

Healthcare Industry in China

Demographics & statistics on China's rapidly growing healthcare service market



Source: Morgan Stanley Research (E) estimates

As shown in *Figure 1*, there has been a consistent increase in the number of hospitals, primary healthcare clinics, and other healthcare service players throughout the years. These increases in China are a result from a number of factorsⁱ:

1. **The aging population**
 - China has one of the largest and fastest ageing populations in the world. The percentage of the population aged 60 or above in China increased from around 7.4% in 1980 to 12.3% in 2010 and is expected to reach 23.4% in 2030.ⁱⁱ
2. **The acceleration of chronic disease prevalence**
 - Changing diets, increases in meat and alcohol consumption, and decline in grain consumption have negatively affected the health of China's people. As well, the reduction in physical activities, intensifying stress, increasing use of automobiles, and higher levels of air/water pollution are factors as well.ⁱⁱⁱ
3. **The increasing access to medical care** through increases in government spending & looser regulations
4. **Supply growth falling short of demand growth**
 - As seen in *Figure 2* and *Figure 3*, the number of available hospitals (left) seems to have a downward trend while the number of patient visits (right) has an upward trend
5. **Growing affluence** attributable to rising per capita income and increasing public insurance coverage
 - Coverage of basic medical insurance increased from 15% in 2000 to 99% in 2012 and medical expenses borne by residents as a percentage of total medical expenses shrank from 59.0% in 2000 to 33.9% in 2013^{iv}

Figure 2: # of Hospitals per Million Patients

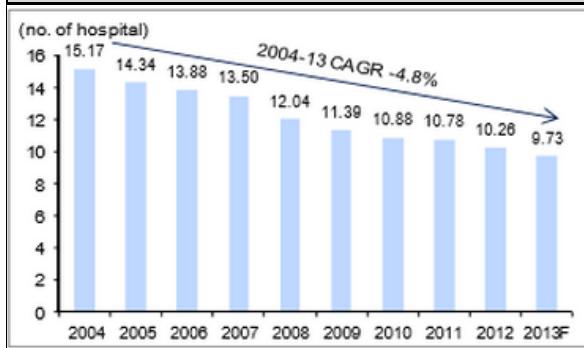
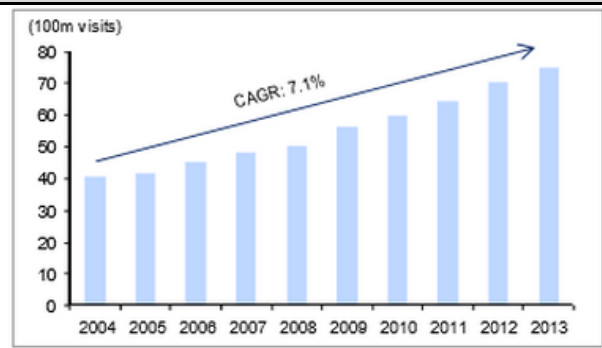


Figure 3: # of Patient Visits to Medical Institutions



Source: CEIC, UOB Kay Hian

Current landscape of the healthcare service market

From the 13,396 public hospitals (as shown in *Figure 4*), about 73% are owned by central & local governments, 25% directly by SOEs, and 2% directly by the military. **Public hospitals dominate** the healthcare service industry in China in terms of total number of beds and patient visits^v

Figure 4: Key Matrix for Public and Private Hospitals in China (2013)				
	Public Hospital	%	Private Hospital	%
Number of hospitals	13,396	54.2%	11,313	45.8%
Total beds in operation ('000)	3,865	84.4%	713	15.6%
Inpatient visits (mn)	132.2	88.7%	16.9	11.3%
Outpatient visits (mn)	2,460	89.5%	290	10.5%

Source: NHFPC, Morgan Stanley Research

There are 3 types of hospital classifications in China (as shown in *Figure 5*), namely Class I, II, and III that are categorized in terms of size and number of beds

- The larger city-level/provincial/national Class III hospitals, accounted for 45.5% of the total medical service market in terms of patient visits. Class II, Class I and hospitals that are not rated, followed with 40.2%, 6.0% and 8.2% market share, respectively (May 2012)

