

Emerging Trends in Chinese Healthcare

The Impact of a Rising Middle Class



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Executive Summary

This report is a reprint of an article that originally appeared in the Journal of the International Hospital Federation in 2008. Because of the high level of interest in this subject, the article has been reprinted here as a reference only. It should be noted that the statistics quoted in the article are from the time period of the original article and have not been updated with 2010 data.

This report examines and illustrates the major phenomenon in the Chinese healthcare marketplace: the explosion of a vigorous and demanding middle class and its impact on the future directions the industry should pursue.

Little is known about the expectations of the middle class regarding their healthcare needs other than through anecdotal or informal sources. The views of the middle-class are shaped by a variety of influences which include exposure through direct personal contact with international healthcare facilities when traveling abroad or indirectly through increased exposure to the entertainment industry with its abundance of hospital and medical dramas. In addition to a general increased international awareness arising from more advanced education, the perspective of the middle class consumer is also shaped by the reality of what is currently available in China and what is realistic to expect. This report addresses this lack of

factual data through an extensive survey of middle class consumers in three major cities in China: Beijing, Shanghai and Chengdu.

The survey took a practical and pragmatic approach to exploring this issue. No attempt is made in this study to explain why the consumer feels the way they do about their healthcare expectations.

Our purpose was simply to outline what expectations the middle class have for the healthcare marketplace in China.

In some respects the results are not surprising. They are the expectations that people have in any country, any where. They expect greater privacy and dignity in the care-giving process. They want to be more involved in the decisions that are made regarding their care. They would prefer a personal, private physician as opposed to a revolving door of faces they will never see a second time. They rely strongly on family and friends to advise them on their choice of provider. They expect clean, well-maintained facilities, efficient systems and courteous personnel.

In other respects, the conclusions are not necessarily expected. They feel strongly that their hospital or provider of care should be located in a residential area. They are willing in some circumstances to pay more for their care in order to meet their

expectations but not significantly more. Despite acknowledging that many of the facets of care they seek such as greater respect for privacy and a generally perceived more positive attitude in the care-giving process are found in foreign physicians, middle class consumers do not express a strong preference for foreign physicians but opt instead for Chinese physicians.

PwC hopes that you will find the report interesting and informative. If you have any questions or comments regarding the report, please contact me or any member of the consulting team.

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Introduction

The dual burdens of developing countries have fallen hard on the population giant China: the fastest rate of population aging in the world accompanied by a dramatic yet inequitable rise of standards of living has led one-fifth of the world's total population towards a diversifying portfolio of chronic diseases. The needs of this population, marked with the rise of a young urban middle class, are currently unmet by the Chinese public hospital system through the lack of access to care as well as dissatisfaction with the services provided. Consequently, this underserved market translates to opportunities for foreign and domestic investors, as urban Chinese grow increasingly affluent and amend their consumer behavior from traditional conservatism to indulgences through self-satisfaction and self-expression.

The emphasis in lifestyle manifests itself in healthcare through the patient's clinical and non-clinical expectations. China's economic transition from a command to a market economy has attained great success in the past quarter of a century, leading to improvements in living standards and unprecedented changes in socioeconomic stratification¹. While growth-led outcomes are remarkable in many aspects, compatible gains have not been observed in some other

areas. Healthcare, in particular, has demonstrated a rising trend of individuals' out-of-pocket payments and a decline of governmental and social responsibilities. For example, health appropriations from the government budget declined from 32.2% in 1978 to 20.4% in 2008². Policies of governance and fiscal decentralization, coupled with increased market competition, have significantly altered the public financing scheme and resource prioritization. As a result of the higher healthcare out-of-pocket expense, consumers or patients have more at risk and therefore, are more demanding and value conscious.

The healthcare investment market is a high stakes game. Entering into the Chinese market, hospital investors/managers must have a strong understanding of the market and its demand for the individual service lines or whether sufficient customers are willing to pay for international standard services. In the context of China's increasingly value-conscious healthcare system, investors who pay attention to the needs and demands of consumers are the ones who gain a significant advantage over competitors. Hospitals must identify the characteristics of the patients they can best serve and attract those people by creating specific value propositions. Hospitals must understand what their customers want and how they want it³.

Through a tri-city survey of consumer healthcare trends conducted by PwC, the reader will have the opportunity to gain an in-depth perspective to target consumers with differentiated services.

¹ Blumenthal, D., Hsiao, W. "Privatization and its discontents: the evolving Chinese health care system." N Engl J Med. 2005 Sep 15;353(11):1165-70.

² Ministry of Health of the People's Republic of China. China Statistics Year Book 2009.

³ Grote, K.D., Levine, E.H. and Mango, P.D. "US hospitals for the 21st century." The McKinsey Quarterly, August 2006. McKinsey & Company: 2006.

Findings:

A growingly affluent middle class in China is increasingly becoming a dominant influence on healthcare

Growing Middle Class

While it is widely accepted and understood that the middle class of China has grown to an extraordinary level since the introduction of economic reform 30 years ago, it is important to understand the full extent of this growth. The economic reforms launched in China in 1978 have resulted in an average annual GDP growth rate above 10% for the past quarter of a century and have thereby led to steadily increased levels of wealth throughout the country. The disposable income of urban households in China in 2008 was 46 times greater than it was in 1978. Real income of urban Chinese grew at an annual rate of 12.2% from 2000 and earns 4 times more than the rural dwellers in 2008⁴. Education, on the other hand, as a variation in the utilization of healthcare services, is on an incline as China has politically committed itself to skills-based growth to fulfill the market's demand of future talents⁵. These steady increases have fueled consumer spending, increased savings, and are projected to continue throughout the rest of the 21st century.

As the economy rises, a burgeoning middle class has also begun to develop in China as the tremendous

increase in wealth has begun to trickle down across all urban sectors. Today, the average annual disposable income⁶ of China's urban households is approximately 45,900 RMB (or US \$6,750) with the upper middle class around 55,600 RMB (US \$8,180)⁷. It should be noted that disposable income stretches farther in China than developed countries. Adjusted for purchasing-power parity, the urban-affluent of China's population, mostly concentrated in the "first China" cities of Beijing, Shanghai and Guangzhou and often considered to be China's prime market, has a spending power nearing global affluence. However, the true size and spending power lies within the emerging young, massive urban middle class.

Making up more than half of the Chinese urban population, the middle class is young (compared to that of most developed markets), well educated (majority college graduates) and is projected by the 2006 McKinsey Quarterly to make up the largest consumer market in the world, commanding an annual amount of 20 trillion renminbi. This unrealized force is widespread and rooted not only in "tier one", but also in the growing mid-size cities of "tier two", such as Xian, Wuhan and Nanjing.

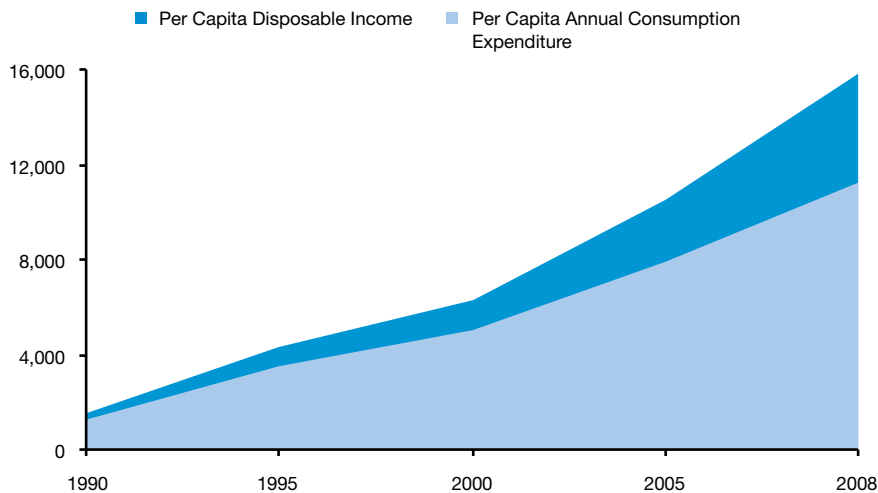
⁴ National Bureau of Statistics of China, 2009. China Statistical Yearbook 2009. Beijing: China Statistics Press; 2009 Sept.

⁵ Ministry of Education of the People's Republic of China. "The 9th 5-Year Plan for China's Educational Development and the Development Outline by 2010." 1996.

⁶ Disposable income = after-tax income.

⁷ National Bureau of Statistics of China, 2009. China Statistical Yearbook 2009. Beijing: China Statistics Press; 2009 Sept

Figure 1 Lifestyle of Average Chinese Urban Household



Findings:
Disposable income is high among middle class Chinese

The financial stability and spending power of the urban middle class may be manifested through material possessions, such as home and automobile ownership. In Beijing, more than 1,000 new cars are registered each day to the streets⁸ while 4 out of every 5 Chinese urbanites have established home ownership⁹. Specifically, 44.2% of the Beijing respondents and 36.0% of the Shanghai respondents revealed that they own a family car in a PwC survey. However, this group currently does not have alternatives when seeking healthcare. Combined with their higher level of education and consumerist attitude, the middle class is another market for top quality healthcare services that has yet to be explored.

Spending Patterns

Since the Chinese adoption of the “Open Door Policy” in 1978, the influx of foreign direct investments into urban Chinese centers has created a channel for multinational corporations to alter the behaviors and lifestyles of Chinese urbanites. The introduction of intense competition, new business practices, new technologies and higher value added jobs to the market has forced domestic companies to enhance and upgrade their performances in order to compete with multinationals. As a downstream effect, the Chinese middle class benefit through greater access to cheaper and higher quality goods. Combined with higher earnings and greater spending power, the average urbanite no longer embraces the traditional conservatism in personal financial management but has instead adopted an evolved mentality which will lead and has led to increases in healthcare expenditures.

⁸ Lu, An. “Beijing sees fast car growth.” Xinhua News Agency. August 16, 2007.

⁹ “China’s high private housing rate reflects contradiction in housing market.” People’s Daily Online. July 4, 2006.

