



# Guangdong Medical Industry

Opportunities for Dutch companies

*Consulate General  
of the Kingdom  
of the Netherlands  
in Guangzhou*

**2015**

**Consulate General of the Kingdom of the Netherlands in Guangzhou**  
gnz-ea@minbuza.nl

**This report was written by:**  
*Ruben de Bie, Economic Policy Officer*

**More information about doing business in China**  
[www.zakendoeninchina.org](http://www.zakendoeninchina.org)

Unauthorized use, disclosure or copying without permission of the publisher is strictly prohibited. The information contained herein, including any expression of opinion, analysis, charting or tables, and statistics has been obtained from or is based upon sources believed to be reliable but is not guaranteed as to accuracy or completeness.

© 2015 Consulate General of the Netherlands in Guangzhou

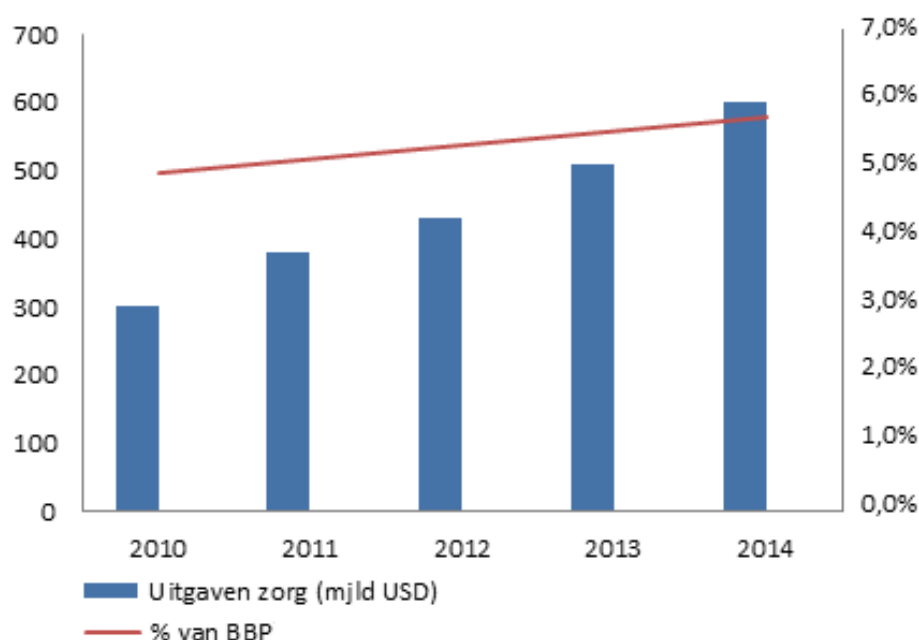
## Contents

<b>1</b>	<b>Introduction: the medical industry in China</b>	<b>4</b>
1.1	Rising...	4
1.2	...But not rosy	5
1.3	Opportunity areas	6
1.4	Guangdong	9
<b>2</b>	<b>Medical devices</b>	<b>10</b>
2.1	Guangdong as market and manufacturing base	10
2.2	Market per product	10
2.3	Market per buyer	11
2.4	Market for imported devices	13
2.5	Market and industry development	15
2.6	Focus area: Shenzhen	16
<b>3</b>	<b>Elderly care</b>	<b>18</b>
3.1	Elderly care in China: a unicorn?	18
3.2	Opportunities per level of care	18
3.3	Opportunities per segment: public care	20
3.4	Opportunities per segment: private care	21
3.5	Elderly care in Guangdong	23

## 1 Introduction: the medical industry in China

### 1.1 Rising...

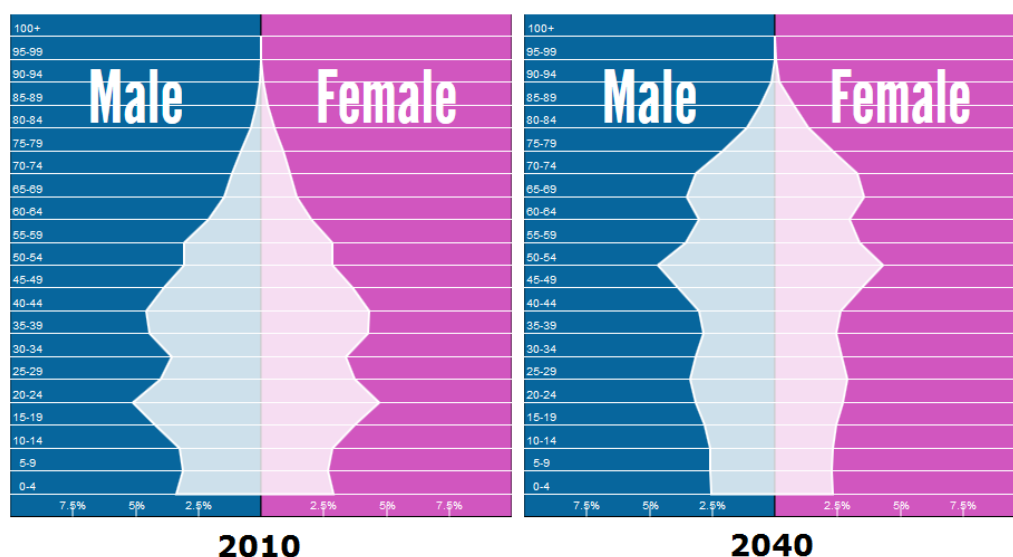
The medical industry in China has grown steadily over the past years, both in terms of revenue and government investments. The increasing total expenditures to health care in China form a good indication. Moreover, current healthcare expenditures in China are still far below the global average. Therefore, further growth of the medical industry in China is to be expected.