Figure 5: Classification of Hospitals in China

Classification	Number of Hospitals	Number of Hospital Beds	Provided Services	Comments
Class I	6,669	<100	Preventative care, primary healthcare and rehabilitation services to the community	Township hospitals
Class II	6,717	>=100, <500	General medical services to multiple communities, some medical education and research	Affiliated with a medium-sized city, country or district
Class III	1,841	>=500	Medical hubs that provide high-standard, specialist medical services to multiple regions and have advanced responsibilities with regard to medical education and scientific research	City-level, provincial or national hospitals
Not rated	9,819		Hospitals without a class grading by MOH (hospital classification paused in 1998 and reinitiated in 2011)	Smaller and specialty hospitals
Total	25,046			

Source: CEIC, UOB Kay Hian

Currently, there is **no dominant player** as the hospital market is very fragmented with several healthcare service companies. *Figure 6* shows the top 3 hospitals (in terms of number of beds) are China Resources Healthcare, Phoenix Healthcare Group, and Fosun Pharmaceutical.

Figure 6: Top Private Hospital Groups in China

Hospital Group	Number of Hospitals	Number of Beds
China Resources Healthcare	5	~4,700
Phoenix Healthcare Group	12	3,390
Fosun Pharmaceutical	5	2,770
Dongguan Kanghua	2	~2,550
Jinling Pharmaceutical	4	~2,200
Dongguan Donghua	2	~1,800
Nanjing Tongren	2	~1,100
Citic Health	4	~1,000

Source: Frost & Sullivan, Morgan Stanley Research

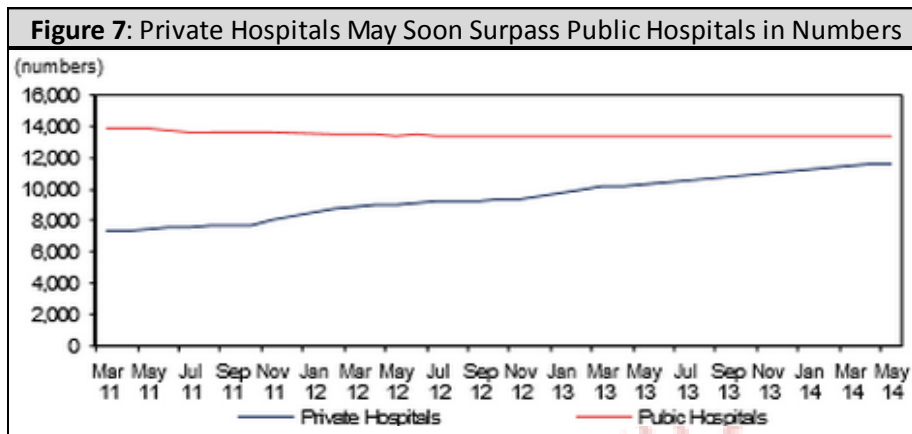
China's government has kick started the public hospital reform

The **NHFPC** (National Health and Family Planning Commission) is doing this with goals to^{vi}:

1. Address the **acute shortage** of healthcare services available for the people of China
 - By attracting more funding by opening up the sector to private and foreign investment
 - By expanding public health insurance coverage and promoting commercial health insurance

2. **Improve efficiency** of services within the healthcare service field
 - By promoting modernized management systems through methods such as employee incentive schemes
 - By targeting operations/management mechanisms, service price adjustments, medical insurance payments, personnel management & income distribution^{vii}

3. Encouraging the expansion of **private hospitals**
 - By aiming to boost number of beds at private hospitals to 20% of the total by 20%^{viii}
 - As shown in *Figure 7*, the number of private hospitals is steadily increasing and catching up to the number of public hospitals



Source: CEIC, UOB Kay Hian

More **private, for-profit entities into the country's healthcare system** as China's Foreign Direct Investment (FDI) catalog was revised in ways that allowed for 100%, or Wholly Foreign Owned Enterprises (WFOE). As FDI was restricted before, many joint venture partnerships in the healthcare space suffered^{ix}. A major demographic that affects the healthcare industry in China is the aging population.

