

**Business Plan of Starting Up a Health Checkup Business in China**

By

**Weibo Liu**

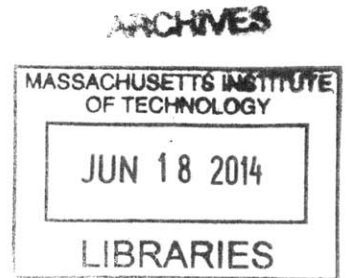
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# Business Plan of Starting Up a Health Checkup Business in China

By

**Weibo Liu**

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## **ABSTRACT**

A health checkup business provides services to examine the customer's health status. This thesis has been developed to understand the health preventive market and prepare a business plan of starting up high-tier checkup centers in China. The target customers are the high-income individuals with more than USD10, 000 per year in big cities, age between 30 and 69. A case study of Beijing Mei Zhao Health Screening Center illustrates that the analysis of this thesis is reasonable and applicable, however, more details will need to be calibrated before launching the real business.

The overall health checkup market is in a full force growth period in China. For example, CiMing Health Checkup Management Group Co., Ltd. filed its IPO in 2012 and 2013. Ciming planned to use the funds to invest in Osis hospital that opened in 2011, which positioned itself as a high-end checkup and medical service center. In another example, iKang Healthcare Group, Inc. has filed its IPO prospectus on NASDAQ on March 3rd, 2014 and the trading commenced on April 9th (NASDAQ:KANG). iKang opened its International Evergreen Medical in December 2013, which is comparable with Osis Hospital. Both of the firms have ambitions to invest in super high-tier health checkup centers. Health 100 claimed that it became the biggest health checkup service institution, with 130 sites in 55 cities in 2013. These are the positive signals for this prosperous market.

The audiences of this thesis are the investors and entrepreneurs who are interested in this market, and the scholars who are pursuing academic research on this industry.

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## **ACKNOWLEDGEMENT**

This research has been conducted with the supervision from **Val Livada**. I knew Val through taking his class of Corporate Entrepreneurship, MIT Sloan course 15.369. I learned about the development of Corporate Venture Capital (CVC) in the past 30 years globally, and most importantly, I started to build more sense about Entrepreneurship. I then developed my idea about this thesis based on the learning from this course and other Sloan action-learning programs. I would thank Val sincerely for his mentorship. Val has provided substantial coaching and support to my research on this topic.

Dr. **Jack Chiang**, at the Guanghua School of Management, Peking University, has co-supervised this research. Jack is my class lecturer and friend, who has coached me through the MBA study in Peking University in the past three years.

I would thank my family and friends who support and recognize me as always. I can only move forward with good courage based on their rigid support. My wife **Pingping Yang** and daughter **Yixuan Mia Liu** have given great love to me, to enable me conduct this dedicated study.

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## **1 Executive summary**

Nowadays, we are increasingly paying more attention to the health care system globally because of people's wish of longer lifetime and high health care expense. As the economy of China becomes prosperous, there is an obvious and strong need for well being from Chinese people. Health checkup service provides a good approach of being well, by screening potential disease in advance. Health checkup service is one of the preventive approaches by visiting to a health institute by asymptomatic person on a regular basis (commonly encouraged to be performed annually). It is known by several names such as general medical examination, health screening, health evaluation, annual physical, comprehensive medical exam, general health check, or preventive health examination. The term of 'health checkup' is used in this thesis to represent all the above terms.

The health checkup service has been well established in the United States, Japan and all the other developed countries in the last century. In China, the health checkup services used to be provided mainly by the public hospitals, and many people went for the checkup because it was a mandatory requirement for enrolling into the military or job positions. However, starting from 2000, private health checkup institutions entered in this market mostly in the first-tier cities such as Beijing, Shanghai, Guangzhou etc, under the encouragement of government policy. The private institutions have reduced the high reliance on public hospitals for most medical care services. Therefore, many of these institutions have grown rapidly and successfully.

This thesis is a business plan discussing about starting up a high tier health checkup business in China. The audiences of this thesis are the investors and entrepreneurs who are interested in this market, and the scholars who need the basic overview information about this industry. Due to time and resource limitation, there are assumptions made in certain situations, which will require actual business analyses in deeper level of details when the new business is being launched.

## **1.1 Consumer Needs on Health Checkup**

‘Health Cultivation’ is a popular topic, to explore the good science and the good medicine of strengthening human body’s immune and endocrine systems in China. The television program about this topic has high audience rating; the products such as food and tea related with this topic are sold quickly; the books are occupying good percentage of shelves in bookstore. This phenomenon illustrates the strong need for being well by Chinese customers, who emphasize on staying healthy. In recent years, health checkup centers provide a good approach in understanding and monitoring one’s body status, especially on chronic diseases such as hypertension, diabetes and hyperlipidemia. Therefore, health checkup is definitely one of the critical matches to these strong needs of well-being. That’s the reason there is a 50% to 70% annual increase in revenue with several key players in this market in China.

## **1.2 Opportunities in the Market**

A high-tier health checkup center’s target customers are the top high-income (annual income of more than USD 10, 000) group in first-tier cities in China (such as Beijing, Shanghai, Guangzhou). Their age range is between 30 and 69. Per the statistics in chapter 3, there are 1.35Million potential customers. If the minimum average expense on health checkup is USD400 per person per year based on current market benchmark, the total size of the market for high-tier checkup service is USD540Million annual revenue. As the economic development in China is progressing, the growth is clearly continuing on the same fast track.

## **1.3 Key Business Strategy**

With identified target customers, the business strategy for the early stage of this startup can be summarized as “More Awareness, More Trial, More Satisfaction and More Loyalty”. The approach is to build the right channel to reach these potential customers, offer good reasons for customers to have first time experience, retain customers by providing high service levels and sustain customer's loyalty through this positive feedback loop. Over time, the business can gain competitive advantage in terms of Brand, People, Operation and Culture.

## **1.4 Key Marketing Strategy**

The marketing strategy should be focused on increasing the brand awareness and trial, which reinforces customer's satisfaction and builds on the brand loyalty. The process can in turn influence more customers to join the practice and form a flywheel effect to enhance the brand. There are three approaches: 1) it can be based on geography that the target group live in the similar neighborhood. The startup company can build joint activities with the administrative office of the neighborhood to deliver the health care programs to the target group. 2) The strategy can be applied to build a community who is careful about his/her health through a well-designed and well-maintained website. This provides an opportunity to generate a platform for the target group to get the necessary information about health, to discuss recent concerns about health and to learn from each other about healthy lifestyles. 3) Initiating smart promotion to ensure the target group tries the health checkup service is critical. The promotion may not necessarily entail a price reduction; it can be implemented in a smart way, such as bundling it with other services or a market champion to award the winner for membership in the health checkup center.

## **1.5 Key Operating Strategy**

Since the business strategy is: “More Awareness, More Trial, More Satisfaction and More Loyalty”. The operating strategy should be focusing on increasing the service level to ensure satisfaction, which can then gain more customer loyalty. The process can in turn influence more customers to join the practice and form a flywheel effect to enhance the brand and grow the business. To achieve the business strategy and business goal, the operation should have the advantage of high service level, efficiency and innovation. To start the analysis, an assumption is made of the profit and loss. There is a gross margin of 49% and a profit of 28% from the business operations (Refer to table 7).

Besides the revenue and cost structures, it is equally important for the management team to drive for a strong company culture, to unite employees together and deliver excellent service to customers.