Table 1 Annual Per Capita Basic Condition of Urban Household (2006)

		Disposable Income	Total Expenditure	Food	Clothing	Medical	Transportation/Communication	Utilities
Beijing	Average	2,854	2,118	30.8%	9.7%	8.9%	14.6%	8.2%
	Middle							
	High 20%	3,299	2,350	30.2%	10.2%	8.3%	14.7%	8.6%
	Top20%	5,231	3,360	24.6%	10.2%	7.4%	19.4%	9.1%
Shanghai	Average	2,953	2,109	35.6%	7.0%	5.2%	15.8%	9.7%
	Middle							
	High 20%	3,285	2,259	36.1%	7.3%	5.6%	13.9%	10.0%
	Top20%	6,126	3,761	27.7%	7.7%	5.1%	22.6%	9.3%
Chengdu	Average	1,508	1,378	35.3%	8.4%	6.2%	19.4%	9.7%
	Middle							
	High 20%	1,868	1,652	31.1%	9.0%	6.2%	17.1%	11.6%
	Top20%	2,613	2,613	26.3%	8.7%	6.4%	27.8%	7.4%

Sources: Beijing Municipal Bureau of Statistics, 2007. Shanghai Municipal Statistics Bureau, 2007 Chengdu Statistic Bureau, 2006
 Beijing Statistical Yearbook, 2007 Shanghai Statistical Yearbook, 2007 Chengdu Statistical Yearbook, 2006
 Beijing China Statistics Press, June 2007 Shanghai NBS Survey Office, July 2007
 Beijing China Statistics Press, July 2007

A decade long nationwide survey conducted by the Gallup Organization from 1994 to 2004 has revealed changes in the Chinese consumer’s mindset. No longer worried about being able to put food on the table, the increased income and standard of living have led to the emergence of the Chinese “me” generation. The youths and affluents are now motivated by self-satisfaction and self-expression as opposed to the traditional “give in service to society” collectivist mindset. Products now need to cater to emotional as well as physical needs. Reflected in spending patterns (Table 1), the Chinese spend the largest percentage of their wages on food

(including dining out), followed by communication/transportation and then utilities (water, gas and electricity), indicating a trend of favoring lifestyle satisfaction over pragmatism.

Other Social Factors

Furthermore, the shift of the social expenditure burden from public to private sources as well as population aging strengthened China’s transition towards increasing healthcare demands. The economic reform of the eighties came along with a set of market-based policies that gradually shifted social expenditures from public subsidies

to out-of-pocket expenses, therefore increasing private burden on healthcare. Responding to the lack of a public medical safety net, a new incentive for saving appeared. A survey completed by McKinsey revealed that the top two drivers for the high Chinese saving rates are their concerns for healthcare and retirement. According to China’s National Bureau of Statistics, in 2005, the average Chinese urban household places about 24% of their disposable income into savings. For households with elderly individuals, the burden is greater as the threshold for measuring large private health expenditure risk has risen from 1% in 1995 to 7% in 2005¹⁰.

¹⁰Chamon, M. and Prasad, P. “Why are Saving Rates of Urban Households in China Rising?” International Monetary Fund Working Paper. June 2008.

China's population aging, one of the fastest country rates ever recorded, also compounds the equation and catalyzes the need for higher health expenditure. Improvements in public health and living standards have led to the dramatic increase in life expectancy from 40.8 to 71.5 between 1955 and 2005. However, chronic health problems are positively correlated with age. With approximately 102 million elderly (aged 65 and above), or over 1/5 of the world's elderly population¹¹, and increasing exposure to health risk factors such as smoking, high-fat and high-calorie diets, China is heading for a population disease profile that will be high in cardiovascular disease, cancer and chronic respiratory disease.

Faced with the need to be able to pay for anticipated medical care of the growing disease prevalence profile, urbanites have now prepared

themselves with the means to spend a greater percentage of their incomes on higher quality healthcare. Conclusively, McKinsey projected at lowest an 11% of annual private health expenditure growth by urban consumers over the next two decades.

Today's Chinese consumer is neither complacent nor compliant, and lives in an environment where rapid change is the norm. China's growing urban middle class population is demanding and will soon demand a customer-friendly healthcare environment, higher quality services and the opportunity to receive patient-centered healthcare. As a result, China's healthcare system will need to accelerate its reforms to meet the special needs of the growing urbanite population. Currently, however, a large gap exists between the demand for these services and their availability.

Findings:

Changes in the savings rate of middle class Chinese are motivated in part by changes in expectations regarding healthcare

¹¹ Kaneda, T. "China's Concern Over Population Aging and Health." Population Reference Bureau. June 2006.

Findings:

Public hospitals dominate the healthcare marketplace while private facilities are generally smaller with more limited service offerings

Current Chinese Healthcare System

China's current healthcare system is primarily composed of large public non-profit hospitals. These hospitals are supplemented by approximately 4,000¹² smaller private for-profit hospitals. China's public medical institutions are generally less sophisticated in their management systems and have a weak organizational structure, simple financial management and limited planning and organizational control. Currently, most public hospitals are not yet true corporate bodies with self-controlling and self-stimulating mechanisms. Moreover, they are not operated under the normal business principles found in international hospitals. Therefore, their capability to respond to market and social demands is somewhat limited. The healthcare system structure is such that they are not sufficiently aware of the need to strive for competitive and quality service. Many medical institutions in China have lower staffing levels and operate at low efficiency than that found in international environments. This inefficiency and lack of market responsiveness limits the ability of the hospitals to provide access to affordable quality healthcare.

The physical environment of these public hospitals is often characterized by inadequate hygiene, non-patient friendly design and a lack of privacy. These factors also contribute to the lack of satisfaction among the middle class consumer-driven patients.

Chinese are increasingly demonstrating a preference for international-style medicine with its greater focus on meeting the needs of the patient. As incomes rise under a predominantly fee-for-service system, patients with income power are able to choose more costly joint-venture healthcare facilities. These private hospitals, most of which are foreign-owned and joint-venture, have the capability of offering the services that affluent patients demand but are usually operated on a small-scale. Few foreign and joint-venture healthcare facilities have been able to move beyond providing outpatient services and limited inpatient services. Indeed, the average joint-venture hospital in China has less than 50 beds. As a result, these facilities lack economies of scale as well as economies of scope and, as a result, there is not enough capacity to meet the increasing healthcare needs of the growing affluent population.

¹² Ministry of Health of People's Republic of China. China Statistics Year Book 2009

Governmental Efforts

The demand for better health services by an increasingly affluent population is driving China's healthcare market to modernize. In response to this demand, the Chinese government is encouraging a competitive mechanism to improve the quality and efficiency of healthcare services. In 2000, the Ministry of Health and then the Ministry of Foreign Trade and Economic Cooperation issued their Interim Measures for the Administration of Sino-foreign Equity Joint and Cooperative Joint Medical Institutions. These regulations provoked foreign interest in investing in China's medical services business. Based on these regulations, foreign capital are able to account for a maximum of 70% of the investment in a joint venture hospital. As a result of these government initiatives, a business atmosphere which encourages the creation of high quality healthcare facilities has been created.

Consumer Survey

To further understand the trends of middle class Chinese attitudes towards healthcare issues, a poll was conducted in the cities of Beijing, Shanghai and Chengdu by PwC in which more than one thousand urban middle class residents were interviewed. Given study parameters, market trends

rather than absolute figures are indicated. Middle class Chinese were targeted for surveys through the selection of interview sites such as high end office buildings and shopping malls.

To facilitate a high response rate, the survey was conducted in person. The questionnaires took approximately five minutes to complete, and respondents were guaranteed confidentiality.

Survey Sites

The People's Republic of China (PRC) is the most populous country in the world and has the world's second largest economy in terms of purchasing power parity. With permanent member status in the United Nations Security Council and the Asia-Pacific Economic Cooperation, the PRC is considered to be an emerging superpower.

The cities of Beijing, Shanghai and Chengdu were selected for their abilities to represent present and future Chinese consumer attitudes. Beijing and Shanghai are established, "tier one" metropolitans with sophisticated consumers; whereas Chengdu, recognized as a thriving "tier two" city, is a governmental-designated center for Southwest China. For more background information regarding the cities, please refer to the Appendix.

Findings:

To further understand the trends of attitudes among middle class Chinese towards healthcare related issues, PwC conducts in-depth surveys in major Chinese cities

Findings:

Populations surveyed represent the target urban middle class Chinese demographic: young, well-educated and generating significant income

Demographic of Surveyed Population

Beijing

- Of the surveyed Beijing population, 53.8% are men and 46.2% are women.
- The surveyed population mostly consists of working individuals, with almost half of the surveyed population between the age group of 30 to 39, followed by 29.2% at 40 to 49 and then 18.8% of 20 to 29.
- More than half of the surveyed population has a monthly household income between 10,000 to 19,999 RMB and one-quarter with a household income of greater than 20,000 RMB. In 2006, 35.0% of the Beijing population has a 3-person household and 30.5% is composed of 2-person per household¹³.
- Beijing has a relatively well educated population, with 44.0% of the surveyed population as bachelor's graduates followed by 17.2% with master's degrees. Only 1.6% of the group is doctorate degree recipients.

Shanghai

- Of the surveyed Shanghai population, 66.6% are men and 32.0% are women (1.4% did not respond).
- 86.0% of the surveyed population is between the ages of 20 to 39. About 9.7% of the population is older at the age group of 40 to 49.
- Shanghai's overall surveyed population is at a higher income level compared to other cities as 44.0% generate an individual income between 10,000 to 19,999 RMB per month, followed by 40.0% at 5,000 to 9,999 RMB per month.
- Of the surveyed population, 95.4% are college graduates. Shanghai has the most well educated sample group as 9.7% of the population has a doctorate degree, 38.6% with master's degrees and 47.1% with bachelor's degrees.

Chengdu

- Of the surveyed Chengdu population, 53.9% are men and 46.1% are women.
- Chengdu has an even age distribution as 35.3% of the sample are between the ages of 40 to 49, 35.3% between the ages of 30 to 39 and 29.4% between the ages of 20 to 29.

¹³ Beijing Municipal Bureau of Statistics. 2007. Beijing Statistical Yearbook 2007. Beijing: China Statistics Press; 2007 June.

- The largest income group in the Chengdu surveyed group is at 60.8% with a monthly individual income between 5,000 to 9,999 RMB, followed by 21.6% of the group making between 10,000 to 19,999 RMB per month.
- The highest degrees earned by 49.0% of the Chengdu sample group are high school diplomas, followed by 41.2% with bachelor's degrees.

Current Health Provider of Choice

Ownership When asked about the hospital most frequented upon need, the top ten identified providers in each city were broken down by ownership to illustrate public hospital dominance. Of the top ten hospitals chosen by each sample population, 100% of the selections were state-owned hospitals in all three cities.

Contextual Factors To gauge each population's initial reaction on factors which will influence their choice of hospitals, a multiple choice question of "Why do you choose your hospital of choice?" was asked.

Beijing

- The top reasons in choosing a hospital of choice are the hospital's technical qualifications (58.4%) and insurance coverage (53.8%).
- The lowest priority items were personnel attitude (0.5%) and the facility's environment (0.3%).

Shanghai

- Of the surveyed Shanghai population, the convenience of the hospital's location (66.3%) was the most important factor in choosing a hospital, followed by the hospital's technical qualifications (39.3%).
- The lowest priority item was the length of waiting time (4.4%).

Chengdu

- Chengdu residents placed the hospital's technical qualifications (78.4%) as the top qualifier in choosing a hospital, followed by location convenience (65.7%).
- The lowest priority items were reasonable pricing (6.9%) and length of waiting time (9.8%).

