

The Development of the Healthcare Industry in China

By

David Wood

President
The ChinaCare Group

Synopsis

This research paper examines the size and growth potential of the Chinese healthcare industry and emphasizes several key characteristics of the marketplace including healthcare expenditures, size and nature of the healthcare facilities, medical staffing, and future trends.

THE CHINACARE GROUP

The ChinaCare Group is the only international healthcare consulting firm in mainland China. Focused on consulting and development activities, The ChinaCare Group brings a detailed knowledge of the economics, practices and structure of international healthcare to its engagements with Chinese clients. It provides its international clients with the detailed knowledge and understanding of the complex Chinese healthcare environment that can only be gained through practical experience. No other firm has this capability.

Corporate Offices:
Suite 2102, SOHO New Town
88 Jianguo Road, Chaoyang District
Beijing, P.R.China 100022

Phone: +86 (10) 8580 6495
Fax: +86 (10) 8580 6499

Company information:
To obtain materials about The ChinaCare Group please contact the Corporate Offices or check the Company website at www.chinacaregroup.com.

Contact details:
For further information please contact enquiries@chinacaregroup.com

About the author

David Wood
President

Mr. David Wood is the President and Senior Partner of the ChinaCare Group. Mr. Wood has held senior management positions in the United States as Assistant Director at the University of California Medical Center, San Diego and Director of the University of Colorado hospital systems as well as Senior Vice President of the Sidney Kimmel Cancer Research Center. Internationally, he has experience as Director of Shaukat Khanum Memorial Hospital in Pakistan as well as President and General Manager of Beijing United Family Hospital and Clinics in the People's Republic of China.
dwood@chinacaregroup.com

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The Largest Healthcare Marketplace in the World

When speaking of many of the sectors of the Chinese economy, observers will frequently cite the remarkable size of a particular sector, quoting statistics that place it at the top or near the top in world rankings. The Chinese healthcare industry is no exception. This is the largest healthcare marketplace in the world and this is true whether you measure it in terms of existing facilities and consumers or in terms of its potential growth.

Table 1: Number of Hospitals and Hospital Beds by Category in China and Beijing, 2003						
	Number			Compositions		
	Total	Non-Profit	For-Profit	Total	Non-Profit	For-Profit
Hospitals						
China	17,703	15,677	2,026	100%	88.6%	11.4%
Beijing	458	370	88	100%	80.8%	19.2%
Hospital Beds						
China	2,265,671	2,175,862	89,809	100%	96.0%	4.0%
Beijing	66,690	63,630	3,060	100%	95.4%	4.6%

Source of Data: China Health Statistical Yearbook 2004

China's level of 2.3 million hospital beds in 17,703 hospitals can be compared to the United States level of .8 million hospital beds in 4,927 hospitals. In a beds per 1,000 population comparison, China has 2.3 beds per 1,000 and the United States 3.3 beds per 1,000 population. If China were to have the same number of beds as the United States per 1,000, the marketplace would grow to an astounding 3.1 million hospital beds. Clearly, either in terms of its current situation or in terms of the potential future growth, this is a major healthcare marketplace. This status would not be true, however, when considered in terms of current healthcare expenditures where China has a fairly typical developing-country profile of healthcare expenditures.

