					
	2018	2016	2017	2018*	2019*	2020*	2023*
GDP PPP (bn USD)	972.45	438.95	452.92	481.76	506.98	534.33	620.83
real growth (%)	2.8	1.7	1.3	4	3.4	3.2	3
per capita PPP (000)	56.57	24.16	24.68	25.98	27.06	28.23	31.8
Inflation rate (%)	1.4	3.8	2.2	2.3	2.3	3	3
Unemployment (%)	3.9	6.5	6.7	6.9	6.5	6.2	6
Government net lending/borrowing (% of GDP)	0.6	-2.7	-2.6	-1.5	-1.8	-1.5	-0.7
Government gross debt (% of GDP)	53.1	21	23.5	25.6	27.2	28.1	28.7

#### Table 2: Economic indicators for Chile (IMF, 2019)

# **3 THE CHILEAN HEALTH SYSTEM**

### 3.1 The Health System Summarised

Health care coverage in Chile is provided either by the state-funded National Health Fund (Fondo Nacional de Salud), commonly known as FONASA, or by the private coverage schemes (Las Instituciones de Salud Previsional), known as ISAPREs. FONASA covers around 80% of the population, whilst ISAPREs cover around 20% of the population. A further 3-4% are covered under an Armed Forces insurance scheme (Salud Legal, 2019).

Since 2005 the benefit basket under the public health system in Chile has been set under a system of enforceable guarantees. This means that citizens are guaranteed access to treatments defined under the '<u>Acceso Universal con</u> <u>Garantías Explícitas</u>', or AUGE. Applicable to all Chileans, whether covered by FONASA or ISAPREs, the guarantees cover provisions around access, quality, waiting times and financial protection (Supersalud, 2019).

Workers pay a mandatory minimum contribution of 7% of their income to purchase health insurance coverage from FONASA or ISAPREs, with a cap of USD 200 on the monthly contribution. Should individuals choose FONASA, their health coverage is uniform and associated with the public sector capacity. If they choose an ISAPRE, they must choose how much coverage they wish to purchase. Premiums are set based on coverage and health risks, and thus the contribution may exceed the mandatory 7%. The non-profit parallel system that gives protection to workers for job-related accidents and diseases has about 2.5 million affiliated workers. In practice, the higher risk and poorest people are covered by FONASA and the lower risk and richest by ISAPREs (Pedraza, et al., 2015).

The FONASA Public System receives significant and increasing fiscal subsidies. If a worker opts in favor of joining an ISAPRE rather than FONASA, they lose this subsidy. The private sector differs from the public sector in terms of timely and quality delivery of health services, which, given the latter's insurance structure and need of self-financing, discriminates between premium charges and risks.

#### 3.1.1 Public Health System

The National Health System (SNSS - Sistema Nacional de Servicios de Salud) is comprised of 29 Health Services (Servicios de Salud) across the country. Health Services provide primary, secondary and tertiary care. The management of public health facilities has been decentralised since the healthcare reforms in 1988. The public sector is the largest provider with over 190 hospitals and around 2000 primary care facilities throughout the country.

Primary care facilities, including most clinics, health posts and rural health centres, are run by the 335 municipalities, whilst the public hospital sector is administered by the 29 Health Services. SNSS currently serves around two thirds of the population, including the poor, assisted pensioners, and family members covered by subsidies who do not contribute directly to any health insurance scheme. Public health system beneficiaries are entitled to free primary care in doctors' offices. Contributions towards hospital care are income-dependent.

According to Chilean healthcare stakeholders and recent publications, the Chilean public health system is confronted with a number of challenges. These include:

- Long waiting lists for a number of treatments related to specific diseases;
- A lack of specialist doctors in the context of an aging population;
- Limited ability to attract specialist doctors overall due to uncompetitive salaries;
- Limited communication and integration between primary and secondary care providers;
- Insufficient healthcare infrastructure and beds;
- Excessively bureaucratic operations;
- Inefficient use of services by the public, i.e. patients use emergency rooms for primary care needs;

- Lack of flexibility in terms of patient choice of care centre, i.e. a patient must attend his assigned primary care facility (CEFAM)
- Lack of financial alignment between hospitals.

#### 3.1.2 Private Health System

Should a Chilean choose to make use of private health insurance (ISAPREs), the price of each plan depends on the coverage of the plan contracted, the greater or lesser freedom to choose providers, and the health risk of its beneficiaries. This is why the ISAPREs offer multiple plans with various premiums depending on the selected plan. It is the individual who makes the choice to join the ISAPREs System which is financed by the worker's legal health contribution (7% of gross taxable salary) plus voluntary contributions. In 2019 ISAPREs had around 1.9 million direct clients and another 1.5 million family members of direct clients and collects over 4 billion USD annually.

There are eleven closed (work-related) and six open ISAPREs that offer an indefinite number of plans. The beneficiaries of closed ISAPREs (for example those of Chuquimata Mines) represent 1.2% of the total population and open ISAPREs beneficiaries represent 25.4%. The open ISAPREs are: Vidatres, Cruzblanca, Colmena, Masvida, Banmedica, and Consalud.



Figure 6: Annual fluctuations in the number of ISAPRE system beneficiaries (number of people) (ISAPRE de Chile, based on SIS data)

#### 3.1.3 Primary Care

Chile began to expand primary health care in the 1950s and to date has an extensive primary healthcare network covering most parts of the country. Over the last 30 years Chile has increased investments and developed primary health care based on <u>Alma Ata</u> principles, resulting in the elimination of direct fees for beneficiaries using the public health insurance fund. The Ministry of Health has a division of primary health care which was able to transform municipal health facilities into family care centres (comprising doctors, nurses, health technicians, dentists, psychologists, and nutritionists). Present day public sector primary care services are relatively well organized, delivering free medical, dental, nursing and midwifery services at local health centres administered and owned by local municipalities.

#### 3.1.4 Secondary/Tertiary Care

There are over 38 000 hospital beds in Chile. Public secondary and tertiary care are provided by a network of public outpatient and hospital facilities with different levels of complexity. The private sector focuses mainly on secondary and tertiary care delivery through a series of clinics, centers, laboratories, and pharmacies managed by private individuals or companies (Christus, 2019).

The most recent available encompassing data regarding public and private facilities is provided by the Clinics Association of Chile, who reported that in 2011 the private sector had 83 hospitals (for-profit) and 27 hospitals of the workers' insurance system (not-for-profit). In 2009, the public sector had 69% ownership of hospital beds, followed by 15% private sector, and 2% workers' system hospital beds (Pedraza, et al., 2015).

#### 3.2 Governance

In terms of governance, Chile's health system leadership and accountability at the central and regional levels are clearly defined. The Ministry of Health is organised into two sub-secretariats, one for Health Networks and the other for Public Health, which in itself elevates the importance of public health issues for the government. The Under-Secretariat for Public Health, which is led by a Vice-Minister for Public Health, has oversight over the Regional Health Authorities.

The 16 Regional Health Authorities (SEREMIS) have an important role to play in public health, since they provide accreditation to public and private providers, and have oversight over FONASA and the ISAPREs. SEREMIS ensure compliance with national health norms, plans, programmes and policies established by the central authorities, and with sanitary and environmental laws and regulations. They also protect populations from environmental risk, manage and co-ordinate epidemiological surveillance and outbreak responses, and adapt health strategic plans and programmes relevant to the respective region (OECD, 2019).

### 3.3 Health Funding and Expenditure

Chile has been increasing its percentage of GDP spend on healthcare over the last couple of years, currently getting closer to the OECD average (see figure 8, latest data available). In 2018 the health market size was estimated at 404 million USD characterized by a strong import base (95.9%).

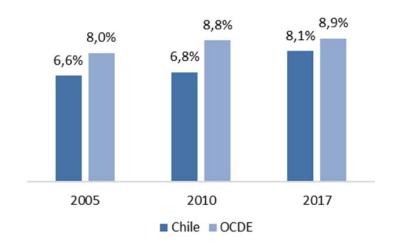


Figure 7: Health Expenditure as % of GDP in Chile, OECD 2018

Chile's health care system is funded by a universal income tax deduction equal to 7% of every worker's wage. Whereas the National Health Insurance Fund is wholly supported by the government using general tax revenue, many private health insurance companies encourage people to pay a variable extra on top of the 7% premium to upgrade their basic health plans. With almost 35% of all health expenditure categorised as "out-of-pocket", Chile has the fifth highest out-of-pocket payments among OECD countries. Out-of-pocket expenditure exceeds 30% of household's capacity to pay, resulting in problematic access to healthcare services and procedures (OECD Chile Policy Brief, 2018).