Findings:

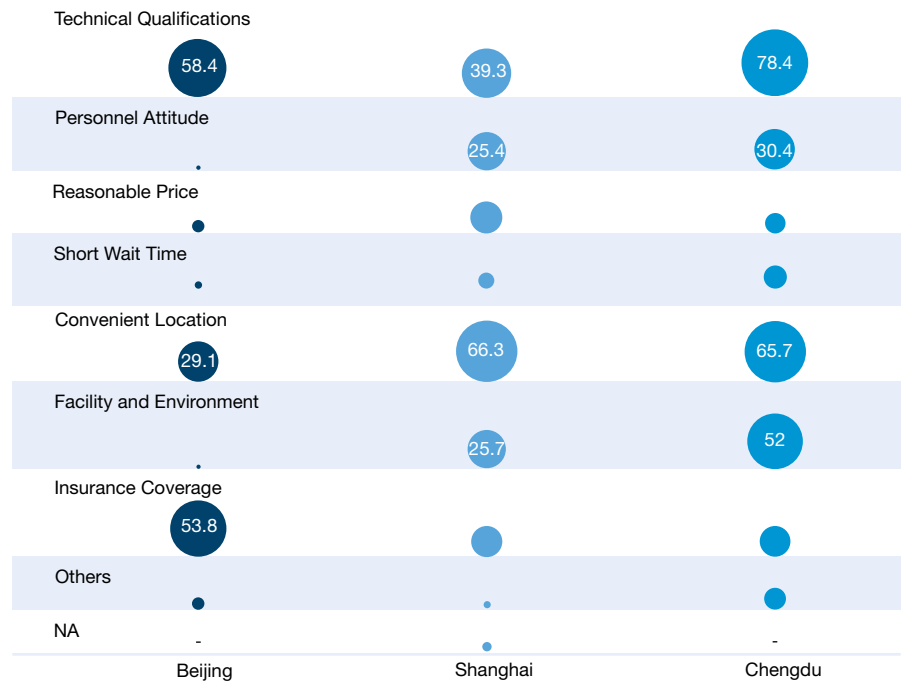
Location and technical qualifications of staff are key determinates in the provider selection process

Findings:

In selecting a hospital, a Chinese consumer places great value in the opinion of friends and family

Survey responses indicate a strong market for the development of specialty hospitals

Figure 2 Factors Influencing Hospital of Choice (Multiple Choices, %)



Social Factors Barriers exist in shopping for medical services. Therefore, people tend to either stick with what they have or they will strongly rely on friends and family referrals. Across all disciplines, studies have recognized family and friends as a significant social factor in selecting medical care. To assess this impact on middle class Chinese, survey populations in Shanghai and Chengdu were asked if their family members choose the same hospitals as they do.

Shanghai

- Family and friends is a significant factor in health seeking behavior as 69.6% of the Shanghai surveyed population stated that they do choose the same hospital as their family and friends.

Chengdu

- With 85.3% of the Chengdu residents making the same hospital choices as their friends and family, family and friends has proved to be an overwhelming force in health seeking behavior.

Medical Need In utilization of medical care, recognition of need and the availability of providers were identified by as the core drivers¹⁴. Posed in a fashion to identify possible market niche and gauge demand, the question of “when necessary, do you prefer to seek care in the specialty department of a general hospital or visit a specialty hospital?” was asked.

Beijing

- Preferring specialized care, 54.2% of the Beijing sampled population would choose to seek care in a specialty hospital as opposed to the 35.4% who would choose to visit a specialty department of a general hospital.

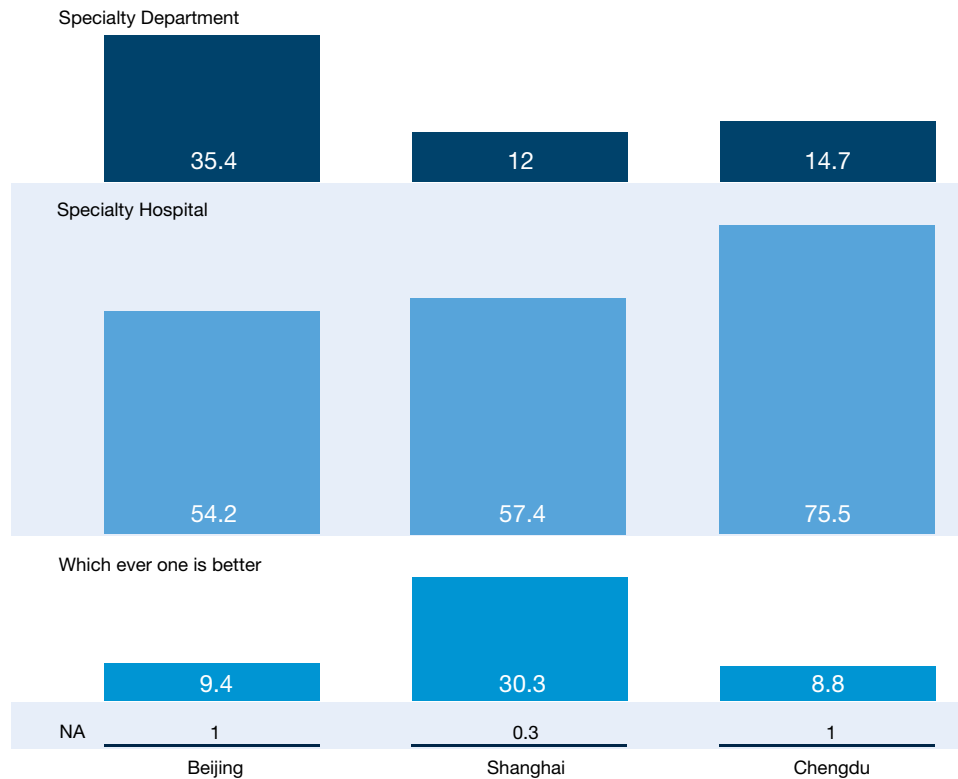
Shanghai

- Seemingly more open to options, 30.3% of the Shanghai group indicated that they will seek care in which ever is the better provider, while 57.4% still choose to go to a specialty hospital.

Chengdu

- Chengdu residents responded overwhelmingly in favor of specialty hospitals at 75.5%, while 14.7% of the respondents would choose to go to a specialty department.

Figure 3 Preferences in Specialty Care (%)



Satisfaction

Healthcare is a multi-dimensional service. To improve this service, ratings or measurements based on experience are essential. Often described as a subjective measurement, satisfaction in healthcare is measured interdependently with outcomes of care and is a reflection of the patient’s physical comfort; emotional support received during the process of care; and respect for

his/her preferences (involvement in the decision-making process). Relevance in satisfaction is significant in that 1) satisfaction enhances quality of care, as a satisfied patient is more compliant and willing to participate actively in their treatment regimens; and 2) it is one of the strongest determinants in an individual’s willingness to recommend hospital services to others. On the other hand, one must keep in mind that satisfaction can be measured only against individuals’ expectations, needs or desires.

¹⁴ Anderson, R. “Revisiting the Behavioral Model and Access to Medical Care: Does it Matter?”, *Journal of Health and Social Behavior*. 1995. 36(1): 1-10.

Findings:

Consumers are generally satisfied with the services received in their hospital of choice

In Shanghai, however, 49.1% of the surveyed Chinese middle class claimed to be dissatisfied with their current hospital of choice

Reasons for dissatisfaction include long waiting lines, poor personnel attitude and poor physical environment

Quality of medical care is not a reason for dissatisfaction in survey responses

Satisfaction with Current Hospital of Choice

To assess the satisfaction of middle class Chinese with their current choice of healthcare providers, the city-wide market survey asked each respondent if they are “satisfied with the services you received at your hospital of choice?”

Beijing

- Beijing responded with significant satisfaction, as 74.0% of the surveyed population responded that they are satisfied with the services received. 26.0% stated that they were not satisfied with their provider of choice.

Shanghai

- Shanghai responded with mixed results as 49.7% of the surveyed population stated they are satisfied with the services received and 49.1% claimed to be dissatisfied with the healthcare services.

Chengdu

- Chengdu responded with 75.5% of the population satisfied with the services received and 14.7% dissatisfied. However, 9.8% of the population did not respond to this question.

Dissatisfaction with Current Hospital of Choice

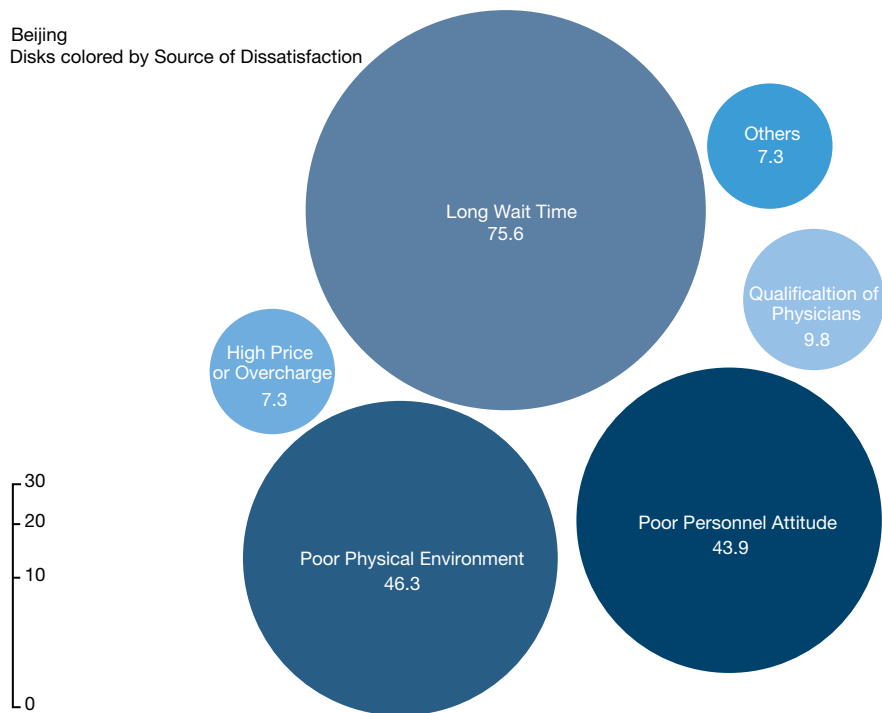
As a follow-up to the “satisfaction with the hospital of choice” question, respondents were then asked to state the reason why if they were not satisfied with the services received. Respondents were allowed to select multiple reasons to identify all possible causes.

Beijing

- Of the 26% dissatisfied with their hospital of choice, 75.6% identified long waiting time as a factor, 46.3% was due to poor physical environment and 43.9% due to poor personnel attitude.