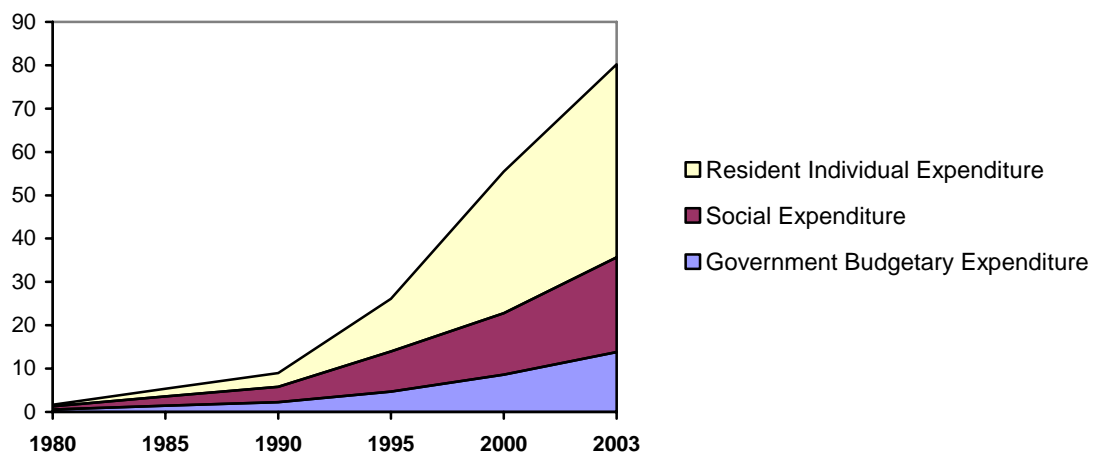
Table 2 : Health Expenditures in China							
	1980	1990	1995	2000	2001	2002	2003
Total Health Expenditure (billion US \$)	1.7	9.0	26.1	55.5	60.8	68.7	80.1
Government Health Expenditure	0.6	2.3	4.7	8.6	9.7	10.5	13.8
Social Health Expenditure	0.7	3.5	9.3	14.2	14.6	18.2	21.9
Personal Health Expenditure	0.4	3.2	12.1	32.7	36.4	40.1	44.5
% of Health Expenditure	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Government Health Expenditure	36.2	25.1	18.0	15.5	15.9	15.2	17.2
Social Health Expenditure	42.6	39.2	35.6	25.5	24.1	26.5	27.3
Personal Health Expenditure	21.2	35.7	46.4	59.0	60.0	58.3	55.5
% of GDP	3.2	4.0	3.7	5.1	5.2	5.4	5.7
Per Capita Health Expenditure (US \$)	1.80	7.90	21.50	43.80	47.60	53.50	62.00
Note: a) Health expenditures in this table are estimated b) The data in this table is calculated at current prices							
Source of data: China Health Statistical Yearbook 2004							

Table 3 : Per Capita Health Expenditures by Region in Mainland China, 2003 (US dollar)	
Region	Per Capita Health Expenditure
North	63.80
Beijing	114.90
Tianjin	75.60
Hebei	63.80
Shanxi	53.70
Inner Mongolia	41.50
Northeast	52.90
Liaoning	56.00
Jilin	52.00
Heilongjiang	50.20
East	49.10
Shanghai	88.70
Jiangsu	45.50
Zhejiang	80.70
Anhui	36.00
Fujian	39.10
Jiangxi	32.40
Shandong	49.30
Central	46.00
Henan	47.10
Hubei	44.80
Hunan	41.60
Guangdong	60.60
Guangxi	29.20
Hainan	36.40
Southwest	45.30
Chongqing	51.90
Sichuan	43.70
Guizhou	32.10
Yunnan	56.40
Tibet	30.20
Northwest	46.30
Shanxi	44.10
Gansu	50.20
Qinghai	51.90
Ningxia	54.80
Xinjiang	41.20
Source of Data: China Health Statistical Yearbook 2004	

Healthcare Expenditures and Growth Potential of Private Market

China's current per capita health expenditure is \$62.0 while the United States' data reflects \$4,737 and Japan, the highest in Asia, reflects \$2,908. While the most evident trend in this data is the growth of total healthcare expenditures over the last 20 years from \$1.7 billion to \$80.1 billion, it should be noted that personal healthcare expenditures are the driving factor in this growth rising from \$0.4 billion to \$44.5 billion while the government spending has only increased from \$1.3 billion to \$35.7 billion. Personal health expenditures now account for over 56% of the total. This data underscores why the Chinese healthcare industry has become the focus of attention both nationally and internationally in the last five years. There is a strong and growing marketplace in healthcare for private consumers.