The Chilean public health system categorises the population according to income. These include:

FONASA A: People with no or very low income.

FONASA B: People with lower income.

FONASA C and D: People with medium income, who potentially have resources to go to private healthcare.

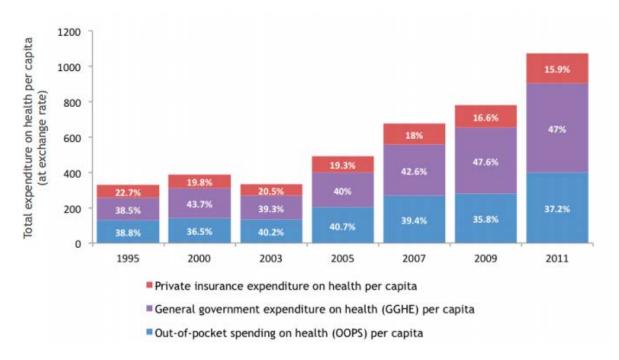


Figure 8: Total Health Expenditure per Capita (World Bank, 2019)

### 3.4 Health Status and Burden of Disease

The average life expectancy in Chile has risen faster than many other comparable countries. In 2017 the average life expectancy in Chile was 79.5 years. Like many other countries, the burden of disease in Chile is dominated by non-communicable diseases. This has resulted in a Healthy Life Expectancy (the average number of years that a new born can expect to live in full health) of 69.7 years, which is lower than that of the Netherlands (72.1 years) (World Health Orgnization, 2018). The most prominent causes of death in Chile are ischemic heart disease, stroke, and Alzheimer's disease. NCDs are estimated to account for 85% of all deaths (Healthdata.org, 2018).

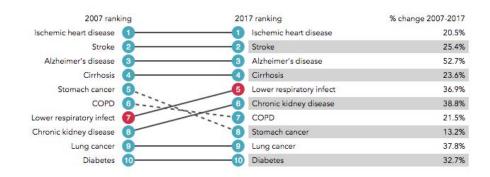


Figure 9: Top 10 Causes of Death in 2017 and Percent Change, 2007-2017, all ages, number (Healthdata.org, 2018)

#### 3.4.1Non-Communicable Diseases

The top diseases in Chile are primarily non-communicable and reflect the development and increased urbanization of the country. The most common risk factors for death and disability are dietary risks, high blood pressure, obesity and alcohol and drug use. All these risk factors are modifiable behaviours, and all are large contributors to the top diseases in Chile. Between 2016 and 2030 the number of Disability Adjusted Life Years (DALYs) lost to non-communicable diseases is projected to increase by 20%.

Dietary risk is a severe risk factor when it comes to NCDs in Chile. Over 30 percent of the Chilean population is overweight, and approximately 76% of the population aged 15 years or more, is overweight or obese. In an effort to promote healthier eating habits, Chile now requires that warning labels be placed on foods that are high in salt, fat, or sugar. These labels are in the form of black stop signs, designed to make them reader-friendly. In addition, these items are not permitted to be sold to children under the age of 14 years or sold with toy incentives. These items are also not permitted to be sold in or near schools (Toomey, 2017).

Chile has high alcohol consumption rates and consumes 9.3 litres of alcohol per capita annually. This is about 50% more than the world average of 6.2 litres (Fuentealba, 2017).

#### 3.4.2 Communicable Diseases

While the burden of non-communicable diseases in Chile is expected to grow in coming years, the burden of communicable disease is expected to continue to fall. The only exception here is HIV/AIDS. Chile is one of the top ten countries in the world with a growing percentage of HIV cases. Between 2010 and 2017, registered cases of HIV increased by at least 50 percent, with figures rising from 889,000 cases in 2011 to 1,184,000 in 2017. Young adults aged between 15 and 29 years old represented 98 percent of the statistics (UNAIDS, 2019).

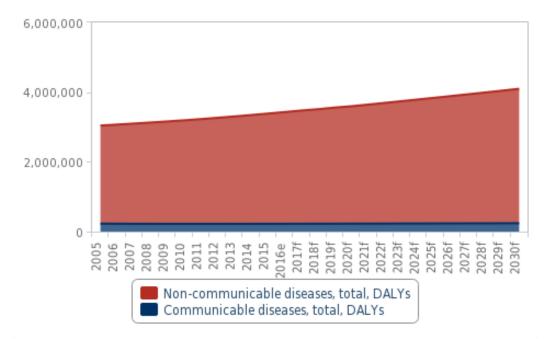


Figure 10: Burden of Non-communicable and Communicable Disease (measured in DALYs) in Chile.

### 3.4.3 Mother & Child Health

Chile has made substantial progress in reducing infant, child, and maternal mortality in the past 40 years through considerable investments in public health, the development of a highly functional health system, and various social policies. However, these overall improvements mask high levels of inequality linked to socio-economic status and education (Milman, et al., 2018). A more challenging issue for Chilean children are high rates of obesity, where over 50% of 6-7-year-old children are either obese or overweight (Reyes, 2019).

#### 3.4.4 Ageing Population

Over the past 50 years, the average life expectancy at birth in Chile increased by 4.2 years per decade, reaching 79 years (CEPAL, 2016). If these trends continue, Chileans older than 60 years will increase from the current 15.7% of the population to 32.9% by 2050, while people older than 80 years will reach 10.3%.

The rapid demographic transition towards an aged population has unfolded in a context of poor development of public policies to tackle the challenges and needs associated with an aging population. The care of patients with dementia is primarily provided by family members, with 80% of family caregivers being women (spouses and daughters) (Thumala, et al., 2016). There are only a few elderly care programs (long-term care, day care centers, and home care), which have been implemented in an attempt to meet the demands of an aging population. According to WHO recommendations, Chile should have at least 500 geriatricians. However, there are only around 80, three-quarters of whom work in the private sector. The few that are employed in the public sector are all based in Santiago.

#### Text Box 1: Belgian Elderly Care Organisation in Chile

Acalis is a private provider of homes for the elderly in Chile. Acalis started its operations in Chile in 2010 and currently has grown to an organization that operates 7 such homes, with a total of approximately 1.000 beds. Acalis is also present in Uruguay and in 2 months will also open a facility in Colombia. Due to their success in the region, their focus has shifted from the Belgian to the Latin American market. Since the government has no real program or policy in place for housing the elderly and only has a few homes, the demand greatly exceeds the supply. Therefore, Acalis, as a privately-held organization that receives no state subsidies, partly fulfills the demand of the market. There has been an overall increase in international participation in the Chilean elderly care market recently (Interview with Acalis, July 2019). However, the few private homes for the elderly that are available, such as Acalis, are only accessible to a small portion of the Chilean elderly who are able to afford it.

#### 3.4.5 Mental Health

Despite Chile's status as an upper-middle-income country, the public mental health care sector continues to deal with problems comparable to those in middle-income countries. Mental disorders account for approximately 18% of Chile's national burden of disease (Zitko, et al., 2017).

Over the last 20 years, Chile has increased the mental health share of its public health budget and implemented policies that radically transformed psychiatric services in the country. The implementation of two national mental health plans has led to downsizing mental hospitals and developing community alternatives, such as primary health care, community mental health teams, day hospitals, acute psychiatric beds in general hospitals, and group homes. Patients can access emergency services without referral. However, various levels of implementation exist across the country (Zitko et al., 2017).