Figure 4 Source of Dissatisfaction: Beijing (%)

Beijing
Disks colored by Source of Dissatisfaction



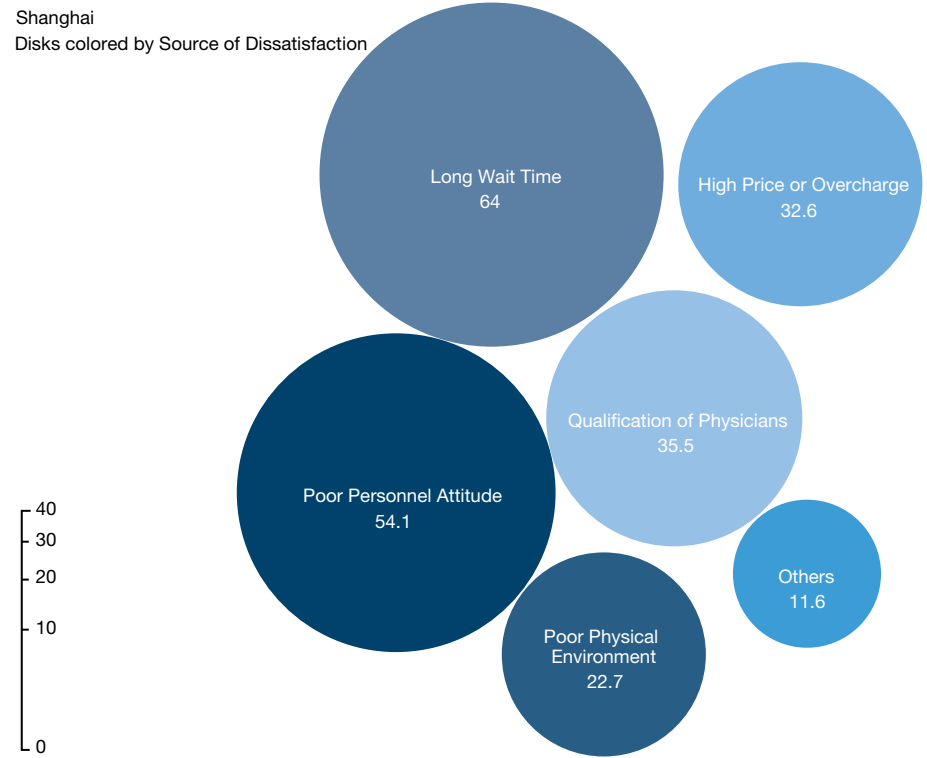
Findings:

Survey results are generally consistent from city to city

Shanghai

- Of the high 49.1% of the Shanghai sampled population who are dissatisfied with their hospital of choice, 64.0% identified long waiting time as a factor, 54.1% was due to poor personnel attitude and 35.5% due to qualification of physicians.

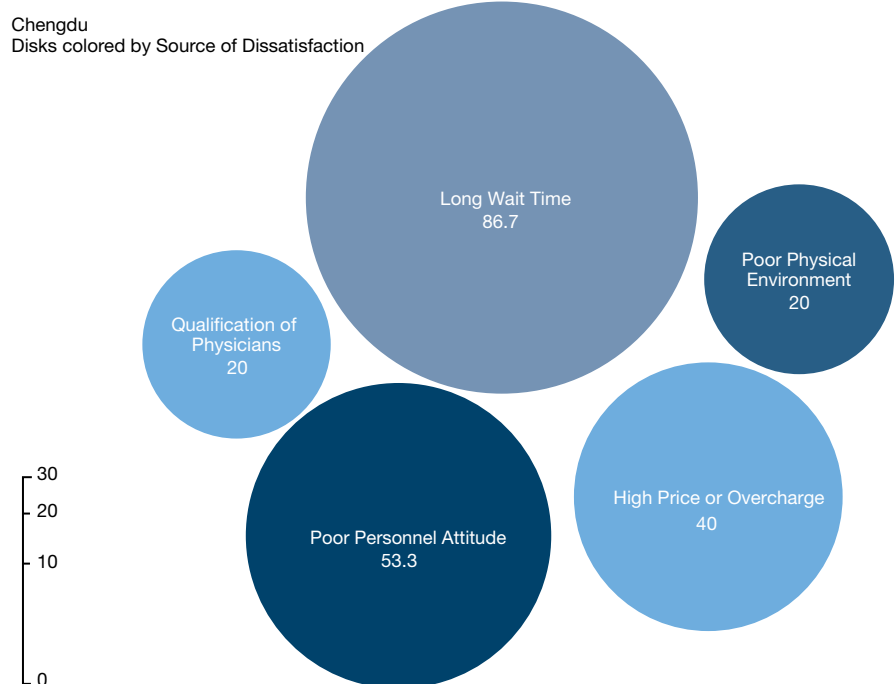
Figure 5 Source of Dissatisfaction: Shanghai (%)



Chengdu

- Of the 14.7% dissatisfied with their hospital of choice, 86.7% identified long waiting time as a factor, 53.3% was due to poor personnel attitude and 40.0% due to high price or overcharge of services.

Figure 6 Source of Dissatisfaction: Chengdu (%)



Perceptions of Foreign Joint Venture Institutions

Perception contributes to social norm, which acts as a contextual predisposing element in determining the utilization of health care services. Perceptions of foreign joint venture healthcare institutions, or private hospitals, were specifically emphasized in this study due to its unique impact on the mindset of the Chinese middle class. As a communist nation that has recently adapted to the market economy, many Chinese citizens have difficulties with embracing privatization of public services. Healthcare privatization, needless to say, impacts the very core of the middle class Chinese livelihood. Therefore in order to accurately assess consumer behavior in light of market potential, perceptions of joint venture institutions must be addressed.

Familiarity Familiarity with joint ventures was assessed as each individual was asked if he/she has been “to a joint venture hospital or clinic in China?”

Beijing

- Beijing ranked lowest amongst all three cities in terms of familiarity with joint venture institutions, as only 7.6% of the respondents said they have been to a joint venture hospital or clinic.

Shanghai

- Shanghai ranked highest amongst all three cities in terms of familiarity with joint venture institutions, where 34.0% of the respondents said they have been to a joint venture hospital or clinic.

Chengdu

- Chengdu ranked second amongst all three cities in terms of familiarity with joint venture institutions, as 11.8% of the respondents said they have been to a joint venture hospital or clinic.

Findings:

Few Chinese middle class have experience in international joint venture healthcare facilities

Findings:

Joint venture facilities are perceived to have greater technical expertise, better attitudes among employees and better physical environment

Foreign Joint Ventures vs. State-Owned Institutions Respondents were then asked to compare their beliefs or perceptions of joint venture facilities to state-owned institutions. Three areas which contribute to the overall quality of care were address: technique, personnel attitude and hospital facility (environment). Respondents were asked to identify if they perceive joint venture or state-owned as the better provider, or if they felt no difference between the two institutions.

Beijing

With only 7.6% of the survey population claiming familiarity with joint venture hospitals, the Beijing population has little familiarity with private institutions.

- In assessing its technical capabilities, 60.5% considered joint ventures to have better techniques.
- 100% of the respondents expect joint ventures to have better personnel attitude than state-owned institutions.
- Finally, 71.1% of the population believes that joint ventures should have better physical environments.

Shanghai

- 34.0% of the Shanghai survey population has had the joint venture hospital experience and perceived less difference between the two when compared to Beijing.

- In assessing its technical capabilities, 58.3% considered joint ventures to have better techniques whereas 31.3% of the population viewed no difference between the two.
- 78.3% of the respondents expressed the belief that joint ventures have better personnel attitude than state-owned institutions, while 15.7% stated indifference.
- Finally, 82.6% of the population believes that joint ventures should have better physical environments.

Chengdu

- Chengdu's population provided mixed response as only 11.8% of its survey population has experienced care at joint venture institutions.
- In assessing its technical capabilities, Chengdu expressed a high degree of indifference as 33.3% of the population felt there was no difference between the technical capabilities between joint venture and state-owned hospitals.
- 83.3% of Chengdu believes that joint ventures should have better personnel attitude.
- Finally, 41.7% of the respondents considered joint ventures to have a better hospital environment while 50.0% expressed indifference between the two.

Physician Ethnicity Preference

Further shaping the perceptions of private institutions, respondents were asked identify their preferences in physician ethnicity in hope to isolate values in seeking care. This question broadens the survey scope by addressing the impact of culture in seeking care. Respondents were allowed to select multiple reasons to identify all possible causes.

Beijing

- Despite the lack of exposure to joint venture health institutions and its strong Chinese roots, Beijing’s results indicated that 61.0% of the population does not have a preference for either foreign or domestic

physicians. However if one was to choose, 26.4% of the Beijing respondents would opt for a Chinese physician over an expatriate.

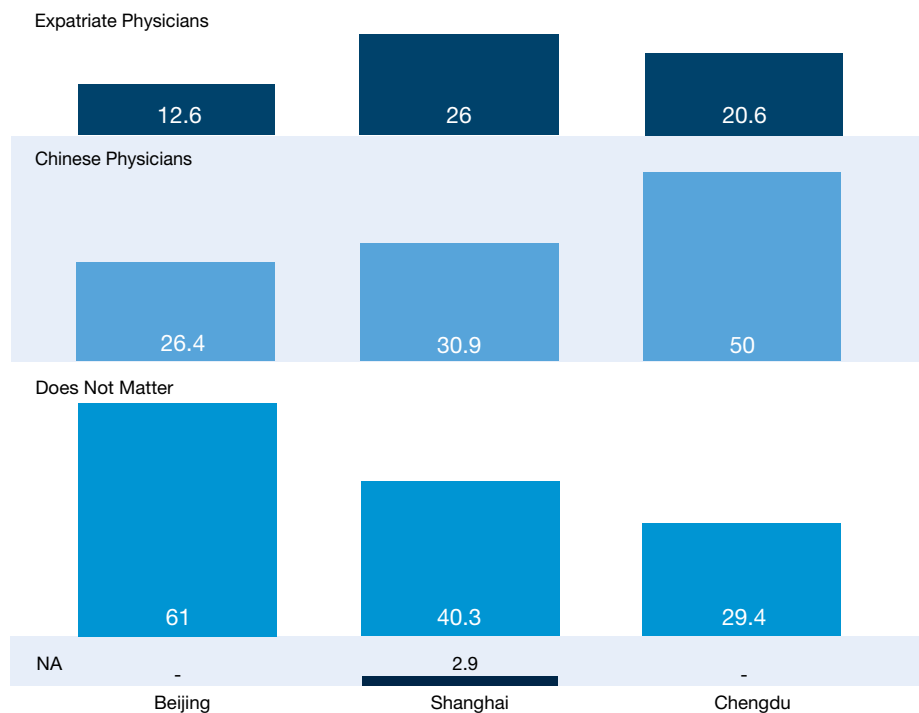
- When asked why one would prefer expatriate physician in receiving care, the dominating reason (87.5%) was that expatriate physicians have better attitudes, followed by respect for privacy at 30.2%.
- When asked why one would prefer Chinese physicians in receiving care, 75.0% chose no communication barrier followed by no cultural differences (13.6%).