## **1.6 Key Financing Plan**

This startup business is expected as from being in a high growth market that needs the involvement of investors such as private equity and venture capital. The funding of a high tier health checkup center requires CNY20Million, which is USD 3.26Million (based on the rate of USD100=CNY613.06 on March 6<sup>th</sup>, 2014). The land area needed is 1,000 square meters. There is no substantial quotation in this thesis regarding the total funds needed; hence this number is an estimation that requires more accurate quotation about lease, decoration, equipment and compensation to finalize the budget.

The startup of first center can be funded through one or two investors who have confidence about this health checkup industry and who agree with the strategy of this business plan. The entrepreneur who runs the business can gain some equity stake as incentive. More discussions are needed in this topic with the actual investor according to different scenarios.

## **1.7 Contact Information**

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## 2 Overview of Global Healthcare Systems

Healthcare expenditure is one of the major expenses for a nation. This spending is closely related with the health status and life expectation of the population in every country; hence it is one of the focus areas for government officials. Per the World Bank's data, the expenditure accounts for 2~20% of GDP globally in different countries. Developed countries have higher percentage, while developing countries have lower by increasing percentage. Refer to table 1 to take the United States, Japan and China for example, their healthcare expenses account for 17.9%, 10.1% and 5.4% of their GDP respectively in 2012. Most importantly, there is clear trend of growth year by year. These health expenditure data include public and private health expenditure. They cover the provision of health services for both preventive and curative activities, family planning activities, nutrition activities, and emergency aid designated for health but do not include provision of water and sanitation. Preventive service is the focused area in this thesis.

(The World Bank)

Country/Year	2004	2005	2006	2007	2008	2009	2010	2011	2012
United States	15.7	15.8	15.9	16.1	16.5	17.7	17.7	17.7	17.9
Japan	8.0	8.2	8.2	8.2	8.6	9.5	9.6	10.0	10.1
China	4.7	4.7	4.6	4.4	4.6	5.1	5.0	5.1	5.4

**Table 1** The total percentage of GDP in Health expenditure in the United States, Japan and China. Source: The World Bank.

While developed countries spend more with health care, in terms of total spending and spending per capita. For instance, the health care spending from thirteen 'Organization for Economic Co-operation and Development (OECD)' peers are all range in higher range, especially the United States' health spending is the highest. The per capita healthcare spending is much higher than his OECD peers, according to the graph in Figure 1. Therefore, it is interesting to investigate the healthcare system of the United States, to understand the structure of spending and the improvement opportunities.

## The United States spends far more on health care than expected even when adjusting for relative wealth

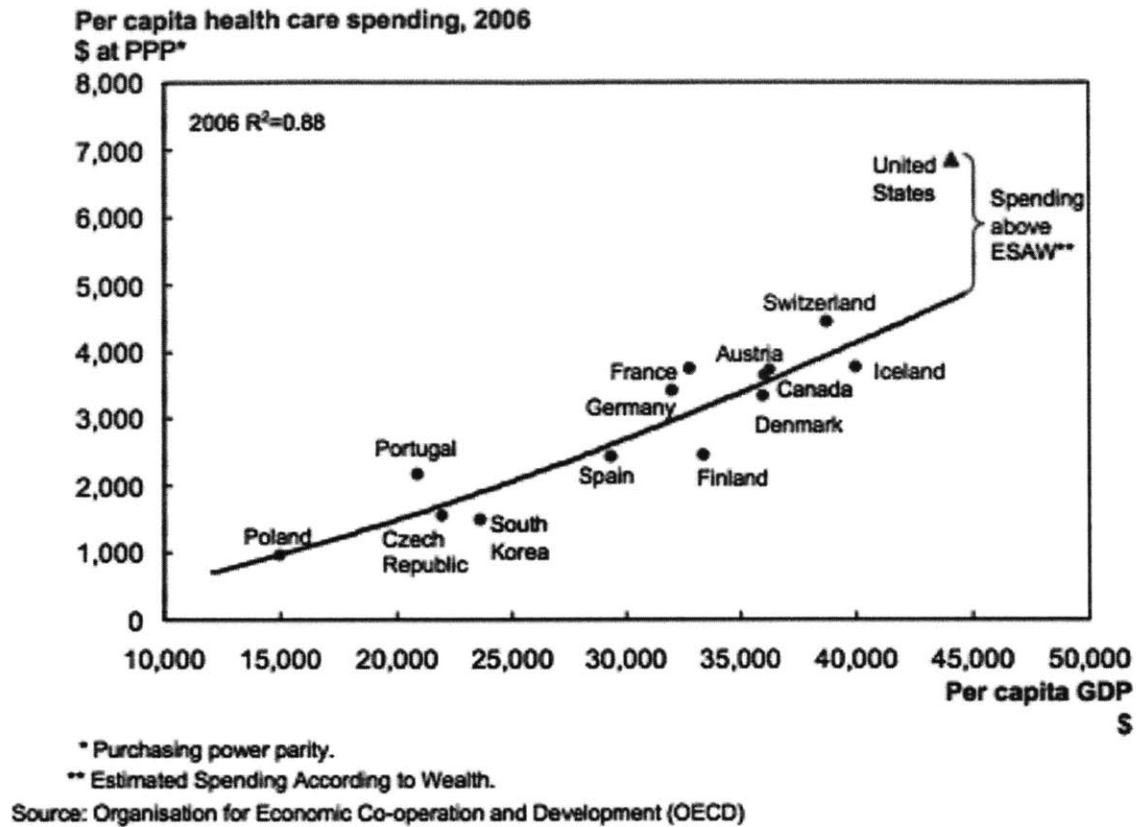


Figure 4 The per capita healthcare spending of OECD countries in 2006. Source: OECD. McKinsey Report. 2008

## 2.1 US Healthcare System Introduction

### 2.1.1 Overview of the System

The United States healthcare system has its significant features to study. On one hand, it is titled as “best healthcare system in the world”, which has the most advanced technologies and medical facilities. The research groups in the US have been leading the development of medical technology and other related technologies. For instance, the robotic application in the U.S medical centers is far more common than in other countries’ centers.



It is not hard to understand that healthcare spending of the US is the highest. The output regarding to disease prevalence for most high-cost medical conditions is lower than other countries. Figure 2 is the research result from McKinsey Global Institute, which indicates heart conditions, mental disorders, COPD asthma, hypertension, osteoarthritis and back problems are all better controlled. It might be questionable because the population is younger in the US comparing with the other OECD countries.