Elderly Care in China

Demographics/statistics show that there is a need for more elderly services

At the end of 2014, the number of Chinese senior people over 60 had reached 212 million, comprising 15.5% of the total population^x. Due to the one-child policy, urbanization, industrialization, and public reforms, the **elderly population is increasing rapidly** (shown in *Figure 8*)^{xi}. Lack of government funding and resources worries physicians as about 23% of China's elderly population fall below the poverty line and are afflicted by high rates of depression and dementia^{xii}.

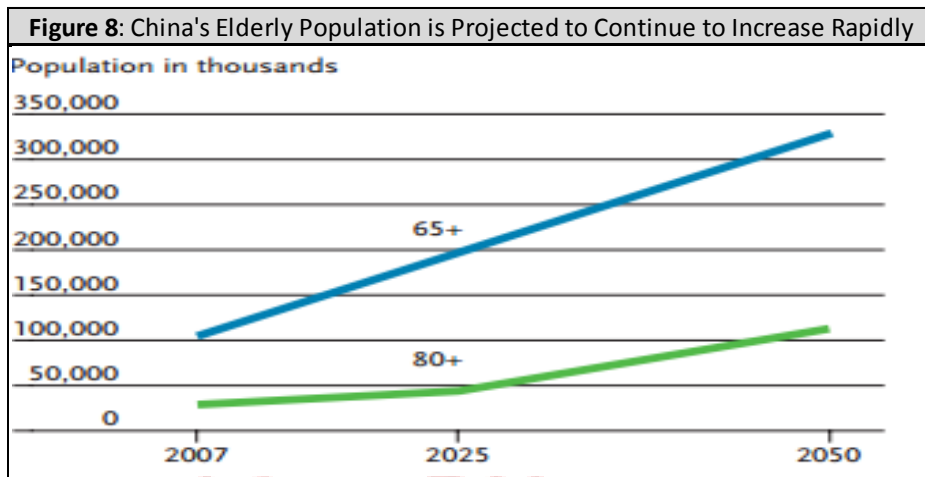
China's elderly have predominantly **received care in the home**; only 2% are institutionalized but as the elderly population increases, more will need to seek care in institutions (2010)^{xiii}

- 1 in 3 seniors in China live apart from their family (2013), creating a greater social need for legal support ^{xiv}

Revised **Law for the Protection of the Rights and Interests of the Elderly** in 2013 (some controversy surrounding whether it's appropriate for the government to meddle in families personal affairs):^{xv}

- Law gives relief for migrant workers who don't have the means to visit their elderly parents more often
- Law requires employers to ensure employees whose parents live far away to have up to 20 days of paid home leave

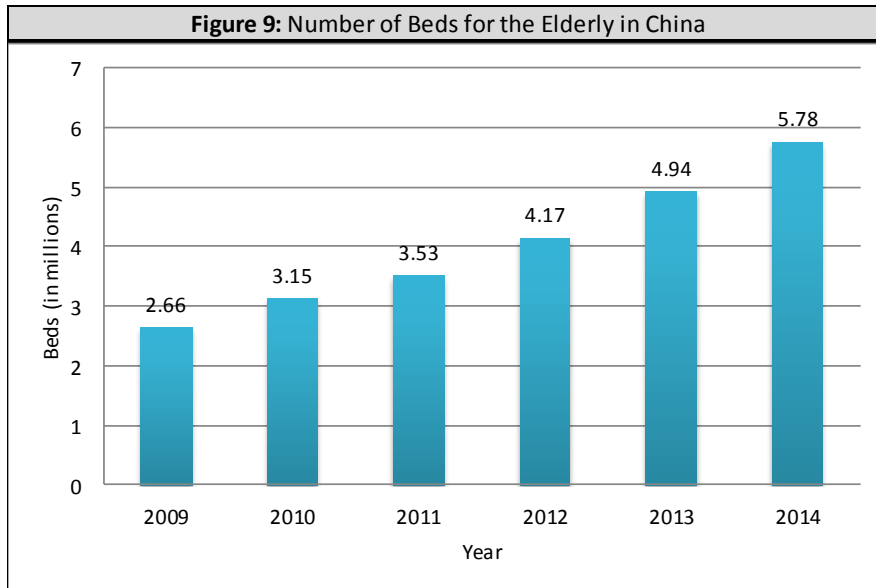
Both rural and urban Chinese residents used to have almost universal insurance coverage but after the economic reforms in the 1980s, a city-based social health insurance scheme replaced insurance provided by cooperatives and employers. Vast numbers of rural and urban workers were **no longer insured**^{xvi}