#### 3.4.6 Disabilities

According to the second National Study on Disability (2015), about 20% of Chileans have one or more disabilities, with 8.3% of the population facing severe disability and 11.7% facing low and medium disability. With regard to health care access, 74.3% of people with disability are affiliated with FONASA, 18.3% with an ISAPRE, 4.9% pay out-of-pocket, and 2.6% are affiliated with the Armed Forces health provider or other systems. Findings from Rotarou & Sakellariou (2017) show that Chileans with disabilities are more likely to report greater problems in accessing health care than people without a disability. Chileans with disabilities face greater challenges not only in regard to getting to a health facility, but also in regard to obtaining an appointment, being attended to, and paying for treatment, including medications. This inequality is even more troubling when one considers that people with disabilities often have greater health needs beyond those related to their primary disability.

Problems in access to health care for people with disabilities persist and the correlation between disability and socio-economic conditions affects access to health care. In Chile, access to health care is determined by the type of health service provider, which in turn is determined by income. People with higher incomes can pay for private coverage, which can ensure them better access to health care. The inequalities in income and the subsequent differences between service providers thus disadvantage many with disabilities, leading to compromised access to health care (Rotarou & Sakellariou, 2016).

#### 3.4.7 Pressure from the Venezuelan Crisis

The ongoing economic and political crisis in Venezuela has resulted in many Venezuelan citizens migrating to Chile seeking refuge. In 2018, about 166,000 Venezuelans entered the country, about the same as the previous year. There are now an estimated 288,000 Venezuelans living in the country, up from only 8,000 in 2014.

In 2016, the World Health Organization triumphantly declared the Americas to be the first region on the globe to eradicate measles. One year later, a measles outbreak erupted in Venezuela. Among the 6,500 confirmed measles cases in Venezuela, at least 76 people died. As is the case with the refugees, this outbreak is now spreading throughout Latin America (NPR, 2019).

The influx of Venezuelan immigrants thus puts pressure on the Chilean health system but also provides relief as Venezuelan health workers, largely well-educated, are employed by families to care for elderly or sick relatives. This partly closes the existing gap in the availability or accessibility of home care, primary care or homes for the elderly (Acalis, 2019).

### 3.5 Health Infrastructure

#### 3.5.1 Public Infrastructure

In terms of primary health care, data from 2015 shows that there were approximately 2 300 primary health centres belonging to the public system. These centres include low-complexity community hospitals and emergency services, as well as general, family and rural healthcare centres. These "Centers for Family Health" or Cesfam, play an important role in the Chilean healthcare system, especially outside of metropolitan areas. These centres are the main purchasers of smaller healthcare products and solutions (IBM, 2017).

Referring to secondary and tertiary care, in 2015 there were 308 hospitals in Chile, with more than half of these belonging to the public health system (Fuentealba, 2017). Almost a third of public hospitals in Chile are highly specialized centres, and 75% of all hospitals in Chile have EMR's. There has been 10% growth in C-arms in Chilean hospitals between 2017-2018.

#### Table 3: Number of Hospitals and Clinics in Chile (2015)

	Number of Hospitals	Number of beds
Public Hospitals	187	24 987
Private Hospitals	79	6 755
Psychiatric and geriatric clinics	40	1 325
Mutual health hospitals	12	684
Other private hospitals	30	3 801

(Fuentealba, 2017)

#### 3.5.2 Private Infrastructure

Among private hospitals, around 40% are located in Santiago (the Chilean capital city) and 75% have less than 100 beds. Current public hospital infrastructure is not enough to cover the demand from public healthcare system beneficiaries. For this reason, FONASA regularly purchases services from private hospitals, clinics and healthcare centres through tender processes. In 2016, FONASA purchased services from private healthcare providers for around USS 300 billion, corresponding to 4.3% of its total health expenditure. Approximately 70% of this expense related to dialysis services (Fuentealba, 2017). Top Chilean private healthcare players are bringing in revenue in the range of 500-800 million USD annually. Key private healthcare players include Banmedica, UC Christus, Redsalud, Bupa, Clinica Las Condes and Clinica Alemana.

#### 3.5.3 Elderly Care Infrastructure

The Chilean government does not have any official housing policy or programme for the elderly. It does have a few homes but demand far exceeds supply. There are however public initiatives, such as the <u>Fundacion Las Rosas</u> who provide homes to those in need. These facilities are in high-demand and are unable to cope with the influx of applications. Privately-held organisations, such as <u>Acalis</u>, fulfil this demand in the market but are only accessible to the few who can afford it.

Unfortunately, illegal care facilities for the elderly are an issue in Chile. These facilities operate without any safety or quality control. Government does not regularly intervene with the operation of these facilities, since housing demands for the elderly far outweigh supply, and the state is not able to fill this gap (Acalis and Salud Legal, interview 2019).

### 3.6 Health Workforce

Chile has a shortage of medical staff which puts a strain on the health system. In comparison to other OECD countries, Chile has low numbers of doctors and nurses. Data from 2016 shows that there were 2.3 doctors per 1000 people, compared to the OECD average of 4.9. Likewise, in 2015 Chile had 2.4 licensed nurses per 1000 people, which is much lower than the OECD average of 14.5 (OECD, 2019).

In the public primary care sector, there is a high turn-over of staff. Almost 50% of Chile's doctors are generalists, with reported high levels of job strain, high patient numbers, and high levels of fragmentation. An uneven geographical distribution of doctors, especially specialists, is another challenge for the health workforce (OECD, 2019).

Table 4: Health Professionals in Chile (World Bank, 2016)

Health Professionals				
	Per 1000 Population (2016)			
Physicians	1.1			
Dentists	1			
Nurses and Midwives	0.86			

### 3.7 Current Policy Planning

#### 3.7.1 National Health Strategy 2010-2020

Chile started implementing *The National Health Strategy 2010–2020* in 2015 and it still remains in effect, thus giving continuity in terms of designated budgets and strategies, regardless of the appointment of a new government.

The strategy consists of the following four overall (general) objectives:

- 1. Improve the health of the population
- 2. Reduce inequalities in healthcare
- 3. Increase population satisfaction with health services
- 4. Ensure the quality of health interventions

Find detailed actions formulated under those strategies here.

#### 3.7.2 Integrated Health Services Networks (IHSN) and Digital Health

Efforts have been ongoing since 2015 to implement an 'Integrated Health Services Networks (IHSN)'. The network aims to consolidate local health teams and ensure that the system has the competencies needed to provide comprehensive care, based on a primary health care model. The aim is to make health services more accessible, equitable, efficient, and of higher technical quality.

In this context, former Minister of Health, Santelices had announced big investments on a pilot project to create the 'Digital Hospital', though no concrete plans were revealed before he was removed from office. The current Minister of Health (Jaime Mañalich, installed in 2019) created a new department for Digital Health in July of 2019 with the aim of bringing together all functions of the Ministry that have to do with IT as well as the Digital Hospital project.

#### 3.7.3 National Telemedicine Programme (Programa Nacional de Telesalud)

The Chilean government published a Strategic Programme for the Implementation of Telemedicine with the main objective to improve access and equity in people's basic health provision. It provides a conceptual framework, and technical, strategic, administrative, organizational, and financial guidelines for the development and optimal functioning of the strategies of telemedicine, already installed in the health networks of Chile. The structure of the Telehealth program in Chile is based on three key areas, as shown in Figure 11.

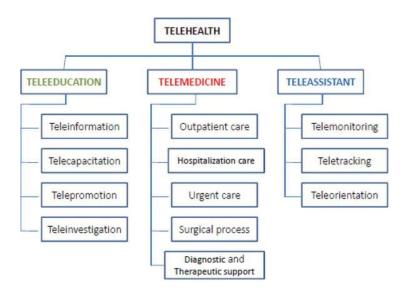


Figure 11: Programa Nacional de Telesalud in Chile (Antonio Rienzo Renato, 2019)

The <u>Chilean National Centre for Information Technology in Health (CENS)</u> developed a project using CORFO funding on interoperability, innovation, human capital, quality and consulting. Seeking participation in this and similar projects poses opportunities for Dutch eHealth companies.