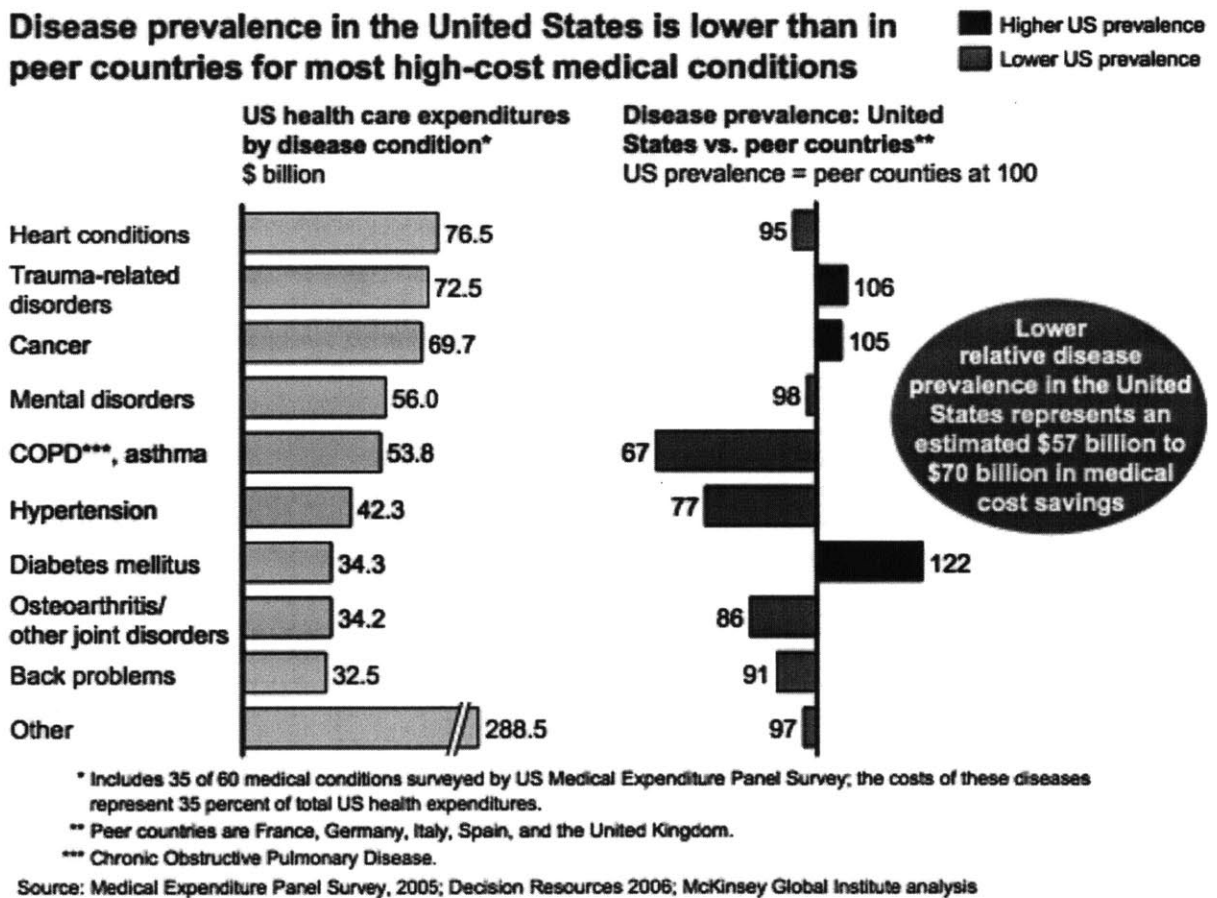


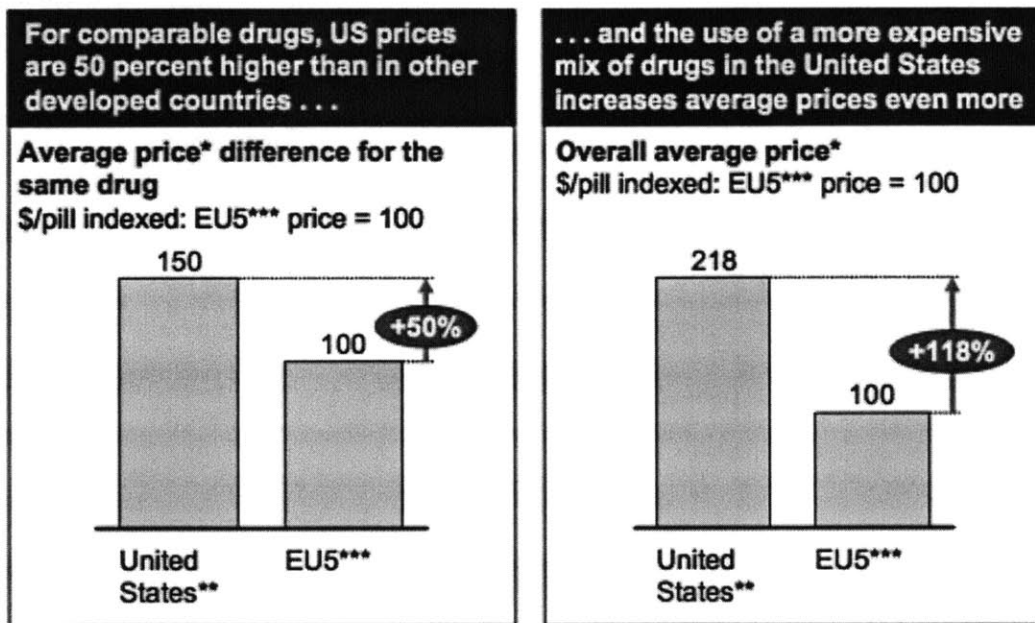
Figure 5 The disease prevalence in the U.S by McKinsey Global Institute. Source: “Accounting for the cost of U.S Healthcare: a new look at why Americans spend more”

However, on the other hand, the system is criticized as uneven and inefficient. 8% of the population is not covered by insurance in this system as of 2006 although the overall expenditure is high. The medical waste is higher than other countries. During an interview the thesis author conducted in Boston

area, one of the doctors who worked in China’s hospital and are the visiting scholars in the US hospital in 2014 said: “In my opinion, comparing with China’s hospital’s current status, the medical waste is huge in the US. Certain operation tools can be sanitized and reused for more than hundred times in one year in China, while they are the disposable tools for one time use in the US hospital.”

The key reason is that patients in the U.S are paying more on the healthcare services and drugs. Since these services and drugs are covered by insurance, the patients are not sensitive to the price of medical care during visiting doctors. Figure 3 illustrates that the drug prices in the U.S are 50% higher for comparable products in United Kingdom, Germany, Italy, France and Spain. The drug overall average price index is 118% higher than in the above five countries.

**Drug prices in the United States are 50 percent higher for comparable products; average price gap is nearly 120 percent due to usage patterns**



\* Manufacturer price.

\*\* Assumes 15 percent rebates from manufacturers to payers and Pharmacy Benefit Managers (PBMs).

\*\*\* Average of the United Kingdom, Germany, Italy, France, and Spain.

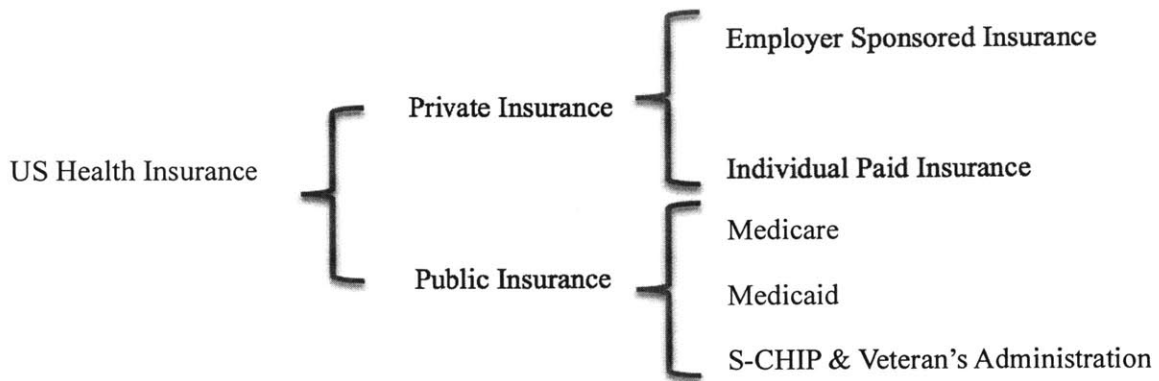
Source: IMS Health; McKinsey Global Institute analysis

Figure 6 The drug price and overall average price comparing with five European countries by McKinsey Global Institute. Source: “Accounting for the cost of U.S Healthcare: a new look at why Americans spend more”