Source: United Nations, World Population Ageing 2007 (New York: UN Dept. of Economic and Social Affairs, Population Division, 2007): 202-203

Nursing homes for elderly people

The number of beds available for the elderly in 2014 was about 5.78 million as shown in *Figure 9*^{xvii}



Source: Statista

In late 2014, China's Ministry of Civil Affairs (MCA) and Ministry of Commerce announced they had **opened up the for-profit senior care institution and services industry for investment**, hoping that international investment will help deliver the senior care services needed before the country's old-age dependency gets too great^{xviii}

Most nursing homes in China are one of two types^{xix}:

- **Low-end** (Public Hospitals): providing only basic food and living necessities, lacking medical or entertainment facilities
- **High-end** (Private Hospitals): well-equipped and provide a high standard of service, many homes built recently aim at high-end because they charge more & generate profits faster

Some problems surrounding elderly care in China include:

1. The **demand for private nursing homes** is higher than the supply
 - In 2013, Chinese state media reported that there could be a 100-year wait to get into Beijing's top-ranked nursing home, as some 10,000 applicants were waiting for 1,100 available beds. The nation currently has about 4 million nursing home spots (there are roughly 30 million Chinese aged 80 or older)^{xx}
 - The number of nursing homes in the seaside city of Tianjin grew from 11 in 1990 to more than 136 in 2011^{xxi}
2. **High prices & low profitability**
 - One elderly couple moved into a nursing home that costs them about 10,000 yuan per month – a price the vast majority of Chinese could never afford^{xxii}
 - Less than 20% of nursing homes in China's major cities are profitable, and homes for middle-income seniors fall far short of what is needed^{xxiii}
3. **Obtaining a license**
 - A challenge for foreign senior care operators who want to enter China is obtaining a license to do so, getting a license to open and operate a private hospital in China is an extremely complicated and drawn-out process^{xxiv}
4. **Lack of professional management**

- China's lack of management techniques and elderly care professionals have made it difficult for domestic private nursing homes to provide high-quality services^{xxv}
- A big problem facing elderly care establishments is staff recruitment, shortage of both careers and management personnel as very few people living in nearby cities are working in this industry^{xxvi}

Combined medical and nursing care is considered to be the future trend - not many nursing homes offer both medical and nursing care and residents have to travel back and forth between their nursing home and the hospital when they fall ill^{xxvii}

Many elderly needs arise from the increase in cardiovascular diseases

Cardiovascular disease (CVD) in China revealed a significant increase over the past decades. For men and women aged 35-74 years, **cardiovascular disease is the main cause of death**, with stroke accounting for over 40% of deaths^{xxviii}. In 2012, CVD accounted for 41% of total deaths in urban populations and 39% in urban populations. Ageing and population growth explains half of the increase in CVD over the coming 20 years but studies are trying to identify the key determinants^{xxix}. As China's CVD burden increases, it is urgently required to address these issues^{xxx}.