Findings:

Expatriate physicians are perceived to have a better attitude in dealing with their patients and a greater respect for the privacy of the patient

Most middle class Chinese express no preference for expatriate or Chinese physicians

Figure 7 Physician Preference in Joint Venture Institutions (%)



Findings:

Communication barriers and cultural differences are issues with expatriate physicians

Location plays a significant role in hospital selection

A majority of Chinese urban consumers prefer hospitals in a residential setting

Shanghai

- As the most internationalized city of China, Shanghai's results indicated a high degree of indifference as 40.3% of the population does not have an ethnicity preference for physicians and only 4.9% more would choose a Chinese physician over an expatriate physician.
- When asked why one would prefer Chinese physicians in receiving care, 57.4% chose no communication barrier followed by no cultural differences (49.1%).

Chengdu

- At 50.0%, Chengdu was the only city with a strong preference for Chinese physicians over expatriates
- When asked why one would prefer expatriate physician in receiving care, Chengdu believes that expatriate physicians possess a higher level of expertise (57.1%), followed by better attitude at 47.6%.
- When asked why one would prefer Chinese physicians in receiving care, 72.6% chose no communication barrier followed by no cultural differences (35.3%) and higher level of expertise (35.3%).

Hospital Preferences

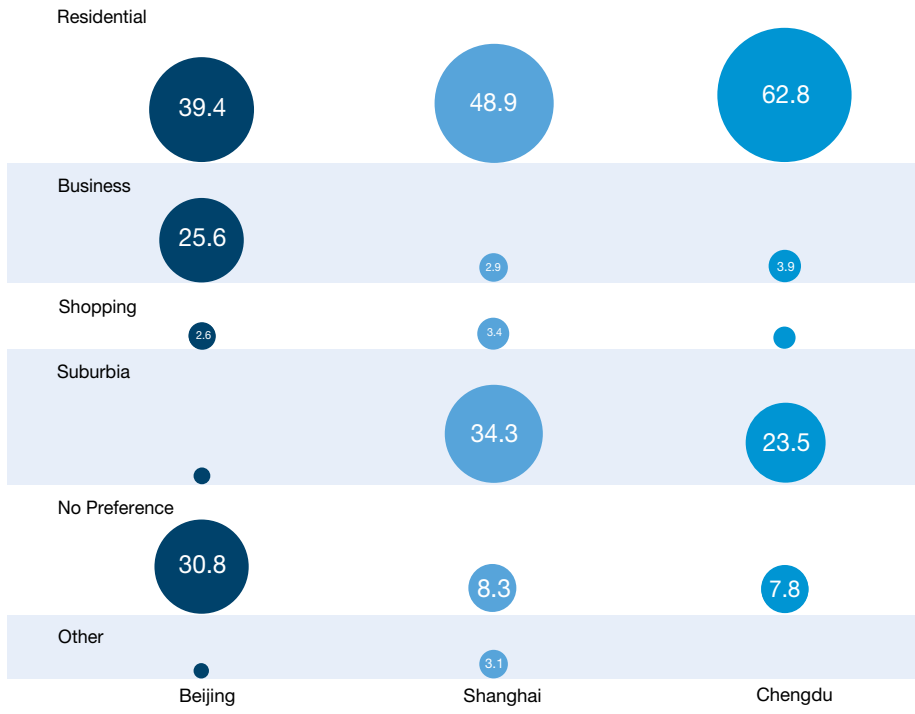
Upon addressing the difference between joint venture hospitals and state-owned healthcare institutions, respondents were then asked a series of questions to describe their personal preferences in a hospital. This section allowed the survey to shape a Chinese middle class' demands and needs of a hospital.

Location Personal preferences of hospital location were addressed through the questions of "does the hospital's surrounding neighborhood make a difference to you?" followed by "what type of environment do you think a hospital should be located in?"

Beijing

- With a strong interest in hospital surroundings, 98.0% of Beijing respondents claimed that the hospital's surrounding neighborhood does matter.
- 39.4% of the preference indicates that a hospital should be located in a residential area, followed by no preferences (30.8%) and business district (25.6%).

Figure 8 Neighborhood Preference (%)



up with a multiple choice question of “What other service do you feel that a hospital should provide?”

Beijing

- In terms of auxiliary services, 75.2% of the Beijing population felt that a hospital should provide restaurant services and 72.6% recommended a rehab center.

Shanghai

- Shanghai’s priorities in medical specialties of importance were reflected through the ranking of: cardiovascular, oncology, cardiology, dental, OBGYN and others.
- Rehab center was the first recommended with 69.4%, followed by flower’s shop, children’s play area and fitness center.

Chengdu

- Chengdu ranked the medical specialties of importance in the order of: cardiovascular, cardiology, oncology, dental, OBGYN and others.
- 70.6% recommended restaurant first, followed closely by rehab center, flower shop and children’s play area.

Shanghai

- Shanghai has also expressed strong interest in hospital surroundings, as 95.7% of the respondents stated that the hospital’s surrounding neighborhood does matter.
- 48.9% of the preference indicates that a hospital should be located in a residential area, followed by suburbia at 34.3%.

Chengdu

- At 83.3%, Chengdu expressed moderate interest in hospital surroundings while 16.7%

believes that the location of the hospital does not make a difference.

- 62.8% of the preference indicates that a hospital should be located in a residential area, followed by suburbia at 23.5%.

Service Availability

Respondents were then asked to identify services which they feel should be available in a hospital. The concept of service was inclusive of medical services and auxiliary services. First, the sampled population was asked “What specialty would be important to you in your hospital of choice?” Followed

Findings:

Restaurants and rehabilitation centers were the two supplemental hospital services most demanded by urban Chinese middle class

Figure 9 Auxiliary Services: Beijing (%)

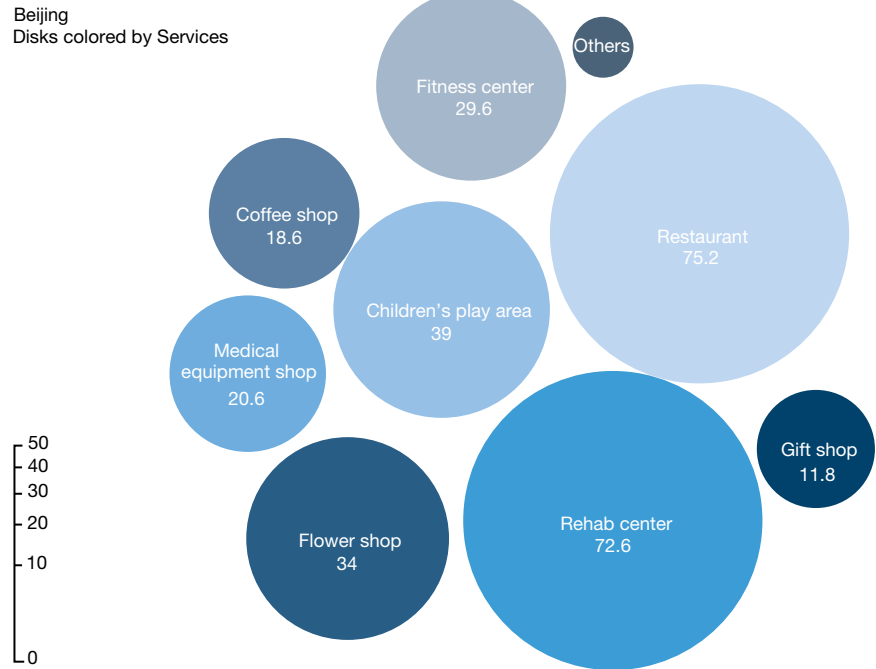


Figure 10 Auxiliary Services: Shanghai (%)

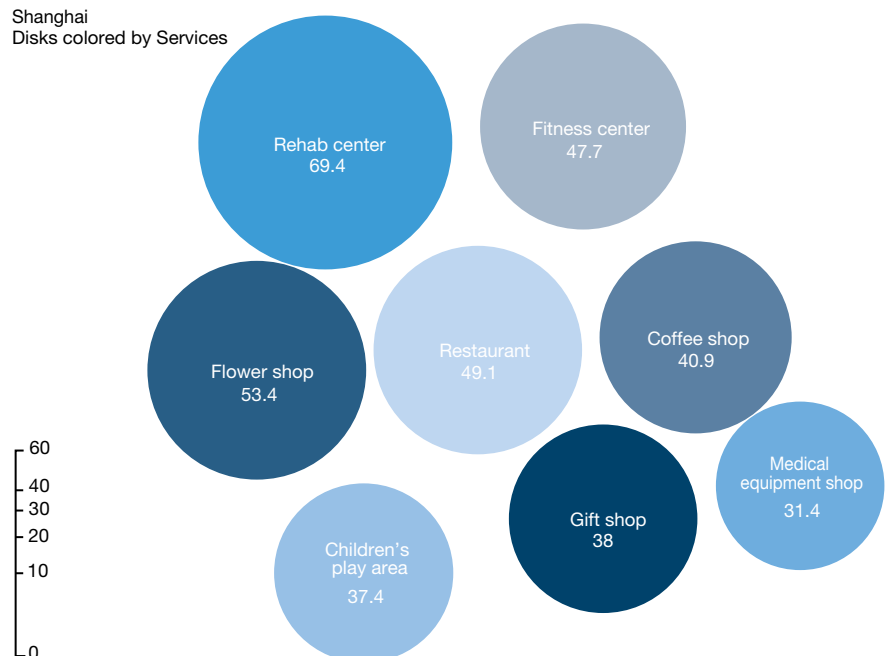
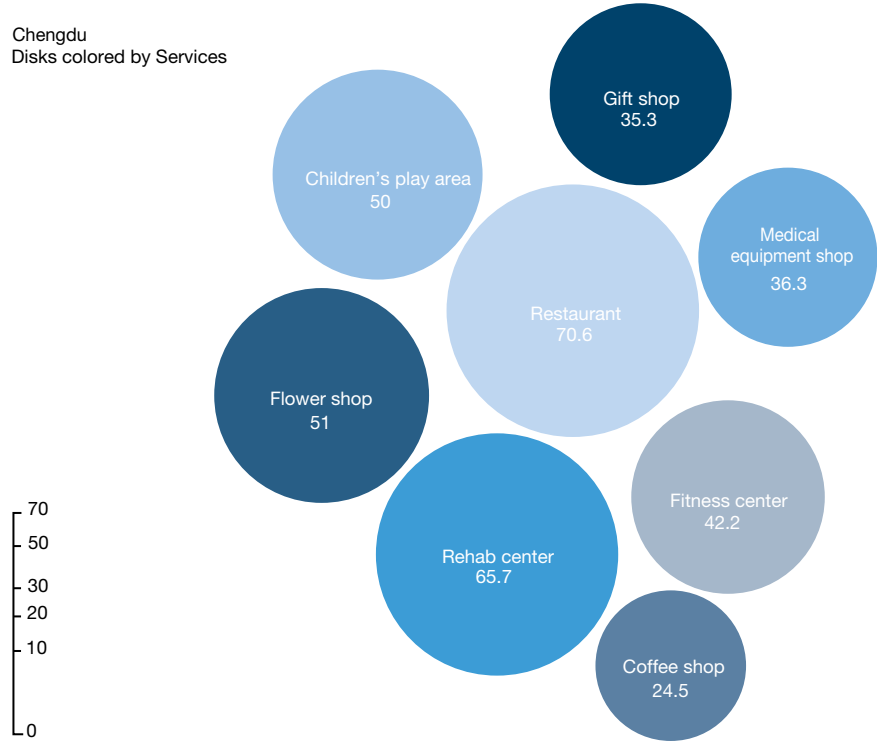


Figure 11 Auxiliary Services: Chengdu (%)

Chengdu
Disks colored by Services



Findings:

Chinese middle class consumers overwhelmingly prefer greater privacy, a private physician and personal involvement in their healthcare decision making

Personalization of Care

Personalization of care involves the tailoring of healthcare processes to individual patient needs. Often overwhelmed with patient demands, the Chinese public hospitals have little resources and thus are unable to address in a meaningful way to patient values and needs. As a result, patients receive limited privacy, little personalized attention and poor continuity of care. As the private industry move in to fulfill this niche, stakeholders must identify and fulfill this vacuum.