Healthcare expenditures (blue) and healthcare expenditures as percentage of GDP (red)

Source: WHO, USITC

There are two important developments in China which drive forward the growth of the medical industry. First, China has a rapidly aging population due to the one-child policy of recent decades. Today China counts 200 million people (14%) older than 60, and this amount will more than double to 440 million in 2050. Aging is directly correlated to healthcare demand. Patients older than 65 are at the moment already the largest segment of the healthcare market. The demand for medical care, and specialized gerontology, will therefore increase considerably.



Population pyramid shows China's aging population (2010-2040)

Source: UN

The second megatrend is the growing middle class. China's middle class has money, and is willing to spend it on gradually higher qualities of healthcare and health products. Health awareness among this class sees a strong increase, such as attention for nutritional value of food products. A survey by PwC shows that a large majority of the metropolitan middle class is willing to pay more for healthcare, especially where pediatrics and complicated treatments are concerned.

In 2022:

**45%** Of China's population will belong to the middle class

**75%** Of the urban population will have the same purchasing parity as the average Italian

Source: McKinsey Global Institute

## 1.2

### ...But not rosy

Despite these promising indicators, there are also many problems to be tackled in order to make it possible for the medical industry to grow sustainably. The World Health Organization (WHO) currently ranks China's healthcare system as 144<sup>th</sup> of 191 countries.

The large urban ("Class 3") hospitals, where all advanced medical devices are concentrated, are unable to deal with the gigantic influx of patients, resulting in

long queues and bed occupancy beyond capacity. There is also a significant rise in the number of NCDs (non-communicable diseases, such as cardiovascular diseases, cancer etc.) resulting in death, partly caused by deficient diagnostics. On the other hand, drugs and treatments are actually prescribed excessively, in turn leading to unnecessary costs.



*Some hospitals in China are being flooded with patients*  
Source: HealthIntelAsia

The central authorities in Beijing are well aware of the systemic difficulties of the healthcare system, which has initiated step-by-step reforms. For example steps have been bad in the area of insurance coverage, training general practitioners and the spreading of patients to Class 2 hospitals. The use of foreign investments and expertise in healthcare is encouraged by the government in many fields. However, in practice there are still many obstacles, especially for foreign enterprises, both due to unclear regulations, and an unbalanced division of assets and patients.

### 1.3

#### Opportunity areas

There are many opportunities in China's medical industry, which remarkably often relate to areas of Dutch expertise. For this report, the choice has been made to highlight two fields: medical devices and elderly care. This is a broad approach, and it requires product-specific research to determine the actual opportunities for a company on the Chinese market. Furthermore, for the realization of these opportunities it is of crucial importance to find a Chinese partner, whose motives are clear.

Medical devices. Revenue in the medical devices industry in China has grown an average of 19% per year over the past 5 years. Nonetheless, the current market

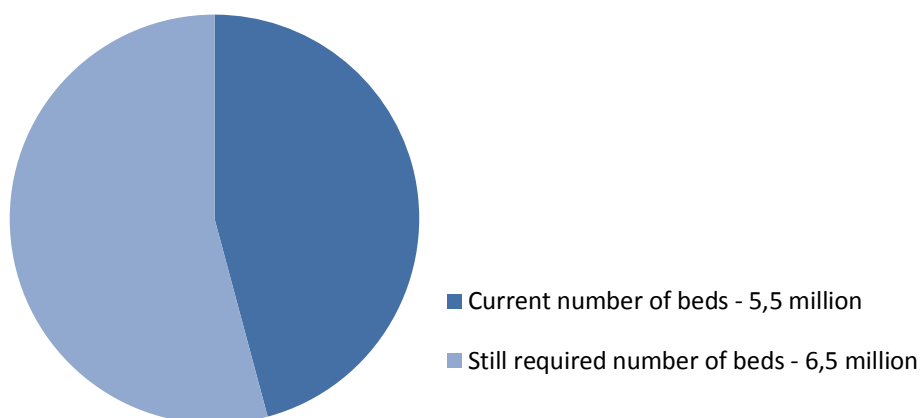
size for medical devices is only 12 Euros per head of the population, which promises considerable future growth. (By comparison: costs of medical devices in the US are 250 Euros per head, and 170 Euros in Germany.) While multinational are developing a portfolio for the mid-market, Chinese competitors are now coming up, who want to conquer the premium market and develop new devices. Chinese medtech companies can be valuable partners for innovation-driven Dutch SMEs. In this sense however, protecting technological intellection property is a big challenge.



*Chinese manufacturers are making the step to premium (Neusoft CT-scanner)*

*Source: Neusoft*

Elderly care. The market for goods and services targeted at elderly people will grow from €600 billion in 2014 to €15 trillion in 2050, according to official Chinese statistics. Since elderly people have a strong preference to remain within a fixed community, there is much demand for specialized home care and integrated residential communities where various levels of care are provided. In addition, there is a dire need for spots in nursing homes, and subsidies have been made available in recent years to facilitate the construction. There is much interest in foreign expertise and investments to bridge the gap. In this sense however, unclear regulations and finding the right partnerships are big challenges.