Figure 1: Increase in Total Healthcare Expenditures (in billion US dollar)



Source of Data: China Health Statistical Yearbook 2004

Healthcare Reform

The high level of attention the market is receiving currently has also been stimulated by two major trends impacting healthcare simultaneously. Internationally, it is recognized that the Chinese healthcare marketplace represents an inviting opportunity for western investors to get into the healthcare sector of the Chinese economy. The large, underserved, Chinese population is viewed as an exciting opportunity to become established in what is clearly the largest healthcare marketplace in the world. With its aged physical plants, inefficiencies, poor management and inadequate patient-service skills, it is believed that China represents an opportunity for western companies to bring the skills, capabilities and knowledge gleaned over 50-years of growth and ever-increasing sophistication in the healthcare sector in the West to China and to realize extraordinary profits.

Simultaneous with this increased awareness of the healthcare market place, the government has issued a series of regulatory changes which open the healthcare marketplace to foreign investment; allow and encourage the creation of private healthcare facilities and specify required improvements in existing healthcare facilities to raise the overall standard of healthcare in the country. Under the broad heading of 'Healthcare Reform', these regulatory changes which were released in 2000 have had a profound effect on the healthcare industry in terms of stimulating interest and discussion; however, there have been few specific and concrete accomplishments to date.

The impact of these two trends, the accelerated growth of the Chinese economy and the efforts to reform the healthcare system, has been a heightened interest in the Chinese healthcare industry. It is anticipated that this will eventually result in the creation of a greatly expanded private healthcare system and will improve the overall services and facilities of the public healthcare system.

Comparison of Chinese Hospital with International Hospital

While it is generally acknowledged that Chinese hospitals are not ‘international’ in their standards, it is not clearly understood in what way they differ. There are a number of aspects of the healthcare marketplace in China today which distinguishes it from other countries. Creating an international standard healthcare marketplace will involve adjusting many of these differences.

a. Physical Characteristics

It is difficult to determine the exact parameters of the size of Chinese hospitals because of the manner in which data is collected and categorized, but it is a fair generalization to say that on the whole, urban Chinese hospitals are significantly larger on the average than their counterparts in international environments. It is typical in cities in mainland China for a large number of the hospital beds in the city to be found in a small number of 1,000 plus bed hospitals. A review of hospital data for Beijing reflects this statement. In Beijing, 36% of the beds in this city of more than 14.5 million residents are found in only ten hospitals for an average of 1,172 beds per hospital in these facilities¹. Table 4 reflects a display of this data. The mean age of these institutions is approximately 35 years although this does not accurately reflect remodeling, new wings and other efforts to upgrade the physical plants.

Table 4: Distribution of High-Quality Hospital Beds by Size of Facility in Beijing			
Bed Size	Hospitals	Total Beds	% of Beijing Beds
1,000 or greater	10	11,724	36%
750 to 999	9	7,850	24%
500 to 749	16	9,711	29%
000 to 499	15	3,657	11%
Total	50	32,942	100%

Despite their large number of beds, Chinese hospitals generally do not have the massive physical plants commonly associated with hospitals of this size in international settings. There are a number of reasons for this but the principal reason is the large number of beds per room. It is not uncommon for Chinese hospitals to place 4-10 beds in a single room. Private and semi-private rooms are rare and usually found only in ‘foreign’ wings or VIP floors. Other factors for the lack of physical size associated with large hospitals include narrow corridors, low ceiling heights, minimal visitor waiting areas, small nursing stations and other variations.

As a result of these factors, Chinese hospitals average approximately 99 square meters of total hospital space per bed² while the international standard is approximately 186 square meters. Thus a 1,000 bed Chinese hospital would be contained in only 99,000 square meters while a similar-sized facility internationally would occupy more than 186,000 square meters³.

While physical plant safety codes for fire and earthquakes, for example, are present, the standards are less rigorous in their definition than found in international environments and loosely applied in practice. Older hospitals, in particular, are deficient as they have been ‘grandfathered’ and often are not required to meet even the less rigorous current codes.

A common feature of international hospitals is the presence of physical codes or requirements for the physical structure which are based either on an accreditation program or government-mandated approval process. Such a process is not found in China and as a result, international standards in door width, ceiling heights, number and type of medical gas outlets per bed, ventilation requirements, airflow and air handling capabilities, and numerous other physical plant requirements are either not met at all in China or are significantly reduced.