#### 3.7.4 Health Investment Plan (Plan de Inversiones de Salud) 2018-2022

The Chilean government is committed to investment in health infrastructure, and in 2018 President Sebastián Piñera unveiled Chile's 2018-2022 USD 10 billion hospital infrastructure plan. According to the Chilean Government Program, 75 new hospitals will be constructed in the near future. The investment, which will cover the entire country, involves adding approximately 12,400 beds to the public health system as well as the completion of 120 primary care centers during this period (Gob.cl, 2018). 13 of the planned hospitals which are expected to be completed by 2020 are the hospitals of El Biprovincial Quillota-Petorca, Cunco, Philippe Pine, Makewe, Curicó, San Agustín de Collipulli, Padre Las Casas, Angol, Carahue, Pitrufquén Etapa II, Torre C Curanilahue, Río Negro and Puerto Octay. More recently, the government announced that 10 of the newly planned hospitals would be included in the 2020 budget, amounting to US\$1.2 bn (Consejo Políticas de Infraestructura, October 2019.

#### 3.7.5 Comprehensive Healthcare Reform

In April 2019, President Sebastián Piñera unveiled a comprehensive healthcare reform. This is designed to strengthen FONASA by providing expanded benefits and lower costs to families. It also aims to enhance the private healthcare system by eliminating discriminations and exclusions for pre-existing conditions, improving protection and giving consumers greater freedom when choosing a health insurance company. The reform gives FONASA greater authority to refer patients within and beyond the public health network in order to provide faster solutions and eliminate extended waiting times (Gob.cl, 2019).

One important benefit for families will be the expansion of opportunities to opt for the free choice modality and improved financial coverage. Allowances will be increased, and co-payments better regulated in order to decrease out-of-pocket spending on healthcare by Chilean families. In addition, an effort will be made to provide lower medication prices. According to the president, the reform will ensure greater access to timely and high quality care and will prevent discrimination by allowing either spouse to be enrolled as a dependent (Gob.cl, 2019).

### 3.7.6 Elderly Care Policy

The Chilean government has recognized the need for the development of policy regarding elderly care provision to its rapidly ageing population. The Ministry of Health has charged the *Servicio Nacional del Adulto Mayor* (SENAMA) and the regional health secretary of the Metropolitan area (SEREMI Región Metropolitana) with revising the current legislation and designing new legislation. These organisations are actively seeking foreign collaboration, given their recent project with the Belgian Ministry of Health (Acalis, 2019).

#### 3.7.8 National Cancer Plan (Plan Nacional de Cancer) 2018-2028

In an effort to decrease the incidence of and mortality from cancer, the Chilean government is implementing a plan that includes strategies and actions designed to facilitate the prevention, early detection and treatment of cancer, in order to improve survival rates. Specifically, the goal is to achieve five-year survival for 60% of patients by 2028, bearing in mind that the current five-year survival rate in Chile is 40%. The plan involves guaranteeing access to quality care for the entire population and providing timely and equitable treatment. Within the plan, the government proposes launching a National Cancer Register in 2020 (gob.cl, 2018).

#### 3.7.9 Increasing equal access

In October 2019 Chile experienced intense protests over inequalities between the rich and poor in the country. President Piñera has promised to take measures to increase minimum pensions by 20%, increase the basic salary amount, and ensure that more medicines are covered within the public insurance package (ABC internacional, 2019).

### 3.7.10 Drug Law II (Ley de Farmacos) and certification system for medical devices

A bill known as Ley de Farmacos II is currently being discussed in the National Congress. The bill aims to introduce more bioequivalent generic medicines in the pharmaceutical market and improve their access to the population.

The bill establishes a series of amendments to the legislation including greater transparency in prices, openness to international markets, and the incentive to exchange medicines through the use of the international common denomination (DCI) in medical prescriptions.

At the same time, the bill also includes a certification system for all medical devices and proposes a 12-month accreditation period for medical devices to enter the Chilean market. If the bill is passed, an average 7% increase in costs for medical devices is expected (APIS, 2019).



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medicines in the pharmaceutical market and improve their access to the population.

# **4 MARKET ACCESS**

## 4.1. Market Trends, Medical Supply-Chain and Procurement

Chile's relative economic stability, open trade regime, relatively high degree of public safety and security, orderly administrative procedures and highly developed infrastructure provides foreign suppliers with one of the best business climates in Latin America. However, new foreign suppliers may find it challenging as procurement in Chile's healthcare market largely occurs through public tenders which are supplied by a consolidated market of established distributors and providers. The Chilean health market is dominated by the public sector, which is growing due to significant investment by government in the public health system, infrastructure, and workforce. Chile's private healthcare market is currently relatively small, but it is growing as the purchasing power of the Chilean population increases. Both the public and private markets are predominantly price-driven (OHL, Philips, Expohospital, interviews 2019).

The main suppliers to Chile's market are international companies with subsidiaries in Chile and local representative firms, with the main countries supplying medical devices being the United States (32.0%), followed by Germany (12.6%) and China (11.9%). The Netherlands, although known as a major exporter of medical devices, only holds the 11<sup>th</sup> place with 1.8% (BMI, 2017).

### 4.1.1 Public Healthcare Market

Chile's government-run healthcare insurance system, FONASA, covers 78% of the population. This makes the National Health System (SNSS - Sistema Nacional de Servicios de Salud) the leading purchaser in Chile's market. As the Piñera administration continues to implement its hospital infrastructure plan, the public market is expected to go through a growth spurt (Section 3.6.1).

Both the public and private sector are eager to purchase and adopt high quality products and innovative solutions. Public hospitals show a willingness to invest in the best products in terms of quality as budgets allow for this degree of freedom. Innovations in the public market tend to be disseminated quickly, with Chilean public hospitals actively sharing knowledge and making recommendations on solutions amongst each other. Obtaining a positive reference in one Chilean hospital is therefore crucial to market success (OHL, Philips and UC Christus, interviews 2019). Within Chile, specialised <u>CePis (pilot centres for Health)</u> promote pilot projects in for instance hospitals. CePis is an initiative of MinSalud, CORFO and Laboratorio de Gobierno (LABGOB).

Procurement in Chile's public sector is generally conducted by the Ministry of Health. The regulatory framework for public procurement in Chile (Law 19.8666) establishes four procurement instruments: public bidding, framework agreements, private bidding, and direct contracting (Fuentealba, 2017). Procurement in the SNSS mainly happens through tenders (BMI, 2017). The main instrument used for medical equipment and supplies is contracted through the electronic platform <u>Mercado Público</u>.

Foreign suppliers are allowed to register for tenders and can appoint a proxy to bid and negotiate on contracts. After a contract has been awarded, foreign suppliers are required to open a corporate structure in Chile (more under <u>Section 4.3</u>).

In addition to public tenders, SNSS also encourages public hospitals and municipalities (who run most primary healthcare centers) to make many of their own purchases. 'Direct procurement' in public hospitals mostly takes place through the Central Nacional de Abastecimiento (CENABAST), Chile's Public Central Purchasing Agency. CENABAST is in charge of the procurement and distribution of medication, medical supplies and goods. Should CENABAST not have a particular product available, Chilean hospitals may place calls on "Mercado Público". Public hospitals do not import products directly but work with local established entities (Chilecompra, 2019).

Public sector opportunities are published as tenders and calls on the following websites:

- Directorate Public Procurement (Ministry of Finance) <u>ChileCompra Salud</u> and procurement portal: <u>Mercado</u>
   <u>Publico</u>
- The Central Purchasing Agency (Ministry of Health): Central Nacional de Abastecimiento (CENABAST):
  - CENABAST prepares purchasing processes of a predetermined list of medication and medical supplies.
     View the list of medications for 2019 here: <u>Canasta Esencial de Medicamentos (CEM) 2019</u>

The best way to enter the market is through a well-established import company. Importing into Chile is reportedly not difficult. However, most products require import licences, which are usually granted as a matter of routine (Expohospital, OHL, Corfo, interviews 2019).

In terms of pharmaceuticals, the public sector accounts for just 20% of pharmaceutical sales in volume. Just three product segments (anti-hypertensives, diabetes drugs and analgesics) have accounted for half this total in the past few years. Reimbursement under SNSS and ISAPREs mainly cover drugs required during hospitalisation. Recently Chilean President Piñera has announced increased inclusion of other drugs into the health insurance package (ABC internacional, 2019).