As shown in *Figure 10*, deaths from CVDs have increased to become the leading causes of lost life:

Figure 10: Changes in the Top 10 Causes of Years of Life Lost in China				
Rank order	1990		2010	Rank order in 1990
1	Lower respiratory infections		Stroke	2
2	Stroke	↗	Ischemic heart disease	7
3	COPD		COPD	3
4	Congenital anomalies		Road injury	10
5	Drowning		Lung cancer	13
6	Neonatal encephalopathy		Liver cancer	12
7	Ischemic heart disease	↘	Stomach Cancer	11
8	Self-harm		Self-harm	8
9	Preterm birth complications		Lower respiratory infections	1
10	Road injury		Oesophageal cancer	18

* Causes highlighted in green are cardiovascular diseases

Source: Adapted from Yong G. Lancet 2013, Oxford Journals

Some contributing factors that cause cardiovascular disease in China include^{xxxi}:

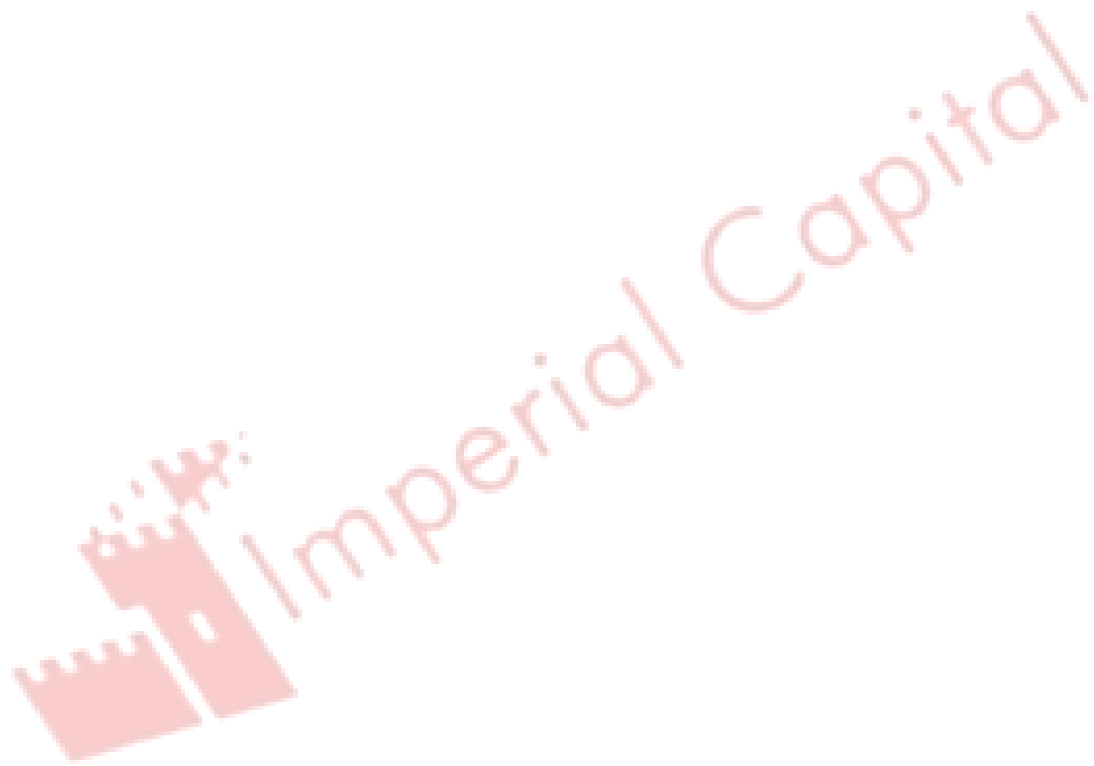
1. **Obesity** (about 18% of the population)
 - The proportion of overweight or obese children from age 17-18 increased 28 fold between 1985 and 2000
2. **Smoking** (about 30% of the population)
3. **Diabetes** (about 3% of the population)
 - China probably has the largest diabetic population in the world
4. **Hypertension** (about 20% of the population)
 - The frequency of hypertension in people ages 20 and older in 2000 was 22.6% in men, and 19.7% in women, and by the year 2025 the frequency of hypertension is predicted

to be 27.7% in men, and 27.0% in women. Considering the enormity of the Chinese population, this is a huge number of patients with hypertension

5. **Decreased exercise** as evidenced by the fall-off in the number of bicycles being used for transportation and the marked increase in the number of automobiles used for transportation
6. **Pollution**
 - Probably related to the increasing number of automobiles.