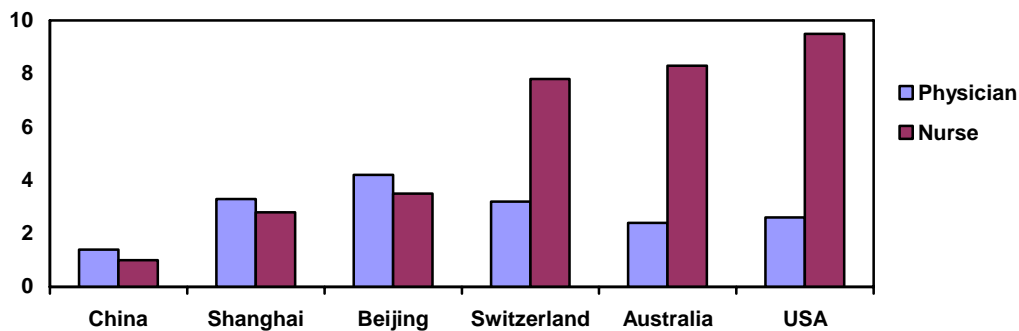
b. Medical Personnel Staffing

In China, hospitals typically have 1.4 employees per bed⁴, including medical staff. It should be appreciated that for all practical purposes, there is no private practice of medicine in China and almost all physicians are employed by the hospital in which they are associated. Adjusting physicians out of this ratio would result in even more striking disparities with resultant ratios in the 1.1 employees per bed range. The international standard of approximately 3 to 4 employees per bed or more reflects a considerably greater capacity for patient service and medical care. Not surprisingly, the lack of efficiency and very low levels of patient service that would be expected in a short-staffing situation, along with the lack of cleanliness which is also a staffing related issue, are the major complaints of Chinese healthcare consumers⁵. While the greater role played by family members in Chinese hospitals somewhat ameliorates this problem, it is clearly impossible for Chinese hospitals to maintain international standards of patient service with these staffing levels.

The international standard of nursing ratios of one nurse to five patients on normal nursing units and one nurse to one or two patients on critical care units is simply not found in Chinese hospitals. In part this is due to usual and common practice where the need for greater levels of nursing is simply not recognized and in part this is due to an extreme shortage of nurses in the country. There is awareness among administrators of the importance of these numbers and visitors to a hospital will often be told that a nurse: patient ratio of 1:5 is maintained but it is very seldom the case.

The attached chart reflects the number of healthcare professionals, physician and nurse, per 1,000 populations in various locales:

Figure 2: Health Personnel per 1000 Population: China Compared to Other Countries



Source of Data: China Statistical Yearbook 2003
 By the Numbers, Modern Healthcare Magazine

Of significance considering the imbalance displayed is the total number of healthcare providers available per bed to provide care. This is significant because while cultural differences may dictate differences in who provides the care, only physicians and nurses are available to provide care. International standards present in other countries reflect a total of physicians and nurses per bed in the range of 3.7 providers per

bed⁶. In China, the medical and nursing staff patient bed ratio of 1:1 is well below international standards. This is similar in Beijing where the ratio is 1.3:1.

Table 5: Physicians and Nurses per 1,000 Population and Per Bed				
per 1,000 population			Per bed	
Physician	Nurse		Physician	Nurse
1.4	1.0	China	0.6	0.4
3.3	2.8	Shanghai	0.5	0.5
4.2	3.5	Beijing	0.7	0.6
2.6	9.5	US	0.9	2.8
Source of Data: Shanghai Statistical Yearbook 2004 China Statistical Yearbook 2003 By The Numbers, Modern Healthcare Magazine				

Future Trends in the Healthcare Industry

There is a strong level of activity in the healthcare industry in China at the present time which is pushing it towards a greater similarity with the international model. The impetus for this movement is not solely from the international community but also from the domestic marketplace where there has been a surge of interest in improving standards. In the Beijing area, there are at present over 14 hospital projects underway which, if all were successful, would add over 8,300 beds to the bed base in the region. While most of the dynamics argue for increased investment in the industry, investors should proceed with caution.