#### 4.1.2 Private Healthcare Market

Chile's private healthcare sector is a relatively small and competitive market. Growth in the private market follows a pendulum associated with the economic cycle, as is reflected in the number of ISAPREs beneficiaries (Section 4.1.2). The private sector is a relatively small buyer in the Chilean market but provides the most potential for suppliers of state-of-the-art medical technology (Cegamed, UC Cristus, a.o. interviews 2019), due to their extreme competition for private clients. They are eager to offer the most advanced medical care, but at the same time try to purchase for the lowest prices possible.

The main purchasers in the private market are hospitals and clinics which usually purchase medical equipment and supplies directly from importers and local manufacturers, through private procurement processes. For some Dutch products it may be easier to work with private purchasers as they are not bound by more rigid tenders as is the case in the public sector. Chile's private purchasers have been shown to work with both large multinationals and smaller innovative companies. Medical supplies are usually distributed through pharmacies and wholesalers (Cegamed, UC Cristus, a.o. interviews 2019).

Some hospitals are members of a group, which means that investment decisions are taken at Head Office. An example of an alternative purchasing process is that of the Chilean branch of the BUPA group (<u>www.bupa.cl</u>). They have a special website for their current and future suppliers on which they publish tenders. Suppliers then submit their tender applications, after which BUPA will choose the suppliers who meet the necessary quality standards and who fit in with their strategy (flanderinvestmentandtrade, 2016).

Chilean banks show willingness to finance the purchase of medical equipment by private clinics, as opposed to banks in other Latin American countries (Philips, interview 2019).

#### 4.1.3 Key Purchasing Criteria

From a number of interviews with Chilean healthcare stakeholders and Dutch LSH companies active in Chile, we learn that imported healthcare products and services are considered attractive on the Chilean market when they are:

- A solution which reduces the cost of healthcare:
  - Chilean health providers seek to improve their productivity and are eager to try disruptive technologies;
  - Public sector interest in prevention is growing.

- A solution which improves public perception of health services in the public and private space:
  - Public health providers are incentivised to invest in technologies which improve the health of lower income classes as this will improve their public status;
  - o Private health providers are incentivised to perform well in the eyes of private health insurers.
- Accompanied by reliable aftersales support:
  - Much emphasis is placed on personal contact with clients in both the pre-and-post-sale phase. In many cases, suppliers require the equipment (especially those with advanced technology or those which are highly priced) to be installed by the suppliers themselves at an additional fee, as a requirement for activating the guarantee.
- Priced favourably (for less innovative products):
  - Price is an important selection factor for both the public and private healthcare market. In some cases, both multinational company subsidiaries and representatives are willing to significantly reduce the price of equipment (even close to cost) in negotiating with their clients, if the sale is tied to a longterm maintenance contract with a monthly fee.
- Of reasonable quality:
  - Many clients and distributors on the Chilean market prefer products/services with a good price to quality ratio.
  - A well-known foreign brand/have a clear competitive advantage/have significant market share:
    - Chilean purchasers are sensitive to brands which are established worldwide and in Chile. Foreign suppliers ought to leverage their good reputation.

### 4.2. Chile's Domestic LSH Strengths/Industries

Domestic medical device production is limited in Chile, with locally-manufactured items tending towards lower-end technological items such as bandages and supplies, medical instruments, prosthetics, mechano-therapy apparatus, medical furniture and wheelchairs (BMI, 2017).

#### 4.2.1 Research & Development in Life Sciences in Chile

Like other Latin American sectors, Chile's domestic sector has historically lacked the capacity to access public-private projects engaged in significant research and development (R&D) initiatives. Chile therefore has produced a limited number of innovations in the Life Sciences & Health Sector.

CORFO is the Economic Development Agency of the Chilean Government, under the Ministry of Economy, Development and Tourism. CORFO's role is to promote entrepreneurship, innovation and competitiveness throughout the country. Its goal is to promote a society with more and better opportunities for all citizens, thus contributing to the Economic Development of Chile. CORFO has a cross-sectoral outlook, however, 50% of all funding granted goes to health-related innovations. For more information have a look at CORFO's innovation cases here.

CORFO invests in R&D through four main funding programmes:

**1. Entorno para Innovar:** This programme supports the development of public goods aimed at resolving market challenges (such as issues related to coordination or information asymmetries) in order to strengthen competitiveness, diversify the economy and increase productivity. They also improve data availability (through mining, processing and sharing) on the health status in Chile, such that new innovations are focussed on issues that exist. This is an interesting instrument for Dutch companies in the Value-Based Healthcare or Outcome-based care field.

**2. Renuévate:** This programme strengthens existing SME's by helping them implement their product plans and tailor products to fit the Chilean market demands. It can assist Chilean distributors and healthcare companies who are trying to access the market with a foreign healthcare product and need funds to adapt it to the Chilean context. The budget however is limited to about €15.000 per SME.

**3. Desarolla Innovación:** This is a programme in the form of an R&D subsidy which can include a foreign partner or a university for technical support or knowledge transfer.

4. Consolide y Expande: This programme assists in the upscaling and exportation of Chilean innovations.

An example of a ground-breaking Chilean innovation that resulted from Chile's recent efforts to invest more in R&D is <u>Levita Magnetics</u>. Founder Aleberto Rodrigues-Navarra designed the first minimally invasive surgery instrument based on a magnetic technology in Chile. The technology soon attracted international attention and was further developed and validated in the US.

### 4.3. General Market Entry Strategies

In Chile only a few products are subject to mandatory control and certification through its regulatory agency ISP-ANAMED: e.g. Examination gloves, surgical gloves, condoms, hypodermic needles, syringes for single use, and some IVD reagents (Fuentealba, 2017).

Although medical devices by law can be sold freely in Chile, in order to enter the Chilean market Dutch suppliers of smart solutions in healthcare might choose to voluntarily comply with several requirements, in anticipation of a new regulation currently being debated by Chile's legislature:

- Meet the requirements set out by Good Manufacturing Practices (GMP);
- Follow the import procedures; import licences, normally granted as a matter of routine;
- Appoint a proxy, local representative, or directly establish a local company structure; and
- For the few technologies/pharmaceuticals which require this, register their product with the Institute of Public Health in Chile (ISPCH Instituto de Salud Pública de Chile).
- In general, imports for medical devices require the following documents:
  - Commercial Invoice Certificate of Origin;
  - International Transport Document (if applicable);
  - Packing List (when necessary).

All imports of a total value exceeding USD 1,000 (FOB) require the participation of a Customs Broker. Minor imports (less than USD 1,000 FOB) can be cleared directly by importers, following a simplified procedure. Most companies work through distributors rather than establish offices in the relatively small Chilean market. This is mainly because the main method of procurement on the Chilean market is through public tenders. Even though foreign companies may register for public tenders (ChileProveedores), it is often more effective to appoint a local representative with experience in selling to the public sector and the use of the government portal (Chilecompra, interview 2019). The market for distributors of health products is concentrated in Santiago de Chile and it is preferred to work with a registered public supplier such as <u>CEGAMED</u>, <u>Socofar</u> or <u>Reutter</u>. These companies generally have good contacts in the public and private sector and a network of sales people throughout the country. In general terms, they prefer to represent well-known foreign brands. Due to the limited market size, most Chilean distributors demand exclusivity (OHL and Cegamed, interview 2019). Find a list of distributors/importers in <u>Annex 3</u>.

#### Text box 2: Recommendations by a Chilean distributor

<u>Cegamed</u> is a distributor of quality disposable medical devices and supplies and represents several innovative European companies such as the Swedish company <u>SurgicalScience</u> that developed a simulator for surgical operations. The company employs 60 people and has revenues of around 15 million USD.

- Check current political discourse and policy planning and build the story of your product around those (if applicable). For instance, prevention and healthy lifestyles are popular buzz-words; ISAPRES might start compensating for healthy lifestyles in the near future.
- The same goes for innovative solutions in the area of telemedicine, training simulation and technology for medical processes and procedures.
- Chile imports almost everything and the market is competitive and price-focused. Therefore, products that are especially unique (have no 'easy or cheap' copy from for instance China) have the best opportunity to enter the Chilean market.
- With 'disposables' it's impossible to compete with cheaper products from China.
- Currently, the public sector does not lag far behind the private sector in terms of investment in innovative healthcare technology.