### **2.1.2 Health Insurance Source and System**

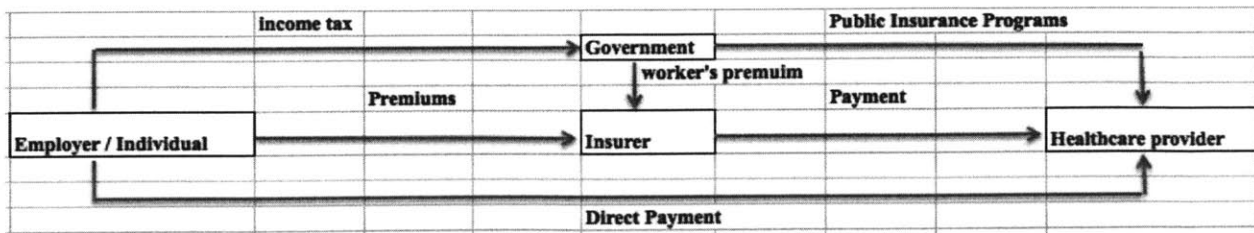
Globally, every country has its public and private funding sources to form a healthcare system. The public source is mainly the government expenditure from tax. The private source is from the premiums paid by employer, employee and individual person. In the U.S healthcare system, the private source dominates the financing of insurance rather than public source. The private expenditure is more than 50% of the overall healthcare expenditure, the public covers around 42%. High private fund involvement reduced the government burden on this area.

Figure 2 illustrates the US health insurance system's structure. The private and public insurance are the two sources of the US healthcare expenditure. The private insurance is paid by employer or individual who is self-employed or retired. Typically the employer pays for insurance premium as the benefit for employees. The employer pays either full percentage of the insurance or a major percentage. The employee then pays the remainder. They all pay on a monthly basis. When one is retired, laid off or chooses to self-employ, he/she has to pay the premium on his/her own. This becomes an expensive option for individual comparing with other insurance sources. The public source can then act as another option to choose. Firstly, The Medicare is a federal program that covers individuals aged 65 and over. The government is the single payer in this program to cover all the reimbursement for the healthcare spending. The fund is from the federal income tax. However, Medicare is not a well-covered insurance. For instance, there are incomplete preventive care coverage, and no coverage for dental, hearing, or vision care. The enrollees choose to buy supplemental insurance, which can account for as high as 22% of their income for health care costs despite their Medicare coverage. Secondly, US launched another insurance: Medicaid, which is designed for the low-income and disabled. The states and federal governments finance Medicaid jointly through taxes. This is a relatively comprehensive insurance. There are other federal sponsored insurance such as S-CHIP for children whose family is not eligible for Medicaid but can't afford private insurance; Veteran's Administration is for veterans of the military.



**Figure 4 The Insurance system in the U.S**

Kao-Ping Chua drew a money flow to indicate the structure of the system. The employer and individual provide the fund through paying premium, income tax, and direct payment. Premiums are paid to private insurers, who run the commercial insurance programs. The government provides fund through covering the public insurance programs (Medicare, Medicaid, S-CHIP & VA) and paying premium for government workers / employees. Nevertheless, the government fund is from the income tax. Hence the primary source of the insurance is the employer and individual. Generally the patient needs to co-pay during a visit in medical care. This is the direct payment to healthcare provider. All the funds eventually go to healthcare providers to support the medical expense in this nation. The overall healthcare system works to provide the medical care to the people who are enrolled in.



**Figure 5 The money flow in the U.S healthcare system. Source: Overview of the U.S. Health Care System by Kao-Ping Chua**

### **2.1.3 Health Checkup Services**

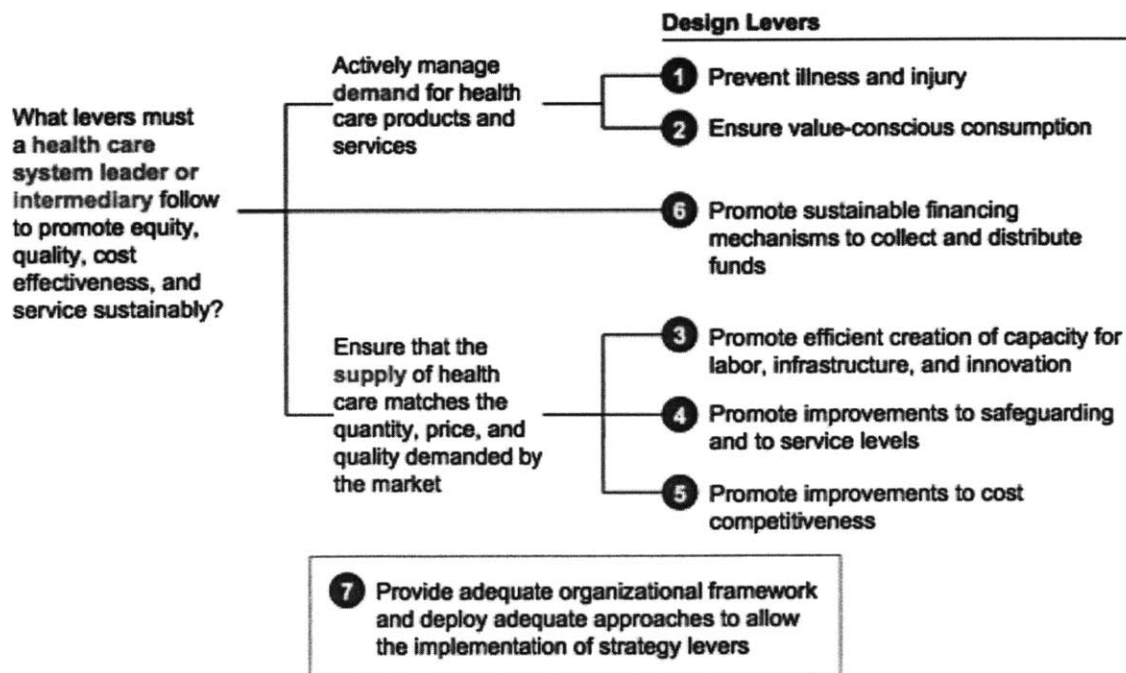
The healthcare services include preventive and curable activities. During the healthcare reforms that took place in the late 1960s through the early 1970s in the U.S, prevention healthcare became an important element in the healthcare system. The prevention includes vaccine injection, promotion of healthy lifestyle, safety regulations and health checkup. The public accepted these activities as good approach to improve public health in the nation. It is also analyzed that the healthcare expenditure can be reduced since the diseases can be detected and treated in the very early stage, to avoid high medical treatment cost.

In 1984, the U.S. Preventive Services Task Force (USPSTF or Task Force) was created. It is an independent group of national experts in prevention and evidence-based medicine that works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, or preventive medications. USPSTF introduced a Guide to Clinical Preventive Services, to emphasize the importance of preventive care by including prevention in primary health care, ensuring health plan coverage for effective preventive services, and holding health care providers and systems accountable for delivering preventive care. Therefore, the health checkup services have been established through the healthcare reform and USPSTF guidelines.

The U.S health insurance plan covers the health checkup service. Therefore, people who are enrolled in the health insurance can go to see their doctor for a checkup regarding his/her health status. The interview with Val Livada (my thesis advisor) who uses the health checkup service annually said: “The US has a comprehensive healthcare checkup procedure where yearly checkups are covered by the insurance policy. The coverage is used at the discretion of the insured. Young people don't use it too much although they have the right to. As one gets older, and especially at the encouragement of the doctor, the checkup becomes a routine.” Most of the checkup services are provided by medical centers and hospitals, but there are not many dedicated health checkup centers specializing at screening.