*Total required number of beds in nursing homes in China – 12 million*

*Source: Fung Global Institute, NHFPC*

Besides medical devices and elderly care there are more opportunity-rich areas, such as rehabilitation medicine. Out of every 60 patients in need of rehabilitation care only 1 can receive the required care. Due to policy measures of the Chinese Ministry of Health the number of hospitals with a rehabilitation department will double between 2014 and 2016, to a total of 8000. The market for rehabilitation care and many other medical sectors should be further investigated by Dutch companies.



*Rehabilitation medicine is an important sector in China*

*Source: Guangdong Provincial Work Injury Rehabilitation Center*



## 1.4

### Guangdong

In the remainder of this report, further attention is paid to opportunities in the medical industry of the southern province Guangdong. Guangdong is one of the wealthiest provinces in China, and with more than 100 million inhabitants it is also one of the most populous. Guangdong has enjoyed the highest provincial GDP of China for the last 23 years. The size of its economy is thus comparable to South Korea.

Although the transition to a more high-value economy maintains a great challenge to Guangdong, high-tech and service industries are relatively well-developed here. This is also visible in the medical industry, for instance in the progress in the field of online healthcare, the quality and quantity of academic hospitals, and in the field of medical devices manufacturing. In the Guangdong Free Trade Zone, opened earlier in 2015, healthcare has been marked as one of the focus industries. Further development of the healthcare sector in Guangdong is therefore highly probable.



*The resort of CG Guangzhou (Guangdong in the middle)*

## 2 Medical devices

### 2.1 Guangdong as market and manufacturing base

While the demand for medical devices in China has been growing steadily, with an average 16,5% per year between 1998 and 2004, Guangdong province has in the meantime assumed a solid position in the industry. The medical devices sector in Guangdong had a revenue exceeding RMB 80 billion in 2014, roughly one fifth of national revenue. Moreover Guangdong as a province is the largest exporter of medical devices in China, with the city of Shenzhen as its main manufacturing base.

Guangdong is:

**#1** Exports of medical devices

**#3** Imports of medical devices

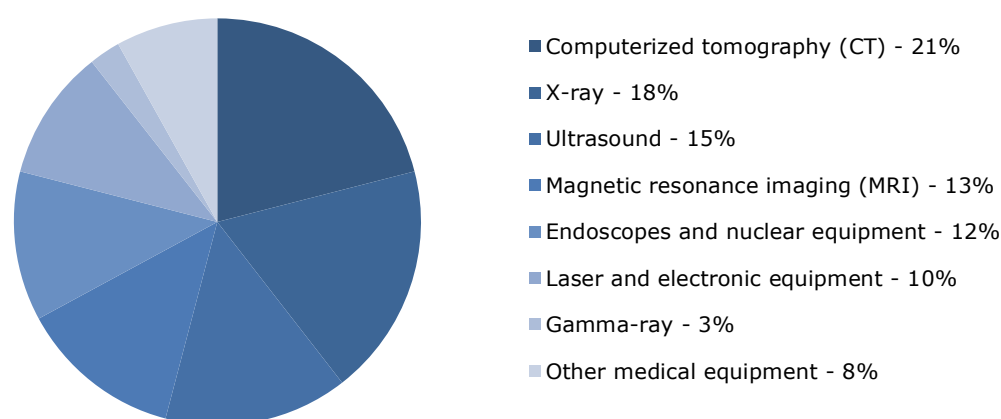
**20%** Of national revenue in medical devices

*Source: Guangdong Bureau of Statistics, National Bureau of Statistics*

Guangdong is not only important as a workshop, but the province also has the highest number of Class 3 hospitals. As a result Guangdong has a relatively large share in China's growing market for medical devices, especially in the high-end segment that is interesting for Dutch companies. As such, Guangdong is the third largest provincial importer of medical devices, even though the market for "made in China" devices is growing much faster than for imports.

### 2.2 Market per product

The medical devices market is rather consolidated. Simple devices and equipment are available from Chinese manufacturers for a relatively low price. On the other side, famous multinationals are as of yet still the regular suppliers of high-value devices such as CT and MRI-scanners, where most of the revenue is made. Newcomers cannot easily move this market through direct entrance.



*Best-selling medical devices in China by revenue in 2014*  
Source: Ibis World

Due to the growing number of NCDs (non-communicable diseases) in China, there is a lot of demand for new test and treatment methods, for instance for liver cancer and breast cancer. New monitoring equipment for home care and e-health is also a growth market with much potential. Introducing such innovations is therefore an important opportunity for Dutch companies.



**80 Million**  
Are obese



**90 Million**  
Are diabetic



**200 Million**  
Have high blood pressure

*The rise of NCD's in China requires improved equipment*  
Source: NHFPC

However, new internationally acclaimed test and treatment methods often find their way into China very slowly. In the first place because of the extensive approval process of the China Food and Drug Administration (CFDA), which can take up to three years. Subsequently, obtaining insurance coverage, approval of the use of the product per individual hospital *and* the establishment of brand awareness among doctors and patients all takes longer than in most other countries. This time-consuming process forms a barrier for innovation in the medical devices industry (and even more so in the pharmaceutical industry).

## 2.3 Market per buyer

The most prominent buyers of medical devices in China's EUR 36 billion market are of course medical institutions. In the whole of China there are almost 1 million medical institutions, of which approximately 25,000 hospitals, and 650,000 smaller facilities such as township health centers and community clinics. The general rule is, the bigger the hospital, the bigger its budget for medical equipment.