Sampled populations were first asked “how would you like to receive your medical test results?” to address preference for privacy; to gauge preferences for continuity of care, respondents were asked “would you like to have a personal health advisor (family physician)?” Finally, willingness to engage in health care decision making was evaluated through the question “would you like to receive healthcare information or newsletters from your doctor or hospital via email?”

Beijing

- Privacy and personalization of care was valued by Beijing as 60.4% of the surveyed population prefers to receive their tests results in person from physician.

- While an overwhelming number of respondents preferred to have their own personalized health advisor, 16.2% of Beijing felt it would be unnecessary.
- 76.9% of Beijing respondents chose to play an active role in the decision making process of health care as they preferred to receive healthcare information or newsletter from their physician.

Shanghai

- While privacy and personalization of care was valued in Shanghai, out of the three cities, Shanghai respondents were more open to receive test results from various forms of communication.
- At 90.6%, Shanghai placed the highest preference on having one’s own personal physician or health advisor.
- 76.9% of Shanghai chose to play an active role in the provision of care as they preferred to receive healthcare information or newsletter from their physician.

Chengdu

- Out of the three cities, Chengdu places the highest priority in personalization of care and chose not to receive results in other methods of communication.

Pricing Transparency As an essential component of care, financial transparency enhances the patient’s decision making capability, thus contributing to satisfaction. In identifying preferences in a hospital experience, respondents were asked what their charging preferences are as a measurement for financial transparency.

Beijing

- With 90.2% of the respondents preferring to be charged by item as oppose to 2.8% of charging as a package, Beijing residents placed high value in financial transparency, thus indicating their desire to be engaged in the process of care.

Shanghai

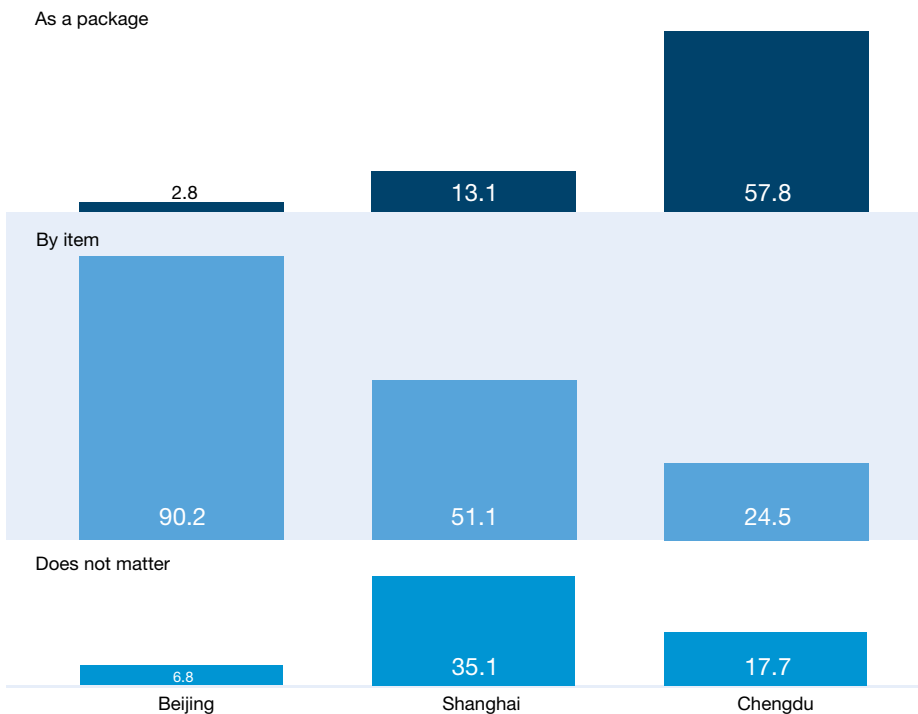
- While 51.1% of the Shanghai sample population prefers to be charged by item, a significant amount of Shanghai residents (35.1%) indicate no preference in financial transparency.

Chengdu

- Chengdu is the only city out of the three which prefers to be charged as a package rather than by item. This may reflect the Chinese familiarity with package prices as public hospitals often charge by procedures as a packaged price.

*Findings:
Pricing is important
- consumers want
to see and evaluate
individual charges*

Figure 12 Charging Preference (%)



Marketing Strategy Finally, consumer perception on a hospital's image, or marketing strategy, was assessed. Questions ranging from how an individual learned about their hospital of choice, source of reliability and marketing strategy was addressed.

Beijing

- Placing more trust on information from social networks, 96.0% of the Beijing residents learned about their hospital of choice from their friends and families.
- Friends and family recommendation and personal experience were listed as the top

two sources for reliable hospital information as opposed to media or advertisements.

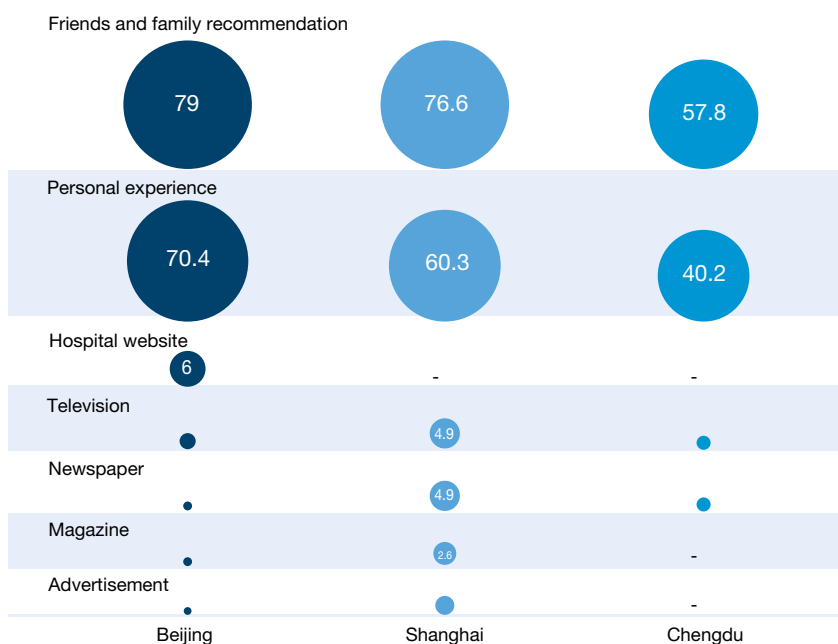
- Unlike other cities, 60.0% of the Beijing residents do not feel that hospitals should market itself like other industries. When asked why, 91.4% felt that marketing of hospitals is inappropriate, as hospitals should focus their efforts on medical matters.

Shanghai

- In addition to relying on friends and family for hospital recommendations (71.1%), 46.3% of the Shanghai respondents chose their hospital based on their own personal experience.

- Friends and family recommendation and personal experience were listed as the top two sources for reliable hospital information as opposed to hospital websites or advertisements.
- 67.7% of the Shanghai residents can accept hospital marketing efforts, as oppose to 31.7% who do not feel a hospital should market itself like other industries. When asked why, 40.5% felt that marketing of hospitals is inappropriate, as hospitals should focus their efforts on medical matters and 40.5% considered the credibility of advertisements to be low.

Figure 13 Which Source of Hospital Information Do You Find Most Reliable (%)?



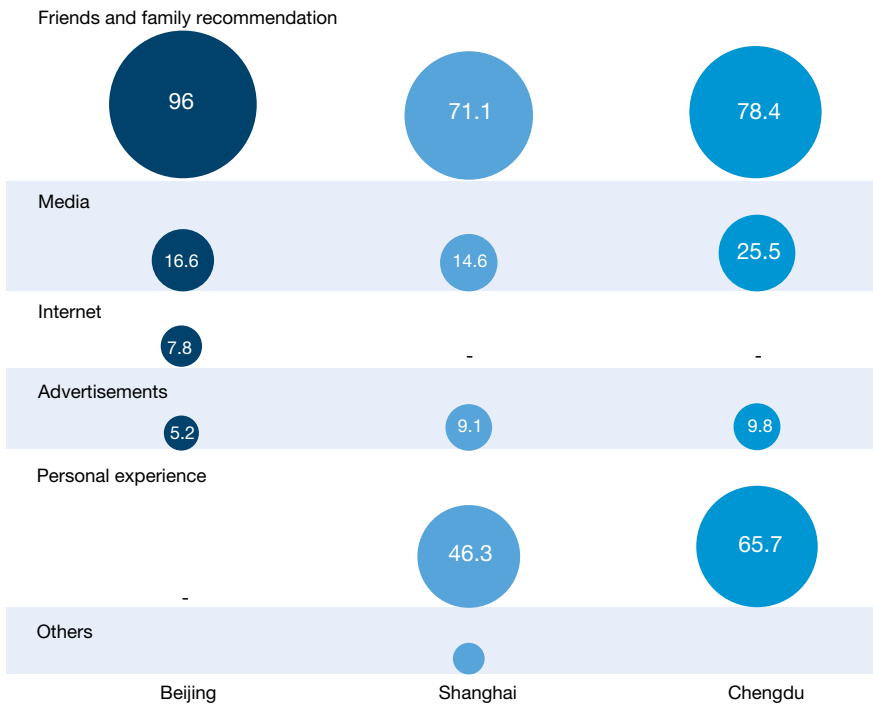
Chengdu

- Out of the three cities, Chengdu’s healthcare industry has a greater reliance on media as 25.5% of the respondents learned about their hospital of choice from the media. However, the most prevalent reason for choosing a hospital is still friends and family recommendation (78.4%) and personal experience (65.7%).
- Friends and family recommendation and personal experience were listed as the

top two sources for reliable hospital information as opposed to hospital websites or advertisements.