McKinsey Global Institute researched the U.S healthcare system in the report of “Accounting for the cost of U.S Healthcare: a new look at why Americans spend more” in December 2008. The first recommended way to improve the healthcare system is to prevent illness in order to manage demand on healthcare products and services. It is easy to understand that if the illness is bettered controlled, the demand can then be reduced to lower down the overall healthcare expenditure. The health checkup service is one critical preventive approach to detect and predict issue in a person’s health status; accordingly, the early treatment can be applied for recovery in a faster and cheaper way. To summarize the status of health checkup service, it is a common practice by most of the healthcare providers; however, the participation rate is not high at the moment.

**MGI believes that to be effective, reform should focus on both supply and demand**



Source: A framework to guide health care system reform, McKinsey Global Institute, November 2006

Figure 6 The recommended direction of reform healthcare system in the U.S by McKinsey Global Institute. Source: “Accounting for the cost of U.S Healthcare: a new look at why Americans spend more”

## 2.2 Japan Healthcare System Introduction

### 2.2.1 Overview of the System

Japan's healthcare system is in remarkably good shape comparing with US and other developed countries. Starting from a level similar to the United States, Japan has achieved the lowest infant mortality rate. Japanese also have the longest life expectancy in the world as in Figure 7. Japan is the world's leader through a well-thought-out plan for prevention, coupled with government investment. Moreover, spending on healthcare expenditure is lower than in most OECD countries. The healthcare expenditure is 10.1% of its GDP in 2012. In Japan's universal healthcare system, all residents are covered with any medical issue they may have, and they can go to any medical institute for treatment as long as the institute is covered by Japan's national healthcare system.

#### JAPAN HAS ONE OF THE HEALTHIEST POPULATIONS IN THE WORLD Ranked from best to worst

**Life expectancy at birth**  
Years; 2003

1. Japan	81.8
2. Iceland	81.2
3. Switzerland	80.6
4. Australia	80.3
5. Spain	80.3
6. Sweden	80.2
7. Canada	79.9
8. Italy	79.7
9. Norway	79.6
10. France	79.4
11. New Zealand	79.2
12. Greece	78.9
13. Singapore	78.9
14. Austria	78.8
15. Belgium	78.8

**Potential life years lost\***  
Years lost/100,000 population; 2002

1. Sweden	2,825
2. Japan	2,843
3. Iceland	2,891
4. Switzerland	3,149
5. Italy	3,185
6. Australia	3,326
7. Norway	3,393
8. Netherlands	3,420
9. Greece	3,452
10. Canada	3,487
11. Spain	3,506
12. Austria	3,593
13. Germany	3,595
14. United Kingdom	3,688
15. Finland	3,793

\* Potential life years lost is an indicator of premature mortality. It represents the total number of years not lived by an individual who died before age 75. This indicator gives more importance to the causes of death that occurred at younger ages than those at older ages.

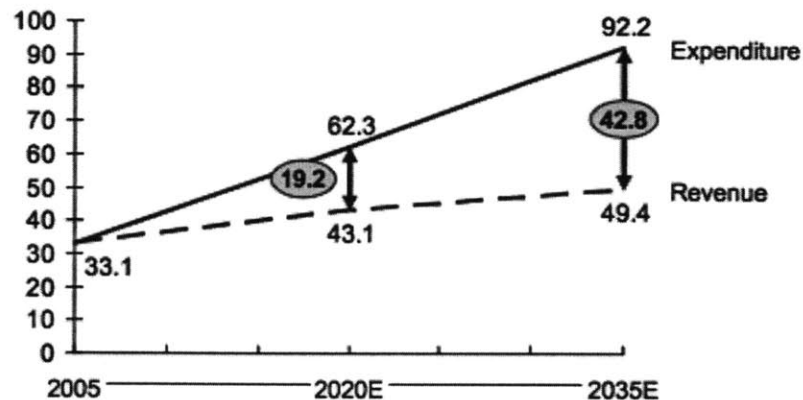
Source: OECD Health Data 2006; Singapore Department of Statistics; Canadian Institute for Health Information

Figure 7 The life expectancy and potential life years lose in Japan. McKinsey Global Institute. Source: The challenge of funding Japan's future health care needs.

Looking forward in the next 30 years, the situation of healthcare system in Japan is not promising, due to the aging population, technology development, and wealth growth. MGI research suggests health care spending could double as a proportion of Japan GDP within 30 years. The financing gap is so large that policies on which Japan has relied in the past, such as increasing co-payments, will not be sufficient to close it. The government also faces fiercely competing demands for resource allocation among prevention, treatment and basic science interest groups. Figure 8 predicts there will be 19.2 trillion gap by 2020 and 42.8 trillion gap by 2035 in Japan's healthcare expenditure. This is the current challenge in Japan's healthcare system.

### CURRENT FUNDING SYSTEM AND CONTRIBUTION RATES WILL RESULT IN LARGE FUNDING GAP

¥ trillion



#### Assumptions

##### Change in percentage

Increase in elderly population	40.0	6.0
Decrease in total population	3.0	7.0
Real GDP growth p.a.	1.3	0.6
Income growth p.a.	1.5	0.7
Revenue sources	As in 2005	As in 2005

Source: McKinsey analysis

Figure 8 Current Fund system and contribution rate will result in large gap in healthcare expenditure in Japan. McKinsey Global Institute. Source: The challenge of funding Japan's future health care needs.



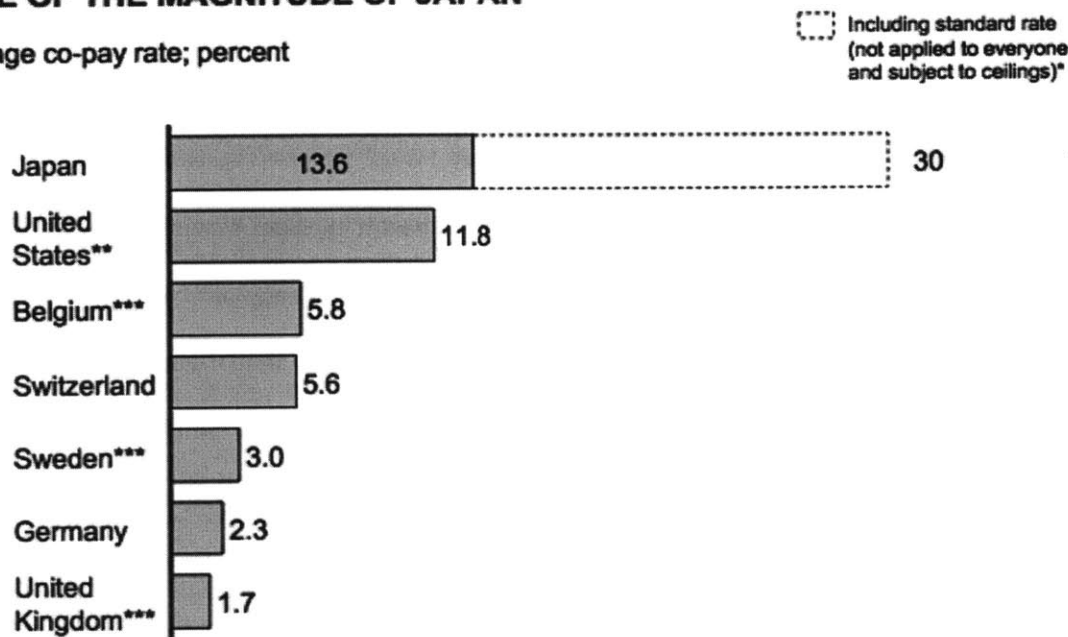
## 2.2.2 Health Insurance Source and System

Japan healthcare chose employment-based system of financing. This mechanism is similar with the US's system as mentioned in the paragraph 2.1.2. The difference is that private source in Japan contribute even more than in the US. The largest share of healthcare financing in Japan is raised by compulsory premiums paid by individual subscribers (34.6 percent) and employers (21.7 percent).