Hospitals of Class 3, 2 and 1

So-called general hospitals usually have more budget and approvals for the purchase of diagnostic and treatment equipment than specialist hospitals. Particularly in Class 3 hospitals there is more budget available; those are the largest hospitals according to the number of patients, beds, departments and medical researchers. Class 3 hospitals are the predominant users of large and high-tech medical devices, such as CT-scanners, MRI-scanners, as well as nuclear, angiographic and color ultrasound devices. At the moment, about 70% of all medical equipment with a value higher than 130,000 Euros can be found in Class 3 hospitals.

Chinese hospitals are categorized as:

**6%** Class 3 500+ beds

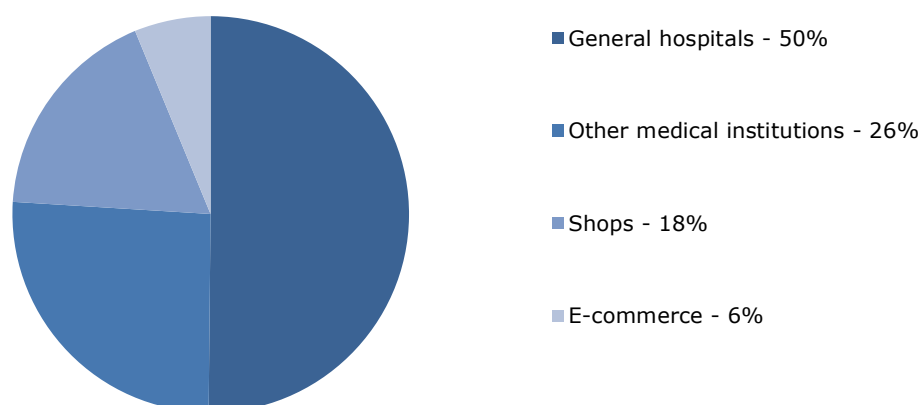
**25%** Class 2 100-500 beds

**34%** Class 100> beds

**35%** Unclassified

Source: Wild Design China

The role of pharmacies, shops and websites as a sales channel should not be forgotten. Sales figures of 2014 show that although most medical devices are sold directly to hospitals, almost 25% went through retail channels. Remarkably, e-commerce is becoming an increasingly important channel for medical devices, especially for smaller devices and home care equipment.



Sales channels for medical devices in China by revenue

Source: EU SME Centre, Ibis World

Guangdong province is an important market because of its well-developed sales channels for medical devices. Not only does Guangdong have the highest number of Class 3 hospitals, e-commerce is also more widely used than in other provinces (excluding Beijing and Shanghai). Hence, forecasts for market development in Guangdong are positive.

## 2.4

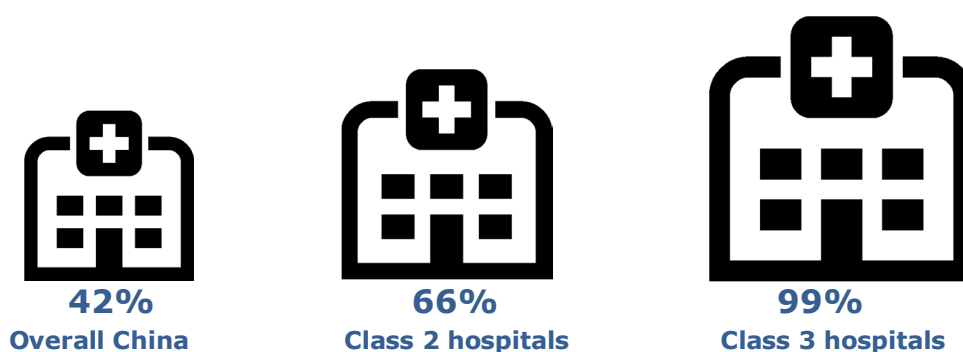
### Market for imported devices

China is largely dependent on import for medical devices, but this is gradually getting less. In 2014 approximately 42% of the medical devices used in China was imported, a small 2% drop from 2009. In Guangdong province – the largest importer of medical devices after Beijing and Shanghai – the import even dropped 3% in the first half of 2015, compared to the same period last year. This shows that the position of Chinese manufacturers vis-a-vis foreign competition is slowly but certainly getting stronger. This is caused by a number of factors.



*Most important brands of imported medical device in China*

First of all, it is mostly smaller hospitals and healthcare centers which constitute a growing market. They use more basic equipment, which is often available locally for a lower price. Imports are by contrast a high-end game. Whereas Class 3 hospitals use close to 100% imported devices, that is only 66% for Class 2 hospitals.



*The percentage of imported products varies greatly per market segment*  
Source: Dezan Shira

Second, the quality of “made in China” devices has improved. Mid-low-end monitoring equipment and diagnostic devices which are manufactured in China are no longer inferior to European standards. In order to adapt to this trend, multinationals such as GE, Siemens and Philips have developed mid-level portfolios through domestic acquisitions in recent years.

Third, market access for foreign medical devices is hindered. For instance, the National Health and Family Planning Commission (NHFPC) announced in 2014 to “strongly advocate” healthcare organizations in the whole country to use domestically-made medical devices. This has directly influenced tenders according to insiders. Imported products additionally have to undergo even longer approval processes than Chinese competitors. To overcome these types of barriers, foreign SMEs can gain more opportunities if they cooperate with established Chinese enterprises.



## 2.5 Market and industry development

The fact that smaller hospitals constitute an important growth market for medical devices, is the direct result of government policy in recent years. Many subsidies are offered for the improvement of basic healthcare, also outside of the big cities, in order to spread patients. For instance, last year the Ministry of Health rolled out a plan for an upgrade of Class 1 and 2 hospitals in county-level cities between 2014-2020, which should establish new departments for many common diseases with practically all types of equipment, for a total value of EUR 14 billion. In the first phase of this program (2014-2017) 500 county-level hospitals will be targeted, of which 25 are in Guangdong.