- Out of all three cities, Chengdu has the highest acceptance rate of hospital marketing. For the 13.7% who does not agree with hospital marketing, 77.8% felt that marketing of hospitals is inappropriate, as hospitals should focus their efforts on medical matters and 51.9% considered marketing efforts to be an indication of the hospital’s weak technical abilities.

Figure 14 How Did You Hear About the Hospital or Clinic of Your Choice (%)?



Findings:

Chinese middle class consumers spend on average \$500 annually on healthcare

Willingness-to-Pay (WTP)

Willingness-to-pay (WTP) is defined as a monetary amount an individual is willing to pay to acquire some goods or service. In healthcare, WTP is used as a measurement to determine value of medical services, as different income classes often have different values for care. In this section, WTP will be used to outline the financial and behavioral boundaries of middle class Chinese when seeking health care.

Annual Expenditure on Health Services

Beijing

- Of the surveyed population, 43.6% spends about 1,000 to 4,999 RMB per year on medical needs (excluding medical

insurance), 3.4% at around 5,000 to 10,000 RMB and 3.2% spends more than 10,000 RMB per year.

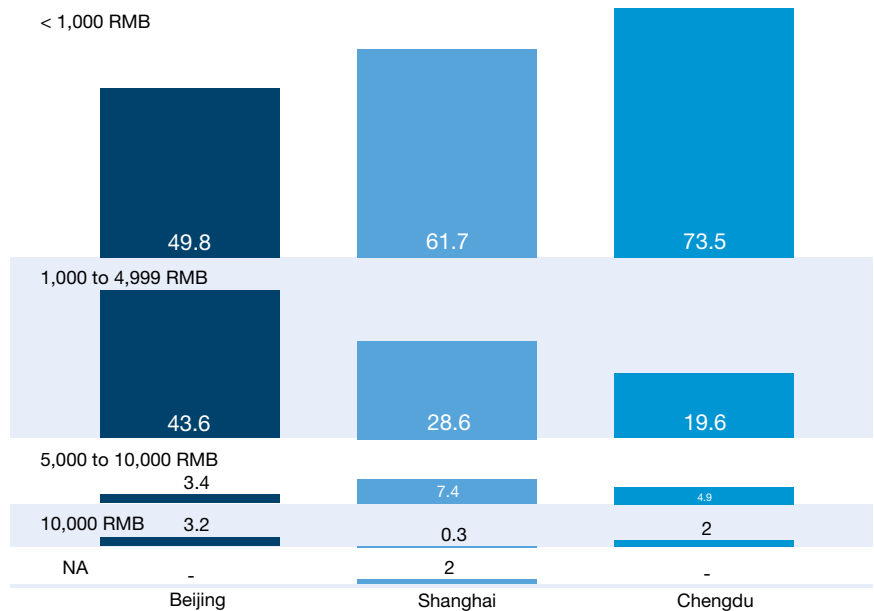
Shanghai

- Of the three cities, Shanghai has the largest group at 7.4% with an annual expenditure between 5,000 to 10,000 RMB per year.

Chengdu

- Out of the three cities, Chengdu spent the least on medical services, as 73.5% of the survey group spends less than 1,000 RMB per year (excluding medical insurance premiums) and 19.6% around 1,000 RMB to 4,999 RMB per year. However, 2.0% of the population did spend more than 10,000 RMB per year on medical needs.

Figure 15 Annual Expenditure on Healthcare (Health Insurance Premium Excluded, %)



Willingness-to-Pay: Out-of-Insurance Network

To assess consumer's willingness-to-pay for better services, respondents were asked if they would "seek care outside of your insurance network for better services?" Consenting to seek care outside of insurance network would also indicate an increase in consumer's out-of-pocket payment.

If respondents were willing to seek care outside of network, they were then asked a multiple choice question of "what type of services are you willing to pay a higher price for?"

Beijing

- Beijing residents are less likely to seek care outside of their insurance network for better services.
- For the 36.3% that will seek care outside of network, the top two sought out services would be pediatrics (39.8%) and regular check-ups (35.4%).

Shanghai

- An overwhelming 86.6% of the Shanghai sampled population is willing to seek care outside of their insurance network for better services.
- Complicated services (69.3%) dominate as the main service sought out for out of network care, followed by cancer therapy (29.0%) and regular check-ups (26.4%).

Chengdu

- 66.7% of the Chengdu residents expressed the willingness to seek care outside of their insurance network.
- 57.4% of the selected service is for complicated cases; 52.9% for pediatric care; and 48.5% for regular check-ups.

Findings:

In order to obtain better service, consumers are willing to go outside of their insurance network

Findings:

Consumers are willing to pay more to obtain the higher level of services found in a joint venture facility

Regional variability exists in responses to how much more the consumer is willing to spend

Willingness-to-Pay: Joint Venture Institutions To measure willingness-to-pay for private sector health services, surveyed populations were asked if they “would be willing to pay more to go to a joint venture hospital or clinic?” If they were willing to pay more, they were then asked “how much more?” Varying degree of WTP indicates consumer behavior in price sensitivity.

Shanghai

- Demanding higher level of care, 71.4% of the Shanghai residents are willing to pay more for services at a joint venture institution.

- The highest the surveyed population is willing to pay is greater than 8 times they usually pay for healthcare services (0.4%). 12% are willing to pay 3 to 4 times more and 42.4% are willing to pay 2 to 3 time more.

Chengdu

- Similar to Shanghai, only 37.3% of the surveyed population is willing to pay more for joint venture services.
- Of the 62.8% who are willing to pay more, 23.7% are willing to pay 2 to 3 times more while 2.6%’s willingness is at 3 to 4 times more.

Figure 16 Willingness-to-Pay: Better Services and Surroundings (%)

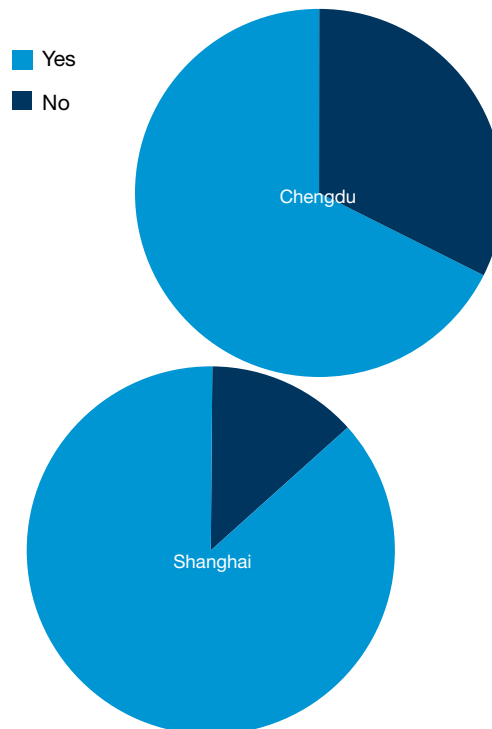


Figure 17 WTP Better Services and Surroundings: Chengdu (%)

Chengdu
 Disks colored by City
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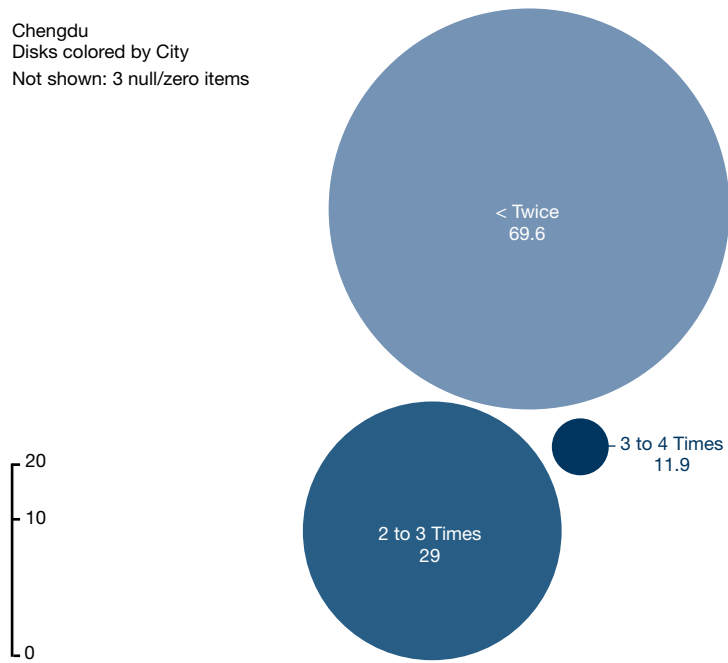
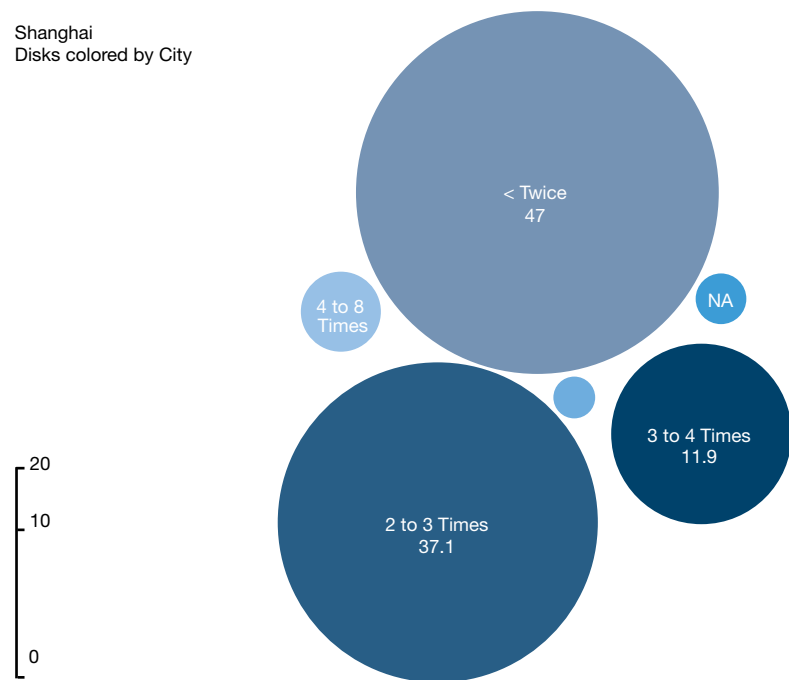


Figure 18 WTP Better Services and Surroundings: Shanghai (%)

Shanghai
 Disks colored by City



Findings:

Consumers indicated that they were willing to pay more for severe conditions which required specialty care