People's premiums to enroll in the insurance are based on income and ability to pay. What is unique with Japan's system is that the co-payment is highest for individual. The co-payment can be as high as 30% for people age from 3 to 69; 20% for people above age 70. Figure 8 compares Japan's co-payment rate with other countries.

### NO OTHER COUNTRY HAS A STANDARD CO-PAYMENT RATE OF THE MAGNITUDE OF JAPAN

Average co-pay rate; percent



\* Among the countries shown, only Japan has a standard rate defined as a percentage of total treatment cost. Other countries have lump-sum payments. France has a percentage co-pay rate of similar size (30% for GPs, 35% for specialists, drugs, and devices) but unlike in Japan, this does not apply to hospitals.

\*\* Out-of-pocket expenditure, which comprises much more than just co-payments.

\*\*\* Based on local definitions of co-payment.

Source: OECD; ONS; Statistik over kostnader for halso- och sjukvarden, Assuralia; Socialstyrelsen; McKinsey analysis

Figure 9 The Co-payment of Japan is the highest among all the countries. McKinsey Global Institute. Source: The challenge of funding Japan's future health care needs.

The insurance plans in Japan can be grouped in five groups. First group is government-managed plans. These are for employees of small enterprises with more than five but fewer than three hundred employees. Premium contributions are at a fixed rate of 8.2 percent of monthly income before taxes and evenly split between employees and employers. Second group is society-managed plans. These plans are for companies with more than 300 employees. Payroll taxes for such plans range from 5.8 to 9.5 percent of monthly income before tax. Third group is mutual aid association insurers. These are for national and local government employees and school employees. The average payroll contribution is 8.5 percent of the employee's wage. Fourth plan is for day laborers who work less than two months during a year and seaman. Fifth group is for companies with fewer than five workers, the self-employed and retirees. These plans are covered either by municipal governments or by national health insurance societies. Contributions to these national health insurance societies are based on reported income. It is also necessary to mention that more than 60% of hospitals in Japan are privately owned healthcare corporations.

### **2.2.3 Health Checkup Services**

In Japan, there is around 70% of the population using the health checkup service annually. There are three major health checkup categories in Japan. The first one is the company or school checkups for their full-time employees or students. This category of people normally has annual health checkups for free, which are sponsored by company or school. The checkup items are basically simple, such as height and weight measurements, a blood or urine test, and a chest screening by X-ray. Company typically contracted with hospitals or checkup centers for employees to go for the services. School normally has its own medical center to provide this service.

The second category is the private health-screening center. Many Japanese hospitals have introduced extensive health checkup services, which are extended for cancer, the brain, the vascular system, women's health screening, etc. This kind of health checkup service is called Ningen Dock in Japanese. A Ningen Dock can be provided by most of the hospitals and clinics. A Ningen Dock takes

anywhere from half a day to full day or night's stay. The Health Insurance does not cover the cost of general health checkups. Customers need to pay by his/her own. Prices vary, but start from around USD400. In many cases, companies pay for the health checkup services. The doctor explains the checkup results at the end.

The third option is the municipal public health checkups services, which are free or very cheap. These services are mostly designed for self-employed people with National Health Insurance. Some of the screenings and services are available for anyone who are the residents in that city. The checkup items of this option are not comprehensive. The service level of the checkup centers is not as good as at Ningen Dock.

## **2.3 China Healthcare System Introduction**

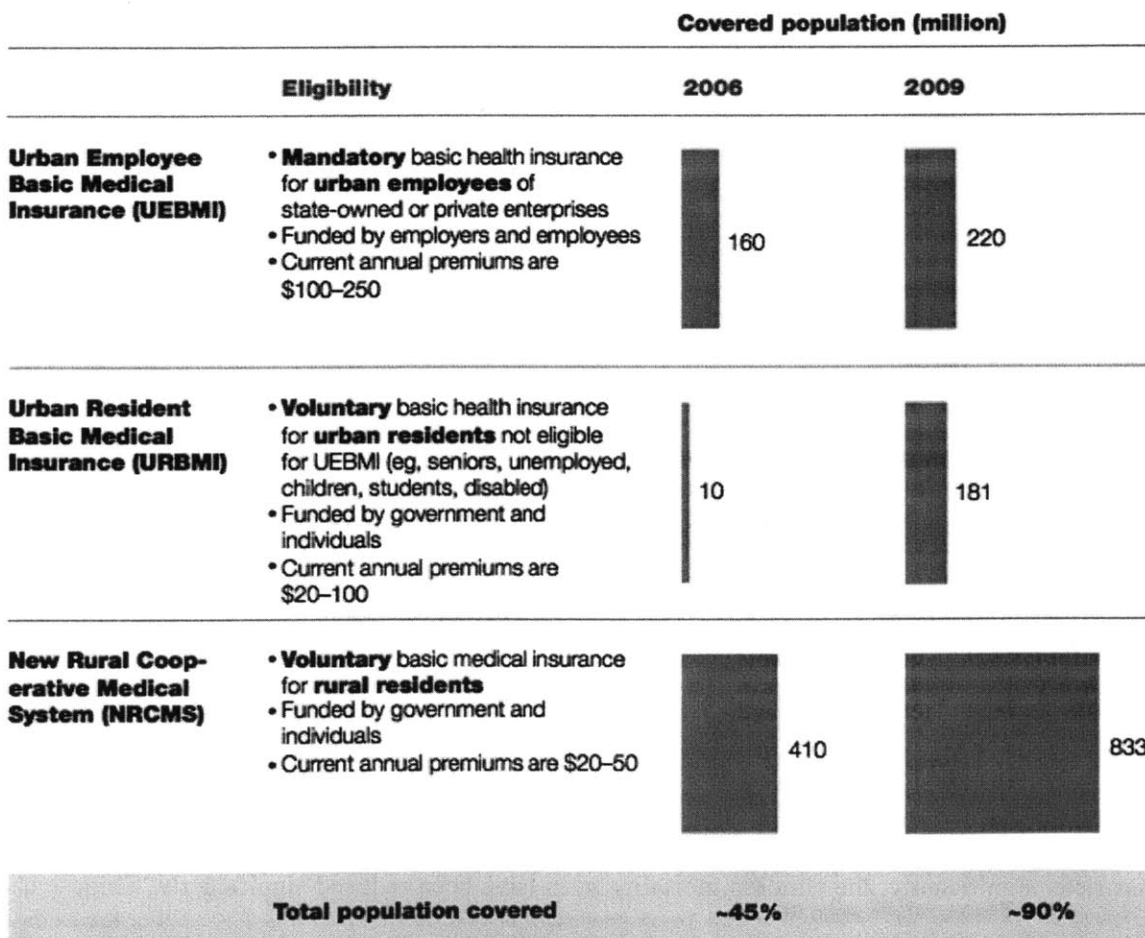
### **2.3.1 Overview of the System**

China launched its major healthcare reform in 1994, trying to advance the system to have good coverage and insurance of the population. The ambition is to establish a universal health system that can provide safe, effective, convenient, and low-cost health services to all of citizens. This reform established the twenty years development of Chinese healthcare system, however, there are still many issues remaining such as uneven distribution of healthcare resources, conflicts between doctors and patients, and the relative high price of healthcare vs. average wage.

In terms of the positive effect of the reform, China has built the insurances that almost cover all the 1.3 billion population in urban and rural areas, with public and private fund. The life expectancy of Chinese has risen significantly; the children mortality rates have been reduced significantly. Chinese can go to hospital to receive better quality of medical care. The constructions of hospitals and community medical centers have progressed quickly, to generate more hospital beds and other services. Starting from end of 1990s, China allowed the private source to enter in the healthcare market and provide medical care to the population, under the regulatory control of government.