# Text box 3: Public Market Entry for Innovative Technologies

In Chile's public tenders, products are already described, including requested pricing and specifications. For new innovative solutions, it is therefore important to engage with potential clients and key opinion leaders (public hospital directors / medical staff) who influence the formulation of the tenders (Interview with OHL, July 2019) Although registration of medical devices is not a requirement in Chile, most purchasers require certification under international standards, i.e. C.E. marking (European Union) and US Food and Drug Administration (FDA). Buyers also usually ask for quality certifications, such as ISO 13485/2003 (or further versions) and Good Manufacturing Practices (GMP).

Voluntary certificates called Background Assessment Certificates (Certificado de evaluación de antecedentes), as well as voluntary company registration, are also used by suppliers in order to appeal to purchasers and anticipate

future regulations that may require registration for all devices. Electro-medical equipment should also be certified under the Chilean electricity safety standard NCH 2893 (equivalent to international standard IEC 60601).

For the clarity of its business environment, the Chilean healthcare sector is attractive for companies investing for the first time in Latin America, not only to gain experience in the region, but also as a base from which to supply to other markets (interviews with Dutch companies active in Chile, 2019).

In the experience of Dutch entrepreneurs, Chilean counterparts (both public and private) are reliable business partners as well as reliable payers. Please find experiences of Dutch LSH companies with Chilean counterparts in Text Box 4 and 5.

#### Text Box 4: Experiences of a Dutch LSH company with Chilean counterparts

Royal Philips is a Dutch company of diversified technology that focuses on improving people's lives through important innovations in the areas of health care and consumer lifestyle. The company is a leader in cardiac care, intensive care and health care in the home:

"Both the public and private customers of Philips Chile are reliable customers. As opposed to our experience in other Latin American countries, our customers here always pay their bills timely. We do well in both sectors and also see increased opportunities. Surprisingly, the public sector in Chile is less focussed on price, since the money is not the hospital's money, but the state's. Mostly presidents of hospitals are medical professionals themselves who still work as doctors and see the benefit of good quality products for the patients (and hospitals). Opportunities in Chile lie in the fields of Imaging, Resonance, Ultrasound and Software (EMR)", interview 2019.

#### 4.3.1 Inter-American Development Bank

The Inter-American Development Bank (IDB) focuses on and finances projects that stimulate economic development in Latin American and Caribbean countries (Inter-American Development Bank, 2019). The IDB has set up a multiyear country strategy for the period of 2019-2022 for Chile, in which they address the challenges Chile is facing, as well as highlighting the opportunities available. These opportunities can be of interest for the Dutch LSH sector. An overview of Chile's country strategy can be found here: <u>https://www.iadb.org/en/countries/chile/overview</u>.

For more information about potential opportunities in cooperation with the IDB, you can contact Corinne Abbas or Jules van Son from the Dutch Enterprise Agency (RVO).

- Corinne Abbas: <u>corinne.abbas@RVO.nl</u>
- Jules van Son: jules.vanson@RVO.nl

Additional information about doing projects with international organisations can be found on the following website: <a href="https://www.rvo.nl/onderwerpen/internationaal-ondernemen/netwerken-en-contacten/internationale-organisaties">https://www.rvo.nl/onderwerpen/internationaal-ondernemen/netwerken-en-contacten/internationale-organisaties</a>

# 5 ALIGNING DUTCH STRENGTHS WITH CHILEAN OPPORTUNITIES

Whilst <u>Section 1</u> of this report shows the interest of the Dutch Health sector in Chile, this section aligns Dutch strengths in the sector with Chilean opportunities.

### 5.1. Medical Devices & Supplies

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

#### 5.1.1 Trends

Chile is 95% dependent on imports for medical devices & supplies. Chile's market for medical devices is competitive with many companies from around the world easily finding their way into the market.

With the Chilean government investing big budgets in hospital build in the coming years (10 bn USD total), the increase in public hospital infrastructure will present an increased demand for innovative medical devices, hospital furniture and supplies. The private healthcare sector is currently filling gaps, by providing Chileans who Text Box 5 : Experience of a Dutch LSH company with Chilean counterparts

Telecom Tube Systems is a supplier of specialized medical pneumatic tube systems:

"We have just started in Chili with two business partners. We are also active in the rest of Latin America and Chile feels like the "Germany of Latin-America". We found it easy to find a business partner due to the fact that the sector is very centralised around Santiago and it is easy to access." Interview 2019."

can afford it, the opportunity to purchase healthcare services. The private sector is easier to access and always looking to provide the best quality care for the best price. Many private healthcare providers are dependent on foreign companies to provide innovative solutions.

However, according to interviews with stakeholders, the key challenge for healthcare providers is not the purchasing of equipment, but it is increasing the productivity of their hospitals and services. Specific medical devices aimed at increasing productivity within hospitals are in great need.

### 5.1.2 Opportunities

Although price is the primary consideration in the procurement of equipment in both the public and private sector, European providers have an excellent reputation, especially when it comes to quality and product longevity. Services such as training and maintenance are also increasingly recognized.

The main opportunity for Dutch companies that provide solutions that improve productivity lies in differentiating themselves through a targeted narrative. Scientific proof of the efficiency of the product is extremely valuable.

As the market of Chilean representatives for foreign medical devices is very concentrated, it's main bi-annual trade fair <u>Expo Hospital</u> provides an excellent platform to interact with these distributors as well as main healthcare stakeholders who attend this event and its policy forum which takes place simultaneously. Other European countries, such as Italy and Belgium successfully have exhibition stands as well as South Korea, China, the State of North Carolina and the State of Mississippi. The trade fair actively invites delegations of high-level healthcare stakeholders (hospital directors, regional healthcare policy makers, etc.) from different regions in Chile, who are recognizable

through their specific badges. Participation (potentially through a Dutch Exhibition Stand) is something to consider for 2021. The year 2021 provides specific opportunities for foreign providers of Medical Devices & Supplies as from 2022 a new government will be installed and the current government will have to start building the remaining 25 new hospitals (within the USD 10bn investment plan) so that all will be completed before 2025.

Once a product has been successfully installed in a public hospital, this provides great opportunities for further sales, as public hospitals tend to exchange their experience with new technology and will recommend it to each other. This is opposed to private hospitals who are competitive with one another (Expohospital, interview 2019).

### 5.1.3 Market Entry Considerations

Foreign products and solutions which are new to the market tend to be more successful if those responsible for the implementation of healthcare infrastructure and equipment (public hospital directors or the regional 'servicios de salud') are familiar with the products. Thus, for individual 'product' companies, contact and familiarity with hospital directors and medical specialists is crucial and can be achieved by working through a local representative/distributor who knows both the public and private players.

Since the Chilean health sector is very price-sensitive, it is important to demonstrate that the innovation or new product is valid and accessible. In practice, this means investing in pilot or joint projects with Chilean clients or counterparts in order to successfully introduce your product in the country.

### 5.2. Mobility & Vitality

The World Health Organization defines Healthy Ageing as "the process of developing and maintaining the functional ability that enables wellbeing in older age". Ageing occurs at different rates and is influenced by many factors such as nutrition and mobility. Healthy ageing encompasses solutions which help people increase mobility and vitality. Dutch organisations within this field offer solutions in areas such as mobility aids or 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.

#### 5.2.1 Trends

Chile's population over the age of 65 is expected to reach 24.9% by 2050. Although people aged 60 years and over receive free general medical care through the public health system, there is reportedly low treatment adherence. There are no homes, homecare policies or programmes for the elderly in Chile, with only a few government-funded homes for the elderly in existence. There are equally few rehabilitation centres in Chile, with charitable paediatric rehabilitation only available through <u>Teleton Chile</u>.

Policies are currently being developed (see chapter 4.7.5). In the meantime, the private sector has started offering elderly care services and opening elderly care facilities, including international organisations (See chapter 4.4.3). These private facilities and services, however, are only accessible to a small part of the Chilean population who are able to afford it.

#### 5.2.2 Opportunities

With the current lack of public elderly care programmes and facilities, Dutch experience and knowledge can contribute to building a sustainable elderly care and healthy living policy in Chile fostering a market for smart solutions in elderly care.