Willingness-to-Pay: Services

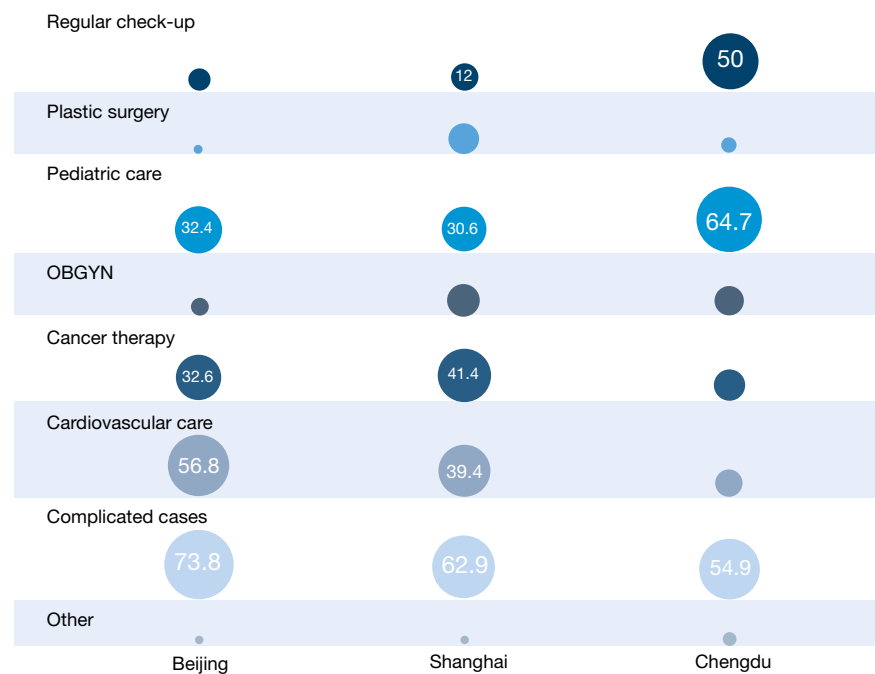
Willingness-to-pay is then assessed for customer service, physical surroundings and types of medical services. Surveyed populations were asked “when seeking care, would you be willing to pay more for better service and surroundings?” If respondents were willing to pay more, they were then asked how much more, when compared to local hospital pricing. Finally, respondents were then independently asked to define what type of medical services

they were willing to pay a higher price for (multiple choice). The 2006 top three causes of death in urban China were cancer, cerebrovascular disease and heart disease¹⁵.

Beijing

- Of services to pay a higher price for, 73.8% of Beijing residents chose complicated cases, followed by cardiovascular care at 56.8%.

Figure 19 Willingness-to-Pay: Type of Medical Services (%)



¹⁵ National Bureau of Statistics of China. 2007. China Statistical Yearbook 2007. Beijing: China Statistics Press; 2007 Sept.

Shanghai

- Majority of the Shanghai surveyed population were willing to pay more for better customer service and physical surroundings. 86.3% of the Shanghai respondents stated that they were willing to pay more. When asked how much more, 11.9% were willing to pay 3 to 4 times more and 37.1% were at 2 to 3 times more.
- Of services to pay a higher price for, Shanghai residents indicated that they were willing to pay more for severe conditions which requires specialty care, such as complicated cases (62.9%), cancer therapy (41.4%) and cardiovascular care (39.4%).

Chengdu

- For better customer service and physical surroundings, 67.7% of the Chengdu surveyed population was willing to pay more. However, only 1.5% of that group indicated they were willing to pay 3 to 4 times more, while 29.0% was at 2 to 3 times more.
- Of services to pay a higher price for, Chengdu residents indicated that they were willing to pay most for pediatric care (64.7%), followed by 54.9% for complicated cases and 50.0% for regular check-ups.

Willingness-to-Pay: Hospital

Stay Finally, willingness-to-pay for better services is further refined by hospital stay conditions. Surveyed populations were asked “if inpatient care was necessary, would you choose to stay in a private or semi-private room if the private room rate is at least twice the amount of the semi-private room?”

Beijing

- 87.4% of the Beijing respondents stated that they are willing to pay more for a private room. Only 12.4% would choose to remain with a semi-private room.

Shanghai

- 61.1% of the Shanghai respondents stated that they are willing to pay more for a private room.

Chengdu

- Contrary to Beijing and Shanghai, only 26.5% of the Chengdu residents will choose the private room, whereas the majority would remain with the semi-private room (73.5%).

Findings:

In first tier Chinese cities, the majority of consumers are willing to pay more for a private room during their hospital stays

Findings:

The ideal middle class Chinese hospital would feature common characteristics regardless of the city in which it was based:

**Specialized services*

**Private rooms*

**Residential area location*

**Superior customer service*

**Patient centered care*

**Private physicians*

**Respect for privacy of patient*

**Superior physical plant*

The “Ideal” Hospital

Beijing Bearing a majority of China’s wealth of medical resources and technology, Beijing has the highest number of tertiary level hospitals out of all Chinese cities¹⁶. Combined with strong social benefits, Beijing consumers have high expectations for a hospital’s technical qualifications, are price sensitive and are strong proponents of the public hospital system.

Based on survey results, Beijing’s “ideal hospital” should consist of the following components:

- Technical support affiliation with strong tertiary level hospital to establish credibility
- Social insurance network inclusion
- Specialize in one medical specialty, specifically in severe, complex disease conditions requiring specialty care, such as cardiovascular care
- Located in either residential or business districts
- Superior customer service to maximize patient experience
- Superior physical plant design and maintenance
- High availability of private hospital rooms

- Feature café or restaurant services within hospital as well as rehabilitation centers
- Physicians with international experience and with training in patient friendly attitude, patient confidentiality and communication
- Emphasis on patient-centered care and allow patient and family engagement in the decision-making process
- Price transparency
- Minimal advertisement on hospital capability

Shanghai As the most internationalized city of China, Shanghai has long embraced global market principles and adapted to a keen sense of consumerism compared to other cities. Of the three surveyed cities, Shanghai responded with the highest degree of dissatisfaction (49.1%) with their current hospital of choice. As China’s consistent leader in GDP production, wealth trickles down to the population through higher disposable income and strong social benefits. As a result, Shanghai consists of one of China’s most diverse healthcare market driven by market demands.

Based on survey results, Shanghai’s “ideal hospital” should consist of the following components:

¹⁶ National Bureau of Statistics of China. 2007. 2007 China City Statistical Yearbook. Beijing: China Statistics Press; 2008 Feb.

- Specialize in one medical specialty, specifically in severe, complex, cost-intensive disease conditions requiring specialty care, such as oncology, cardiology and cardiovascular care. A market for pediatric care is also in demand
- High priority on hospital location: Hospital should be located in either residential districts or suburbia
- Superior operations management to reduce patient wait time and throughput
- Superior customer service to maximize patient experience
- Superior physical plant design and maintenance
- Services priced 3 to 4 times higher than public hospitals hospital of choice
- Physicians with prestigious, international experience and with training in patient friendly attitude, patient confidentiality and communication
- Feature person physician or family physician services
- Emphasis on patient-centered care and allow patient and family engagement in the decision-making process
- Feature programs to engage patient's family and friends and maximize experience
- Equal mix of private and semi-private hospital room availability

- Feature café or restaurant services, rehabilitation centers, flower shops or children's play area
- Price transparency
- Advertise cautiously, specifically on the perception of medical staff qualification and hospital credibility

Chengdu Designated as the heart of Southwest China and bridge to Eastern China, Chengdu signifies the next phase of Chinese development despite its currently lower income and educational status. As a major production site for multinational corporations, the city's standard of living is projected to increase dramatically along with higher quality healthcare demands.

Based on survey results, Chengdu's "ideal hospital" should consist of the following components:

- Specialize in one medical specialty, specifically in severe, complex, cost-intensive disease conditions requiring specialty care, such as oncology and cardiovascular care. Markets for pediatric care and regular check-ups are also in demand.
- Located in residential district
- Superior operations management to reduce patient wait time and throughput

- Superior customer service to maximize patient experience
- Superior physical plant design and maintenance
- Price transparency and appropriateness
- Services priced 2 to 3 times higher than public hospitals hospital of choice
- Technical support affiliation with strong tertiary level hospital to establish credibility
- Chinese physicians with strong technical skills and training in patient friendly attitude
- Social insurance network inclusion
- Emphasis on patient-centered care and allow patient and family engagement in the decision-making process
- Feature programs to engage patient's family and friends and maximize experience
- Feature café or restaurant services and rehabilitation centers
- Price by service packages for clarity and convenience
- Active market advertisements preferably through media, avoid advertisements that may undermine the quality of care provided
- High availability of semi-private hospital rooms

Appendix

Beijing. As the nation's capital, Beijing is the core driver behind China. Beijing is China's second most populated city after Shanghai and is the country's political, educational and cultural center. Beijing is one of PRC's four municipalities administered centrally by the Central Government along with Shanghai, Tianjin and Chongqing. Designated as the world's door to China, Beijing's culture and economy embody the direct clash between the mixture of old and new China, the intertwinement of Communist and market principles and the enrichment of foreign influences. Furthermore, as the host of the 2008 Summer Olympics, Beijing has accelerated its transformation into an international metropolis capable of catering to the world's needs. While Beijing's economy has grown tremendously in the past couple of years with significant rises in living standards, the city currently suffers from consequences of expedited industrialization, such as income disparity, pollution and dust storms. The city also serves as the country's transportation hub through air, rail, roads and expressways and an expanding public transit system.

Shanghai. Located on China's eastern coast at the entrance of the Yangtze River, Shanghai is the largest Chinese metropolitan with the highest GDP amongst all Chinese cities (2006). This global city of the future is one of PRC's four major municipalities administered centrally by the Central Government. Due to its strategic location, history of foreign trade, relations to the Central Government and strong base in manufacturing and technology, Shanghai is recognized as China's commerce and finance center. Shanghai's prominence and internationalism emerged through its openness to international trade in 1842 with the Treaty of Nanjing. Since then, the city was able to maintain high economic productivity and relative social stability despite China's tumultuous modern history and consistently remain the Central Government's largest contributor of tax revenue. Politically, the city also gave birth to several key political figures in modern China, including former President Jiang Zemin, former Premier Zhu Rongji and current Vice President Xi Jinping.

Chengdu. Featuring a diverse economy ranging from defense to agriculture to information technology, the fertile Chengdu has been recently named by the China Daily as the fourth most livable city in China. As the capital of Sichuan and the point city of government's "China Western Development" strategy (2000), Chengdu has been developed as an economic, transportation and communication center of the Southwest China region. Numerous Fortune 500 corporations as well as embassies, along with the United States, have established regional offices in the city. Chengdu's High-tech Industrial Development Zone has successfully attracted large-scale foreign and domestic investments, such as the production plants for Intel, SMIC or Lenovo. Currently, Chengdu is also in development as the financial hub for western China. In addition, the city's rich culture also fosters an eclectic lifestyle enriched by its famous cuisine.

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