In 2006, there is only 45% of the population covered by insurance. By the end of 2009, there is 90 percent of the population covered by health insurance, per the data in figure 10. Initially, there was Urban Employee Basic Medical Insurance (UEBMI) for employed people. Then China established Urban Resident Basic Medical Insurance (URBMI) and New Rural Cooperative Medical System (NRCMS) to cover unemployed population. (China's health care reforms. McKinsey & Company.)

**Almost all of China's population is now insured.**



Source: Ministry of Human Resources and Social Security; Ministry of Health

Figure 10 The data of people covered by insurance in China. Source: China's health care reforms. McKinsey & Company.

### 2.3.2 Health Insurance Source and System

Funding of the healthcare system in China is extremely challenge taking into consideration the 1.3billion population and the early development stage of healthcare system. UEBMI is the well-established program, which can provide comprehensive coverage. The employer is required to contribute six to twelve percent of an employee’s annual salary to the insurance. Employee is required to contribute another 3~6 percentage. In contrast, the central government, local governments, and individuals fund URBMI and NRCMS. Individuals also need to co-pay up to 40% of the medical care expense at the moment. The government fund is the major source at the current stage.

### 2.3.3 Health Checkup Services

There are four categories of institutions that are providing health checkup services in China at the moment. They exist due to the different development stages of Chinese healthcare system. These institutions are serving the 1.3Billion population in China nowadays. They are:



Figure 11 The four categories of institutions that are providing health checkup services in China

The health checkup departments at public hospitals held 80% of the market share in 2009. They are still playing the leading role in this market; however, the service level in these departments cannot meet the increasing expectation of Chinese customers. There are two reasons: 1) there are too many patients in these public hospitals in China, considering the population of China is as high as 1.3Billion but the number of public hospitals is limited. The hospitals have to put all of their attention to take care of the patients who are in urgent conditions. Therefore, the health checkup departments whose function is prevention cannot be fully supported and developed. 2) The individual who goes for checkup service might share the same test machine with the patients in the hospital. Per the model in Figure 12, there is probability of cross contamination, a risk of infection by patients who are recovering in the public hospitals to people who use the same equipment for health check-ups. Referring to other categories, the community health centers are designed for primary health services providers, however, the patients go to the major public hospitals directly when they need to see the doctor. The community health centers are skipped and hence these centers are underdeveloped. This unbalanced phenomenon dramatically lowers down the service level in the current health care institutions. Therefore, a new model of health care centers with better services and lower risk of infection is highly demanded by the consumers.

## **2.4 Lesson Learned for China's Future Development of Healthcare System**

Referring to these two examples of the US and Japan, it is easier to conclude that health checkup is an essential service that people will take, especially when they are in their senior age. As the Chinese economy develops, the similar situation can be expected in the near future. Therefore, it is time to start the journey in this exciting roadmap to develop the Chinese version of a strong health checkup network service.

The facilities and equipment in the United States and Japan are well maintained; the one who funds the new health checkup center in China should plan a visit and experience the process in these two countries so as to get the first hand information.

It is necessary to point out that the health checkup expense is not covered by national health insurance system in China. The expense is either paid by individual, or by the corporation that covers the checkup expense as part of the compensation of employees. This is a major difference in the United States. The opportunity is that the market can grow even faster if there is collaboration with insurance system. For example, the commercial health insurance may be willing to offer a bundling of health checkup and care services at a higher insurance premium. By offering this insurance product, on one hand, the service can be more comprehensive to meet customer's needs and more attractive when the customer is considering to buy insurance. On the other hand, the healthcare expense can be lowered down since the diseases are predicted or found at the very early stage. In the long term, the Chinese government might even consider to include the health checkup service at the national healthcare insurance system, comparable to the system in the United States. There is no clear decision-making discussion about this topic now, but it is a key future opportunity to change the rules of current market.

### **3 Consumer Needs in the Health Checkup Service**

#### **3.1 'Wish of Well-being' Strongly Rooted in Chinese Culture**

With the development of Chinese medicine in the past thousands of years, the Chinese people believe a healthy lifestyle leads to longevity. 'Traditional Chinese Medicine Health Cultivation' is a hot topic in history. There are many researches on this topic. A simple search on Baidu.com results in 100million related websites. Accordingly, the information is distributed through Internet, TV, magazine, book and other media channels. Audiences have shown great passion about health cultivation related products / services. As the new and popular practice of a common form of preventive medicine, health checkup is definitely one of the critical matches to these strong needs.

#### **3.2 Proactive Prevention Is Key of Being Well**

When examining the definition of health and illness, I found that it is difficult to distinguish between a healthy person and an ill person. The reason is that there is always potential conversion from

healthy to unhealthy individuals in the dynamic situation. Figure 12 is a simplified system dynamics model to illustrate the infection process. The infection rate is determined by the contacts made between infected and uninfected people and the infectivity of the disease. One of the approaches to control the infective diseases is to control the infection rate, as indicated by the red arrow in the diagram. This is an early-on control approach and can save on healthcare expense significantly. The population does not need to go through the infection and recovery loop, which will cost even more with the overall healthcare budget.

Similar concept applies to chronic diseases, which takes time for these diseases to be detected when the individual does not feel well. To better control the disease and prevent sickness, one can proactively monitor his/her body conditions by quantified checkup results. Through this checkup, he/she can detect the clue of potential disease and take actions to avoid it in the very early stage. In other words, Health checkup is the practice to screen and predict the disease development process.

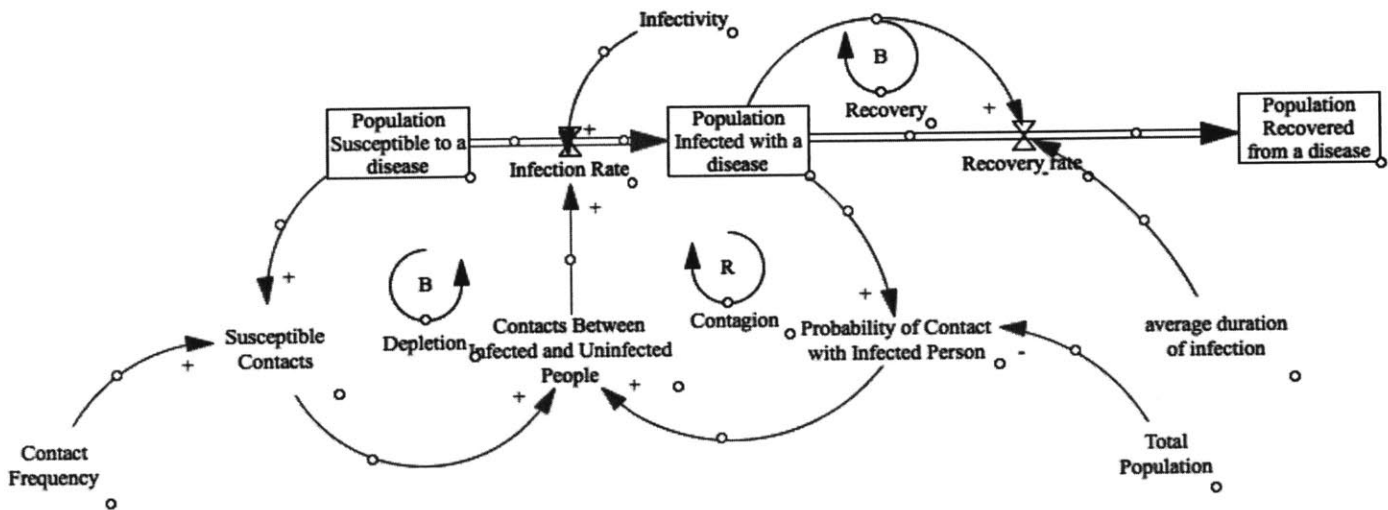


Figure 72 The disease infection and recovery model (Adopted from Sloan course 15.871 Introduction to System Dynamics)



### 3.3 Improved Average Wage Can Afford the Cost of Being Well

Per the webpage of World Bank, China's GDP in 2012 is \$8.227 trillion and the income level is 'upper middle income'. The average wage of Chinese workers has been increased dramatically year by year, as the economy of China took off over the past twenty-five years.