Stakeholders in the private elderly care sector are keen to implement projects with innovative international companies in the mobility and vitality market. Solutions such as fall-prevention systems that use digital information are currently being explored by <u>Acalis</u>. As these are usually private companies, sometimes headquartered in Europe, they are easily approachable for Dutch companies. At the same time, the Chilean Public Sector is looking for international collaboration on the development of a coherent elderly care policy and provision strategy.

In the Netherlands we define health by functional ability, rather than by disease status. With a healthcare system that focuses on community care and 'ageing in place', the Dutch have been able to facilitate quality care for everyone who needs it. The Netherlands is ranked first on the Global Access to Healthcare Index (2019) which measures countries worldwide on accessibility of healthcare and the overall healthcare system. Through forty years of experience with an ageing population, the Netherlands has a solid understanding of the specific healthcare challenges that come with an ageing society. In 1975 more than 11% of the Dutch elderly (aged 65+) lived in institutional environments such as nursing homes or homes for assisted living. Nowadays this is only 4.5%, while the percentage of people aged 65+ in the Netherlands is much higher. This has led to cost reduction on a national level, and a great improvement in quality of life. Dutch knowledge can contribute to building a sustainable healthy-living policy in Chile. Dutch companies and organisations can share knowledge and advice on ageing policies and systems based on the Dutch experience together with a broad range of integrated products and solutions - from home care support systems to advanced medical equipment and nutrition.

### 5.2.3 Market Entry Considerations

With little elderly care policy in place, as well as unclear and insufficient supply of products and services in the public system, it might be difficult for foreign companies to offer innovative solutions to the majority of elderly in Chile. At the moment, only a small niche market of private, elderly care providers offer relatively easy access to Dutch solutions. As policy is about to change and the Chilean government will have to accommodate care and services for its quickly increasing ageing population, having references in Chile within the private sector might provide Dutch Mobility & Vitality companies with an advantage, as soon as elderly care solutions increase in the public sector.

### 5.3. Digital Solutions: eHealth, Big Data and VBHC

The Dutch have strengths in the digital solutions sphere, which could help connect various players in the health system, such as through the exchange and storage of health information. Organisations within this sphere offer solutions in health information exchange, interoperability, telemedicine, serious gaming and personal health monitoring. These organisations typically partner with health care providers and consumers.

### 5.3.1 Trends

The use of digital solutions, such as telemedicine, e-health, big data and value-based health care, are becoming more prevalent in Chile. There is a great focus on solutions that can increase efficiency and productivity due to a persistent issue of long waiting lists and accessibility in the public system. The current Minister of Health recently installed a entirely new department for Digital Health focussed on these issues.

Despite a number of projects related to health IT, lack of interoperability remains one of the major challenges in implementing successful health IT systems in Chile. This is especially challenging across primary and secondary lines of care. There is a consensus on the urgent need to incorporate technologies and improvements in management. Additionally, there is a general a capacity problem which could be solved using telemedicine, especially in rural areas. The Chilean government is currently implementing a comprehensive National Telemedicine Programme (Programa Nacional de Telesalud) (see chapter 3.7.3).

### 5.3.2 Opportunities

In terms of connectivity which is considered a crucial element to effectively implement digital solutions, the country ranks 35 out of 144 according to the ranking of the World Economic Forum. Compared to Colombia ranking 63<sup>rd</sup>, Brazil 69th and Mexico 79<sup>th</sup> (WEF, 2018).

Due to the government's focus on improving the IT infrastructure, sharing of data and implementation of telehealth and telelearning solutions and its outlined programme, most health care providers should have the incentive to invest in innovation in this field. Referring to the programme and the way in which the specific product meets one of its goals might help the institutes to apply for and assign budgets for pilot projects or implementation. The <u>Chilean National Centre for Information Technology in Health (CENS)</u> developed a project using CORFO funding on interoperability, innovation, human capital, quality and consulting. Seeking participation in this and similar projects pose opportunities for Dutch eHealth companies.

According to HIMSS Analytics (2018), the Netherlands has the highest ICT penetration in hospitals and clinics. Building on this experience, Dutch companies in the field can build a strong case for their Dutch solutions.

### 5.3.3 Market Entry Considerations

Solutions in the eHealth sphere are abundantly available, especially in a competitive, easy access and telemedicinedevelopment focussed market as Chile. The trick is to differentiate your solution from the rest by using the right phrasing, presenting concrete information on the increase in efficiency and decrease of costs, and thus appealing to public and private healthcare stakeholders. Investing in a pilot, using the material to show the applicability and accessibility of the solution in the Chilean context improves your business case significantly.

#### Text Box 6: Example of Value Based Health Care in the Netherlands

Seven top Dutch clinical hospitals have united under the <u>Santeon</u> label to share open information in order to improve care. The hospitals use the *Value-Based Health Care* (VBHC) method. Supported by patient and doctor-relevant indicators (such as survival, complications, quality of life), and by process indicators and costs, they bring teams together that analyse results and (treatment) processes and agree to objectives and improvements based on these indicators. They identified the need to work with other comparable hospital teams and outcomes to improve each individual hospital. Santeon currently has VBHC programs for breast, prostate, lung and colon cancer, hip osteoarthritis, stroke, chronic kidney damage, birth care, rheumatism, coronary artery disease and IBD (Inflammatory Bowel Disease). Santeon hospitals work with state-of-the-art but accessible Dutch technology and software providers such as <u>Topicus</u> (for screening) and <u>Performation HOTflo</u> (for outcomes and benchmarking) to achieve quick and positive results.

### 5.4. Hospital Design and Build

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.



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According to the new Chilean Government Program, 75 new hospitals and 120 primary care centers will be constructed in the coming years, 30 of them to be finished before 2022 (when the government will end its term).

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### 5.4.1 Trends

The Chilean government has announced a wide range of public healthcare infrastructure projects throughout the country. According to the new Chilean Government Program, 75 new hospitals and 120 primary care centers will be constructed in the coming years, 30 of them to be finished before 2022 (when the government will end its term). The overall hospital build entails a total budget of 10bn USD. 13 of the planned hospitals expected to be completed by 2020 the hospitals of El Biprovincial Quillota-Petorca, Cunco, Philippe Pine, Makewe, Curicó, San Agustín de Collipulli, Padre Las Casas, Angol, Carahue, Pitrufquén Etapa II, Torre C Curanilahue, Río Negro and Puerto Octay. More recently the start of 10 of these hospital build projects was announced for 2020 with a budget of US\$1.2 bn (Consejo Políticas de Infraestructura (CPI), October 2019).

In 2017, the Chilean Ministry of Health (MINSAL) together with the Sustainable Building Certification Agency (IConstrucción) and the Ministry for Public Infrastructure (MOP) released a guideline for the development of future hospitals and primary care centers. This document includes criteria such as natural lightning, improved air ventilation, reduced energy consumption, acoustic isolation and reduced water consumption. Future versions of this guideline will add new criteria in order to incorporate new technologies and higher standards.

### 5.4.2 Opportunities

On the one hand, the size and number of investments to be made in hospital infrastructure in Chile the coming years will entail opportunities for Dutch architects and construction and consultancy firms to help develop and build one of these hospitals. On the other hand, the increase in hospital infrastructure will present an increased demand for innovative medical devices, hospital furniture, medical consumables, etc. According to KPMG (2018) private partners will be needed to construct, equip and maintain the hospitals, while Chile's Ministry of Health will manage operations and clinical services. To comply with the higher standards of newly built hospitals, construction companies will look for quality solutions abroad within this field. Numerous Dutch companies have been investing in the development of innovative hospital build solutions focusing on quality of treatment, efficiency, patient centered logistics, and sustainability.

### 5.4.3 Market Entry Considerations

The use of BIM (Building Information Modelling) is a pre-requisite when it comes to building hospitals in Chile. Dutch companies interested in this sector should incorporate Chilean hospital procedures into their hospital build plans. These include considerations related to electrical circuits, hygiene requirements and flooring, to name a few.