*The equipment in many Chinese hospitals is receiving an upgrade*

There are similar efforts to upgrade the medical devices industry itself. Chinese manufacturers are already a global powerhouse in the field of simple medical supplies, but now there is also a strong investment in innovation. The large Chinese medical device manufacturers invest close to 10% of their revenue in R&D. The government supports this through subsidy programs for R&D activities. And there are PE/VC funds which target the medical device industry.



*Chinese companies are looking for the innovation Holland has to offer*

In the field of R&D and technology there is much attention for projects in cooperation with western partners, including direct technology transfer. In this respect, Chinese companies do make high demands. They mainly look for products which are already approved in foreign markets, or have reached phase 2-3 of clinical studies, with concrete prospects for useable products in the near future. In such a cooperation process it is of major importance for the Dutch side to have a clear picture of the possibilities, and a strategy for the protection of intellectual property.

## 2.6

### Focus area: Shenzhen

Shenzhen lies on the border with Hong Kong and is one of China's largest and most developed cities – it is often called China's fourth biggest city. Shenzhen is probably the most important base for the medical device industry in China. Revenue of companies registered in Shenzhen totaled approximately 30% of the provincial total in 2014, with a larger export volume than any other city or province in China. More than 50,000 people work in Shenzhen's medical equipment industry, at more than 700 manufacturers and another 2000 distributors and similar enterprises.



*Mindray headquarters*

*Source: Mindray*



In the field of medical equipment, as in many other sectors, Shenzhen rightfully positions itself as distinctly high-tech. More than 10,000 people work in R&D for medical devices in Shenzhen, with a total of 3,000 patents. From a list recently published by the National Health and Family Planning Commission with the most excellent domestic medical devices, 8 out of 27 companies listed are from Shenzhen, and as much as 37 out of 95 products. These 8 “excellent” companies can be valuable partners:

Landwind  
<http://www.landwind.com.cn/>

Angell Technology  
<http://www.szangell.com/?load=index&lang=2>

Mindray  
<http://www.mindray.com/en/>

Sontu Medical Imaging  
<http://www.sontu.com.cn/> (only Chinese)

SonoScape  
<http://www.sonoscape.com.cn> (alleen Chinees)

EMP Emperor Medical  
<http://www.china-emperor.com/en/en.aspx>

Rayto  
<http://www.rayto.com/about>



*Fully digital colored ultrasound device (Landwind)  
Source: Landwind*

## 3 Elderly care

### 3.1 Elderly care in China: a unicorn?

Elderly care brings along interdisciplinary opportunities for Dutch business. There is a demand for expertise on all facets of elderly care, from building design to staff training. Moreover, there is an expansion of elderly care on different levels of care, from home care to specialized dementia care. Although Guangdong is a wealthy province, its elderly care is relatively underdeveloped. This currently attracts many public and private investments in new projects.

When it comes to elderly care China is by no means a clean slate. Even though it is still in its infancy, there is currently a lot of competition trying out all kinds of care models. Specialists from many western countries, and also Japan, are already active in China. Some thus see elderly care as a sector that is excessively invested.



*Relatively many elderly people stay with their family and in their community*

Critics point at hungry real estate developers, who try to get their hands on cheap pieces of land under the guise of elderly care, without paying attention to the actual execution of the facilities. Hence, the opportunities in elderly care have cynically been called a “unicorn” – something everybody talks about, but nobody has actually seen. Successful examples are indeed limited, but most experts agree that with a long-term vision and the right partners, much can be gained in China’s elderly care.

### 3.2 Opportunities per level of care

As is the case in the Netherlands, the Chinese government strives to keep most of the elderly population independent. The role of the family is emphasized similarly. According to the so-called “90-7-3 guideline” 90% of the elderly population has to live independently, and there is a limited offer of public services such as community

daycare and subsidized nursing homes. In addition, the independent living space in integrated elderly communities, where elderly can stay when they need more intensive care, is very popular among the elderly who can afford it.

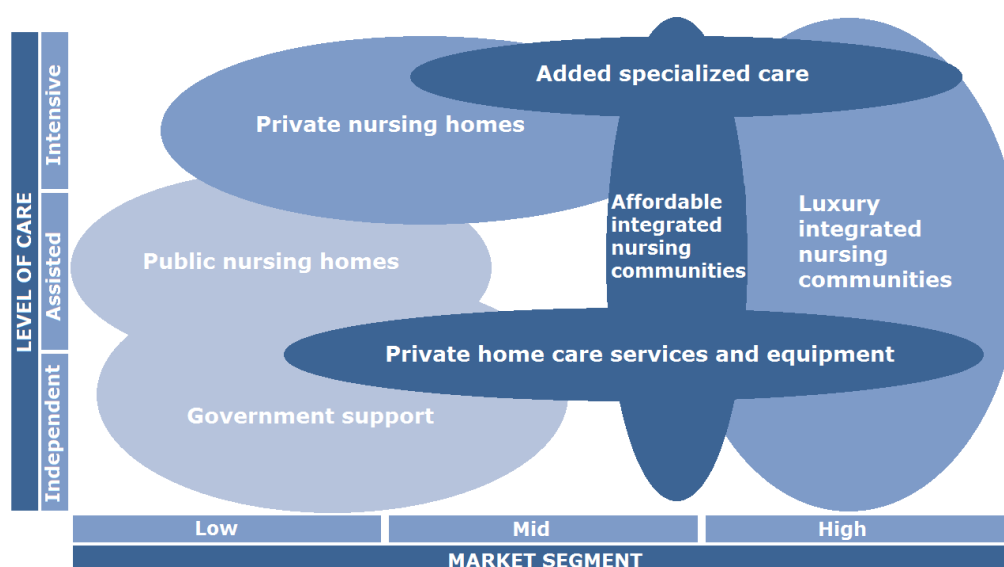
**90%** lives independently or with family