While the facts and statistics make an impressive case for China having evolved into a potential marketplace for international-level healthcare, behind these obvious economic indicators are realities that are little understood and warning signs for the healthcare investor intending to build international standard facilities.

While it is true that there are savings that can be realized in the lower construction costs found in China, these savings are offset by the larger number of square meters per bed in an international standard facility, higher costs for imported medical equipment, for expatriate managers, for expatriate physicians, for imported medications, for architectural fees, for increased physical plant design issues and, for increased staffing levels. These increased costs will when taken together offset the lower labor and construction costs found in China. Thus, it will cost as much, if not more, to open and operate an international caliber facility in China than it would in most international environments.

Unlike most international environments, however, the rate structure in Chinese hospitals has historically been set by the government without regard to realizing a return on capital. Such artificially low levels of hospital charges were necessary to be affordable to the average citizen but have now created an expectation of value or worth for healthcare services that is unrealistically low. There is little, if any, relationship between the actual costs of building and operating a hospital facility and the rates currently being charged.

A typical Chinese hospital operating at 100% occupancy, 365 days a year, and charging normal rates is not capable of generating enough revenues to cover the interest alone on the capital involved in establishing the facility, much less paying salaries of staff, purchasing supplies, or operating the facility. The only recourse available to potential international investors is to set the charges for their facilities at a level which generates an adequate return on their investment in light of its associated risk factors. While

Chinese consumers in several independent surveys have expressed a willingness to pay 2 to 3 times more for hospital services in order to receive improved services, a hospital rate providing a reasonable return for the investment is estimated to be 15 to 20 times greater than currently charged by local hospitals. At this level there is significant consumer price resistance and only the most affluent Chinese consumers would consider themselves as potential patients.

This, then, is the challenge for healthcare in China. Providing a true international healthcare experience requires a rate structure which limits the potential market to only the wealthiest members of society. This is a very competitive niche with limited growth opportunities. Is this an attractive investment scenario?

The answer is a qualified “no, not at this time.” For many healthcare investments, the Chinese healthcare market needs to mature; rates at local hospitals need to rise and the public’s expectation about the value of the improved services they are demanding needs to become more realistic before international investors will be able to make an acceptable return on their investment in China. However, there are opportunities for investment in healthcare in carefully selected niches which balance lower capital costs for construction and equipage with a rate structure providing a reasonable revenue base that would be acceptable to a broader spectrum of Chinese society. These specialty niches typically require less intense medical equipage when compared to a typical, full-service, general acute care facility or depart entirely from inpatient care and focus on the lower cost ambulatory care facilities which have rapidly evolved in the West. In either of these cases, an investor can enter the Chinese marketplace with an acceptable return on their investment and await the market maturation which will inevitably occur.

The ChinaCare Group

The ChinaCare Group established its first office in China in Beijing in 2003. The only international healthcare consulting firm in China, the firm has assisted a number of international clients in their efforts to enter the Chinese healthcare marketplace. The assistance has taken the form of feasibility studies, business plans, market research, licensure, recruitment and other key elements of starting a healthcare business in China. An increasingly large number of the firm’s clients are now Chinese healthcare facilities who wish to upgrade their standards and improve the services they provide.

The ChinaCare Group’s in-depth understanding of how to transfer the principles of international healthcare management in a culturally sensitive and realistic manner to the Chinese marketplace represents the platform on which all of the activities of the firm are based. This is what makes the ChinaCare Group unique. It’s not enough to know the elements and practice of international healthcare. You must know how to make it work in China. Attempting to transfer what works in other international environments without recognizing the uniqueness of China will result in costly failures.

The ChinaCare Group is committed to the healthcare industry of China as it struggles with the challenges of the future.

For further information of this article or The ChinaCare Group, please contact

Suite 2102, Building A, SOHO New Town
No. 88 Jianguo Road, Chaoyang District
Beijing, P.R.China 100022
Phone: +86 (10) 8580-6495
Fax: +86 (10) 8580-6499
www.chinacaregroup.com

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