#### Text box 7: A Dutch Hospital Build company on opportunities in Chile

Most trauma patients are transferred to hospital by helicopter. Emergency medicine, fast transport, and good accessibility demand a helicopter and a helipad that is safe and operable in all weather conditions. Bayards specializes in maintenance-free aluminium helipads that can be installed on any existing building, whether it is low or high rise.

"Chile is a very interesting market for us and we are following its developments meticulously. The Chilean government is investing enormous budgets in the building of new hospitals and renovation of older ones. We are trying to enter a number of concrete project plans that are due to be completed in the coming years. Nevertheless, finding the right partners and entrances to participate in the projects is still a challenge. In our experience, we have more success in countries where collective activities and tools are provided by the Dutch diplomatic network and organisations such as Task Force Health Care."

# CONCLUSIONS

This report has highlighted opportunities for Dutch companies and organisations interested in the Chilean healthcare market. The report outlines the trends and market-entry considerations in four main areas of interest: Medical Devices & Supplies, Mobility & Vitality, eHealth, and Hospital Design & Build.

Chile's health system is known in the region as reasonably well-functioning, well-organised, and effectively governed. Nevertheless, big differences exist between the public and private systems in terms of accessibility and timely care provision, resulting in unequal care admission between lower- and higher income and urban groups and rural populations.

Persisting unavailability of public hospital beds has led the Chilean government to announce the biggest investment in hospital build in Chile's history for 2020 of US\$1.2 bn. The hospitals are part of a wider US\$10bn plan to have 25 projects finished by 2022, while another 25 would be under construction and 25 under study.

Smoking rates are high in Chile, alcohol consumption is rising, and cancer mortality is high compared to cancer incidence. However, Chile's biggest health challenge currently is obesity, with approximately 34.4% of adults categorised as obese, and 44.5% of children categorised as overweight or obese. Another urgent challenge is its ageing population with the percentage of people over 65 expected to reach 24.9% by 2050, equalling the percentage in the Netherlands in this regard.

Policy and care service models for the elderly are lacking. Whilst the Chilean government has recognized the need for the development of policy and is planning a revision of its system, the private sector has stepped into the existing gap to set up such care facilities.

Despite a number of projects related to health IT, the lack of interoperability remains one of the major challenges in implementing successful health IT systems in Chile. This is especially challenging across Primary and Secondary lines of care. Additionally, there is a general human talent in health capacity problem which could be solved using telemedicine, especially in rural areas. There is a consensus on the urgent need to incorporate technologies and improvements in both public and private hospitals. The current Minister of Health recently installed a completely new department for Digital Health within its Ministry, tasked with amongst others, a telemedicine project and a 'Digital Hospital' project.

Above developments in the Chilean health system and sector provide opportunities for Dutch companies and organisations. The Dutch have experience with an ageing population and have one of the highest digital health penetrations worldwide. This has provided a highly fertile context for innovative healthcare solutions. Due to geographic distance and the relatively small market size, amongst other factors, not many Dutch LSH companies have identified Chile as an export focus country yet. However, market participation figures show great potential for growth. The friendly business climate, reliability of payments, easy product registration, and recent announcements on huge hospital build investments might offer Dutch companies an unexpected successful and accessible new market, providing an interesting stepping stone to other Latin American markets at the same time.

### **Next Steps**

This report marks an important step in strengthening the bilateral healthcare relations between Chile and the Netherlands. Working with the Netherlands Embassy in Chile, future steps and activities will be identified to further connect Chilean and Dutch healthcare stakeholders, building more sustainable healthcare relationships. Please get in touch with the Netherlands Embassy and TFHC for more information.

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# ANNEXES

### Annex 1 – List of Interviewees

An important element of the study was the fact-finding visit to Santiago the Chile, whereby a delegation from TFHC, accompanied by representatives Transfer LBC, gained insights from key stakeholders in the Chilean health sector. The fact-finding visit took place over a period of two days and included 10 field visits with diverse sector health stakeholders. These organisations are listed in chronological order below:

- 1. <u>Acalis Chile</u>: Acalis is a private operator of senior residences in Chile, currently operating 1.000 beds on 7 locations.
- 2. <u>Banmedica</u>: Banmedica is a private healthcare insurance company, whose shareholders also own a number of private clinics in Chile
- 3. <u>Cegamed</u>: Cegamed is a leading importer and distributor of disposable medical devices and supplies to both the private and public sector
- 4. <u>Chilecompra</u>: Chilecompra is the government entity that operates a online purchasing platform, where tenders for public purchases are published
- 5. <u>Corfo</u>: Corfo is the agency of the Government of Chile, under the Ministry of Economy, Development and Tourism in charge of supporting entrepreneurship, innovation and competitiveness in the country along with strengthening human capital and technological capabilities
- 6. <u>Expohospital</u>: Expo Hospital is the leading tradeshow in Chile for suppliers of products and services for the health sector, where they showcase their novelties to health professionals. The tradeshow shows supplies, medicines, technology and equipment for hospitals, clinics, diagnostic centers and laboratories and also hosts an extensive cycle of conferences to its assistants
- 7. OHL: OHL is a Spanish construction company that has built hospitals and other infrastructural works in Chile
- 8. <u>Philips Healthcare</u>: Royal Philips is a Dutch company of diversified technology that focuses on improving people's lives through important innovations in the areas of health care and consumer lifestyle. The company is a leader in cardiac care, intensive care and health care in the home
- 9. <u>Salud Legal</u>: Salud Legal is a company that assists individuals with administrative actions towards private healthcare insurance companies, since they work with all Isapres and Fonasa, they have an unbiased impression of these players
- 10. <u>UC Christus:</u> UC Christus is Joint Venture between the Catholic University from Chile and its school of medicine and its private health clinics and CHRISTUS Health a Catholic, not-for-profit system made up of more than 600 centers, including long-term care facilities, community hospitals, walk-in clinics and health ministries

# **Annex 2 – List of Relevant Events and Trade Fairs**

Event	Main function	Upcoming date(s)	Location
Expohospital	The leading event of the Health Sector in Chile with focus on hospital & laboratory	2021	Santiago de Chile
<u>Expomed</u>	Small healthcare event in Chile, with more focus on the consumer	To be confirmed	To be confirmed
<u>Expodent</u>	Brings together the main dental industry actors operating in the country	To be confirmed	To be confirmed
<u>FIME</u>	The largest medical trade fair highlighting advancements, innovation, technologies, medical device experts and professionals in North and Latin America.	23-25 June 2020	Miami Beach Convention Center, Miami beach US

## Annex 3 – List of Main Importers of Medical Devices & Supplies

Find a list of all medical device distributors active in Chile's public sector at <u>Public Health Institute of Chile</u>. Find out more about the regulation of medical devices <u>here</u>.

Name	Website	Focus
Cegamed	http://cegamed.cl/	Disposable medical devices and supplies to both the private and public sector and innovative foreign medical brands
Andover Alianza Medica	https://www.andover.cl/	Representative of bigger international brands such as Hewlett-Packard, Philips. Enraf-Nonius, Natus, Getinge and Gimmi
BlueMedical	http://bluemedical.cl/	Representing smaller international brands in the areas of orthopaedics, furniture, medical devices and wound protection.
Gemco	https://www.gemco.cl/	Steralization, Medical devices, furniture, imaging, dental, etc.
lvens	http://ivensmedlab.cl/	Medical Instruments, Medical Machines, Medical Monitoring Devices, Medical Software, Medical Tools
Sanix	http://www.sanix.cl/	Wound protection, pre-cut dressings and gauzes
Ewell Medical	http://www.ewellmedi.com	Aesthetic and medical products
Balboa Productos y Servicios	http://www.serviciosbalboa.cl/	Furniture and logistics
Barron Vieyra	http://www.barronvieyra.com/productos/division- medica	Surgical packs, medical clothing, cloths and towels
BSZ Surgico	https://www.bszsurgico.com/	Surgical instruments, dental instruments, electro surgery etc.

## **Annex 4 – Industry Associations**

Chile's National Association of Concessionaires (COPSA). Association of ISAPREs Association of Private Clinics Association of Providers of Medical Devices Association of Architects Specialised in Hospitals





# Agenda

For more information on upcoming activities:

www.tfhc.nl/agenda/

www.rvo.nl/actueel/evenementen

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