**7%** uses community daycare

**3%** depends on nursing homes

Source: Ministry of Civil Affairs

Due to the influence of real estate developers, the emphasis with regard to elderly care is being placed on the construction of new residential/nursing facilities. This approach requires large investments, and so far few successful models have yet come out of it. By contrast, independent home care services and equipment can fulfill an important role in providing lower levels of care, for low as well as high market segments, without immense investments. This might offer new opportunities for Dutch companies.



*Opportunities in China's elderly facilities*

Establishing added medical care and specialized gerontology in nursing homes is likewise an important potential source of profits for Dutch knowledge. Integrating medical facilities and services is a new trend, which has strong preference of elderly people and their families. The involvement of medical insurance providers can make such an addition financially feasible. In the summer of 2015, a first group of 50 nursing homes in Shanghai received new medical equipment. Guangdong Civil Affairs Bureau has announced that it intends to do the same in Guangdong.

"In view of the fact that most residents of nursing homes have needs for medical attention and nursing and daily care, whether these establishments can offer professional medical service and are covered by medical insurance are crucial considerations for elderly people and their families."

- Liang Yue, Managing Director at Guangzhou Shouxing

### 3.3 Opportunities per segment: public care

Government support for the elderly is limited in China, and mostly consists of a small state pension. Monthly pension amounts differ per region, but generally speaking pensions are less than half the salary of an uneducated laborer. In the suburbs of some cities there are also subsidized housing rental schemes for elderly people, but these tend to be relatively small-scaled projects.

There is yet no systemic form of home care in China, but the government puts an effort into establishing more day-care centers and assistance in the neighborhood. Local governments are eager to work with private parties in developing new social care models. Local governments are also very open to the use of e-health in improving efficiency. In practice however, actually finalizing and carrying out such a cooperation can be time consuming.



*A public day-care center for elderly residents  
Source: Guangzhou Liwan District Government*

For elderly with a lower income, who are not able to take care of themselves well, there are public nursing homes. However, it takes a long time on a waiting list to conquer a spot in a public nursing home, especially in urban areas. Moreover, there is much criticism on the quality of care in public nursing homes. The number of public nursing homes is currently being expanded, and there is the intention to improve existing care levels. Although there is not much space for foreign designers

in these public tenders, there is much potential for providers of trainings for management and personnel.

### 3.4 Opportunities per segment: private care

Due to deficient pensions, elderly are mainly dependent on their family, personal possessions and private care. The most simple but commonly used form of private care is the employment of a non-specialist caregiver, such as a resident nanny. This type of care is labor-intensive, but of limited quality, for instance in the case of progressing dementia. Therefore, much potential lies in establishing an efficient home care system, based on training of nannies, e-health applications, and professional medical and nursing care. The models of Buurtzorg Shanghai and the Chinese Pinetree Care are based on this. In the execution hereof, obtaining the required medical license can be a great obstacle.



*Real estate developers invest in well-equipped day-care centers for elderly residents*

The share of private nursing homes is 20% in the whole of China, and almost 50% in the big cities. The increasingly rich upper class feeds excessive investments in new luxury elderly care properties, equipped with all imaginable conveniences. However, the largest share of the elderly population has a low income, or is not willing to spend money on long-term care for themselves. In private nursing homes, the occupancy of beds is on average merely 50%, which there are long waiting lists for their public counterparts. Slow return on investment is an important reason why many new projects fail. This puts pressure on the possibilities for an all-round improvement of private elderly care in China.





*Luxury elderly residential and nursing community in the suburbs of Guangzhou*

*Source: Taikang Life*

The best counter example, of a successful foreign invested elderly care complex is the Starcastle project in Shanghai. Starcastle has succeeded in creating a broad community with both active elderly who do not require much assistance and those in need of nursing services and specialist care. The ability to bridge these levels of care at a price point acceptable to the upper middle class, makes Starcastle the most occupied foreign-owned elderly care community in China. The fact that Starcastle has chosen to refurbish an existing (but not ideal) building, is an important reasons for its success.

## Opportunities per stadium

### Architecture, planning en design

- Design high-end new development projects
- Redesign existing urban buildings for elderly care
- Integrate medical facilities and specialized care
- Maintain permanent communities