China is in need of more resources within cardiology

While Chinese cardiovascular specialists and medicine have drastically advanced over the last 25 years, there are still many areas that lack resources. China's huge patient population requires more physicians that are general cardiologists to lessen the increases in CVDs ^{xxxii}



Endnotes

- ⁱ Phoenix Report - Morgan Stanley (Apr 2015)
- ⁱⁱ Phoenix Report - UOB (Apr 2015)
- ⁱⁱⁱ Phoenix Report - UOB (Apr 2015)
- ^{iv} Phoenix Report - UOB (Apr 2015)
- ^v Phoenix Report - Morgan Stanley (Apr 2015)
- ^{vi} Phoenix Report - UOB (Apr 2015)
- ^{vii} http://en.nhfdc.gov.cn/2015-05/22/content_20809067.htm (June 2015)
- ^{viii} Phoenix Report - Morgan Stanley (Apr 2015)
- ^{ix} <http://www.forbes.com/sites/benjaminshobert/2015/07/20/why-chinas-public-healthcare-insurance-advancements-matter/> (July 2015)
- ^x <https://www.travel-impact-newswire.com/2015/07/china-to-launch-national-survey-of-senior-citizens/> (July 2015)
- ^{xi} <http://www.prb.org/pdf10/todaysresearchaging20.pdf> (July 2010)
- ^{xii} <http://www.voanews.com/content/china-rapidly-aging-population-strains-resources/2817406.html> (June 2015)
- ^{xiii} <http://www.prb.org/pdf10/todaysresearchaging20.pdf> (July 2010)
- ^{xiv} http://www.chinahumanrights.org/Messages/feature/2013/52/t20130703_1066970.htm (July 2013)
- ^{xv} http://www.chinahumanrights.org/Messages/feature/2013/52/t20130703_1066970.htm (July 2013)
- ^{xvi} <http://www.prb.org/pdf10/todaysresearchaging20.pdf> (July 2010)
- ^{xvii} <http://www.statista.com/statistics/251917/number-of-beds-in-nursing-homes-for-elderly-in-china/> (Feb 2015)
- ^{xviii} <http://www.scmp.com/article/topics/invest-china/1796323/china-offers-incentives-develop-elderly-care-face-alarming-population-ageing> (May 2015)
- ^{xix} http://usa.chinadaily.com.cn/epaper/2015-07/21/content_21369718.htm (July 2015)
- ^{xx} <http://www.bendbulletin.com/nation/3120181-151/downside-of-chinas-boom-wholl-take-care-of#> (May 2015)
- ^{xxi} <http://www.voanews.com/content/china-rapidly-aging-population-strains-resources/2817406.html> (June 2015)
- ^{xxii} <http://www.mcclatchydc.com/news/nation-world/world/article24783796.html> (April 2015)
- ^{xxiii} http://usa.chinadaily.com.cn/epaper/2015-07/21/content_21369718.htm (July 2015)
- ^{xxiv} <http://www.chinabusinessreview.com/senior-care-in-china-challenges-and-opportunities/> (April 2012)
- ^{xxv} <http://www.china-briefing.com/news/2014/09/10/golden-years-coming-investment-boom-chinas-elderly-care-industry.html> (Sept 2014)
- ^{xxvi} <http://hkmb.hktdc.com/en/1X0A38NP/hktdc-research/Running-an-Elderly-Care-Home-A-China-Senior-Market-Case-Study> (Aug 2015)
- ^{xxvii} <http://hkmb.hktdc.com/en/1X0A38NP/hktdc-research/Running-an-Elderly-Care-Home-A-China-Senior-Market-Case-Study> (Aug 2015)
- ^{xxviii} <http://www.ingentaconnect.com/content/nrc/bcb/2007/00000085/00000002/art00005> (April 2007)
- ^{xxix} <http://eurheartj.oxfordjournals.org/content/ehj/35/38/2621.full.pdf> (2014)
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