### Devices and other equipment

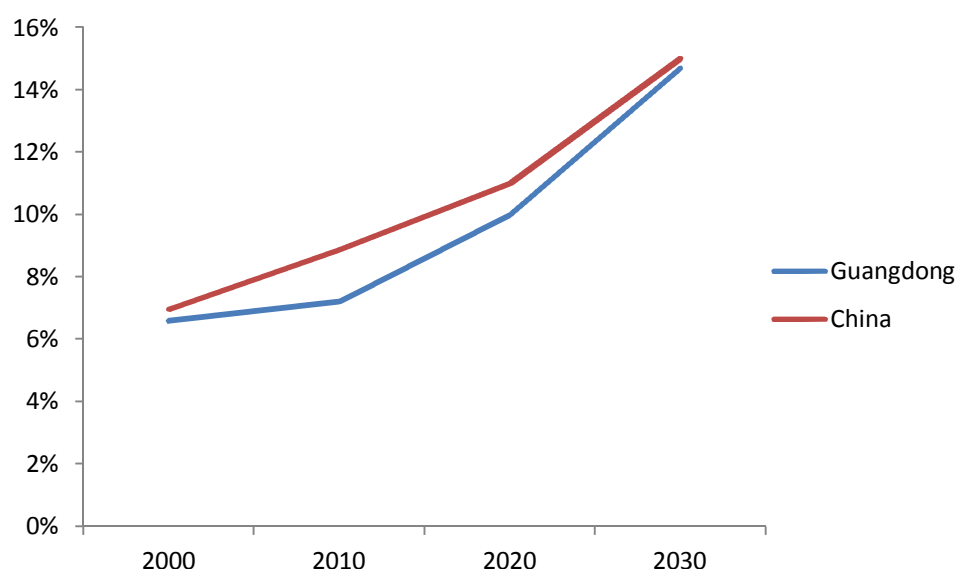
- E-health, home monitoring devices, software and data management
- Specialized medical devices
- Food, supplements and pharmaceuticals

### Training and execution

- Training for all levels of caregivers
- Management training
- Management of nursing homes and home care organizations

### 3.5 Elderly care in Guangdong

Despite the fact that Guangdong is one of China's wealthiest provinces, it is running behind in the field of elderly care. The pensions are low, there are few day-care centers, and relatively few spots in nursing homes. The percentage of elderly people in Guangdong is currently lower than in the rest of China, due to the large number of migrant workers, but this percentage is rising fast at the moment. Therefore, it is to be expected that the demand for elderly care, and the available subsidies will increase in the coming years.

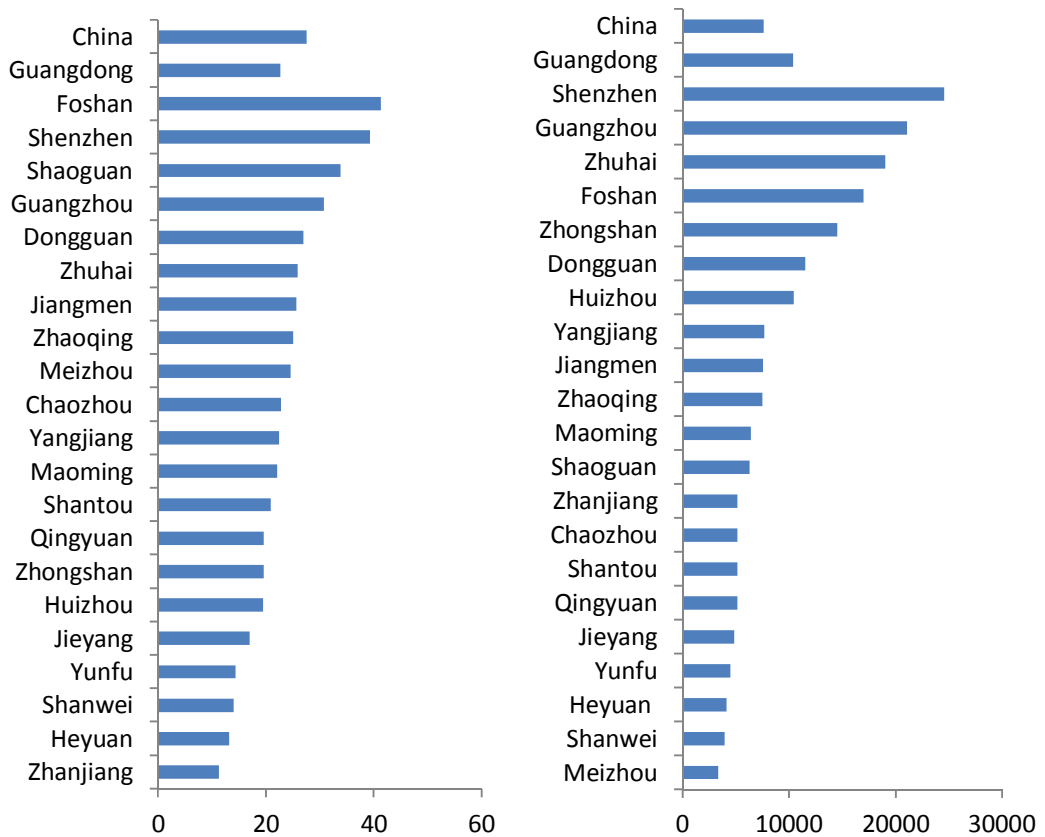


*The percentage of people aged 65+ is rising more rapidly in Guangdong*

*Source: Guangdong Academy of Social Sciences*

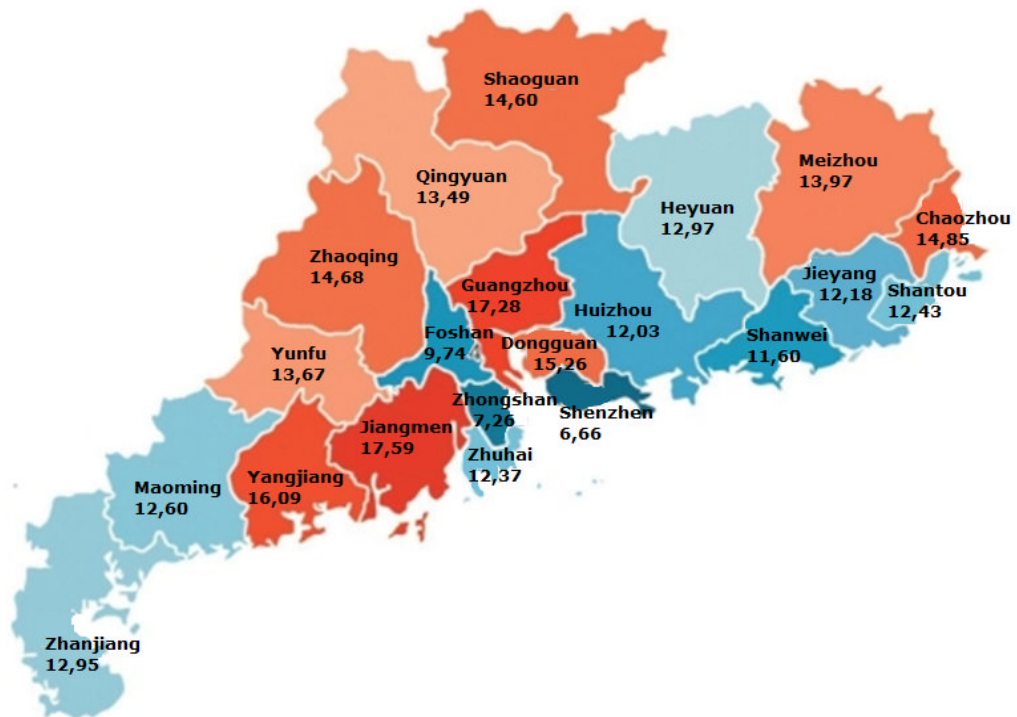
Elderly care companies considering to enter the market in Guangdong, should have a look at local differences. In order to determine a strategy, the available number of beds in nursing homes and per capita GDP could be an indication of demand. Namely, the cities Zhuhai and Huizhou have a relatively low number of spots in nursing homes compared to their GDP levels. Furthermore, the number of elderly people changes strongly from area to area, and this influences policy priorities. In quickly aging Guangzhou, the government places much emphasis on the improvement of facilities for the elderly.

Guangzhou municipality wants to reach the level of Beijing and Shanghai. It wants to be able to offer 40 beds per 1000 inhabitants aged 65 or above, which is now 31/1000 inhabitants. For this purpose, Guangzhou is freeing 400 hectares of land in the period 2015-2020, which can be obtained for free (albeit not tax-free) by non-profit organizations. At the same time there is the realization that the insufficiency of facilities cannot only be solved through new building projects. For example, there is a severe lack of capable nurses. The municipality has indicated interest in using Dutch expertise for training and management.



The number of beds in nursing homes per 1000 people aged 65+ (left) and the GDP per capita (right) in 2014 across Guangdong

Source: Nanfang Dushi Bao, National Bureau of Statistics of China



Percentage people aged 60+ differs strongly within Guangdong

Source: Nanfang Dushi Bao



**Ambassade van het Koninkrijk der Nederlanden**

4 LiangmaheNanlu  
Chaoyang District, Beijing 100600  
Tel: + 86 10 8532 0200  
E-mail: pek-ea@minbuza.nl

**Consulaat Generaal Shanghai**

10/F Tower B, Dawning Center, 500 Hongbaoshi Road  
Changning District, Shanghai 201103  
Tel: + 86 21 2208 7288  
E-mail: sha-ea@minbuza.nl

**Consulaat Generaal Guangzhou**

Teem Tower, 34/F, 208 Tianhe Road  
Guangzhou 510620  
Tel: + 86 20 3813 2200  
E-mail: gnz-ea@minbuza.nl

**Consulaat Generaal Chongqing**

54/F, Yingli International Finance Centre, 28 Minzhong Road  
Yuzhong District, Chongqing 400012  
Tel: +86 23 6399 7000  
E-mail: cho-az@minbuza.nl

**Consulaat Generaal Hong Kong**

Room 2402B, 24/F, Great Eagle Centre, 23 Harbour Road  
Wanchai, Hong Kong SAR  
Tel: + 852 2599 9200  
E-mail: hon-ea@minbuza.nl

**NBSO Chengdu**

6/F, West Building, La De Fang Si,  
1480 Tianfu Avenue, Chengdu, 610041  
T. +86 (0)28 8511 4047  
E-mail: nbsochengdu@nbsochengdu.com

**NBSO Dalian**

4910 World Trade Center, 25 TongXing Road  
Zhongshan District, Dalian 116001  
Tel: + 86 411 3986 9998  
E-mail: nbsodalian@nbsodalian.com

**NBSO Jinan**

Room B1, 3/F, Building 2, Shuntai Plaza 2000 Shunhua Road  
Jinan, 250101  
Tel: + 86 531 8606 5138  
E-mail: nbsojinan@nbsojinan.com

**NBSO Nanjing**

Suite 2316, Building B, 23/F, Phoenix Plaza  
1 Hunan Road, Nanjing 210009  
Tel: + 86 25 8470 3707 / 8470 3708  
E-mail: nbsonanjing@nbsonanjing.com

**NBSO Qingdao**

A-2505, Top Yihe International, 10 Hong Kong Middle Road  
Shinan District, Qingdao 266071  
Tel: + 86 532 6677 7515 / 17  
E-mail: nbsoqingdao@nbsoqingdao.com

**NBSO Wuhan**

Tower I, Room 1306, 568 Jianshe Avenue  
Wuhan 430022  
Tel: + 86 27 8576 6511  
E-mail: nbsowuhan@nbsowuhan.com