Tradingeconomics.com summarizes the average wage of Chinese workers from 2004 to 2013. Up to January 2013, the average yearly wages is CNY 46,769, which is USD 7,628 (based on the rate of USD100=CNY613.06 on March 6<sup>th</sup>, 2014). The exact number is not as big as developed countries; however, the yearly rate of increase is significant, as shown in the bar chart in the following figure. Continuous growth is expected from the current market analysis and policy guidance.

This increasing income allows people to improve their living conditions. Meanwhile, more and more people pay attention to healthy lifestyles and longer life than before. This expectation builds the foundation for strong consumer needs in health related products and services.

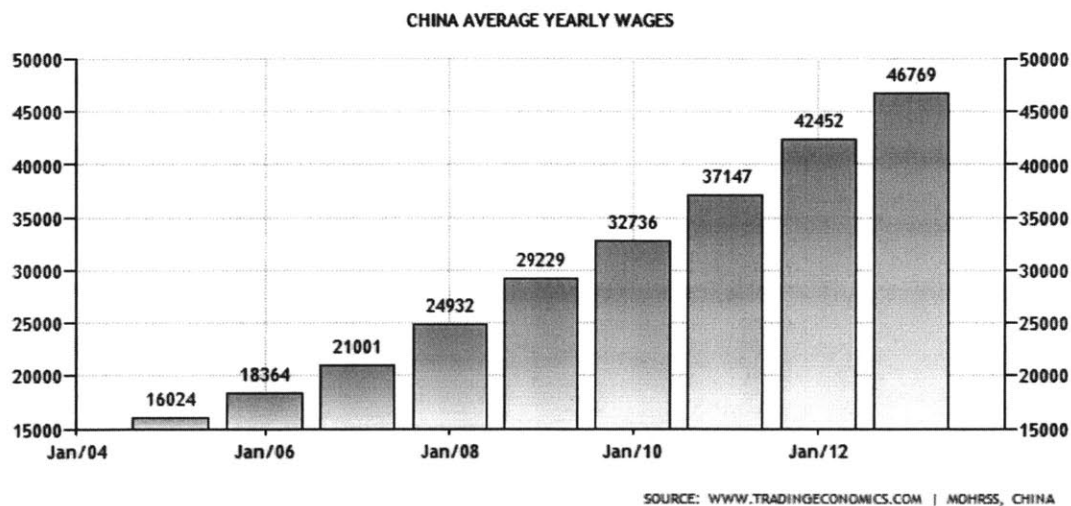


Figure 13 The China Average Yearly Wages. Unit: CNY.

As analyzed, the need for health checkup is strong; the improved financial status allows people to spend on health related products and services. It is helpful to zoom in on the overall healthcare expense and examine the business case in this area.

Nationwide, the growth rate of China’s healthcare expense is significant. The Compound Average Growth Rate (CAGR) of overall healthcare expense is 18.03%. It is CNY 396Billion as in 2011, which accounts for 5.1% of China’s GDP. The CAGR of personal expenditure on healthcare is 17.89%, which is CNY 138Billion in 2011.

The growth and overall personal expenditure on health checkup/prevention is not as high as the healthcare expense, however, there has been fast growth in the past twenty years and the growth rate is expected to be much higher as income continues to rise, especially in the first-tier cities. Figure 3 is the illustration of growth with personal expense on health checkup/prevention. The rising trend is clearly fast. It is well agreed that spending on preventive activities can widely lower down the cost of overall healthcare, because many more diseases can be controlled and treated early. Therefore, it can be expected that expenditure on health prevention activities including health checkup will keep up fast growing trend.

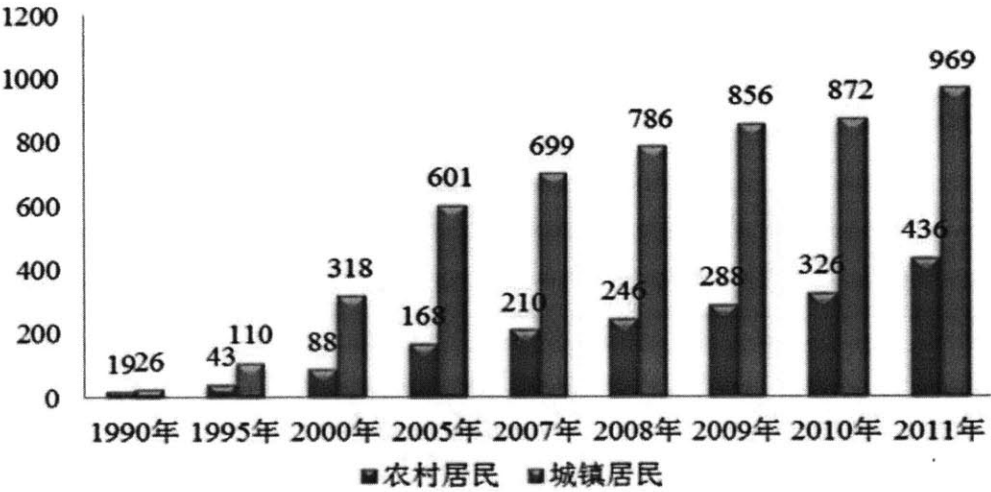


Figure 14 The personal expense on health checkup/prevention in China as of 2011. Unit: CNY. Blue Bar: Rural area; Green Bar: Urban area. Source: 卫生部《2012年中国卫生统计年鉴》

### 3.4 Increasing Prevalence of Chronic Diseases Drives More Needs

As the quality of life improves, some of the chronic diseases can easily happen if the individual does not pay good attention to healthy lifestyle. These diseases typically include Hypertension, Diabetes and Hyperlipidemia. iKang's IPO prospectus lists the growth in the prevalence of these three chronic diseases in China from 2001 to 2012. All three diseases exceeded 70% growth in a year, which is a significant increase. This trend can greatly harm the health of the people in China. As a result, it is necessary to provide regular health checkup to the people, and suggest preventive approaches to avoid these diseases from happening in advance.

	<b>Select Chronic Disease Prevalence in China</b>		
	<b>2001</b>	<b>2012</b>	<b>Growth</b>
	<b>(in millions)</b>	<b>(in millions)</b>	<b>(%)</b>
<i>Hypertension</i>	141	266	89
<i>Diabetes</i>	47	92	97
<i>Hyperlipidemia</i>	146	250	71

Table 2 The Rising Prevalence of Chronic Diseases. The table sets forth the growth in the prevalence of select chronic diseases in China from 2001 to 2012. Source: iKang's IPO prospectus

To conclude in this chapter, it is clear that consumer needs and the buying power are matched in the health checkup service. This awareness of being well among Chinese builds the foundation of consumer needs on healthy related products and services. The average wage of Chinese workers has been increasing significantly, and is expected to continuously increase in the next ten years. Hence, people become more and more interested in the topic of being well; people can afford the cost of being well. Health checkup has been commonly recognized as one of the critical approaches of being well.

## 4 The Health Checkup Market, Competitors and Identified Business Opportunity

### 4.1 The Current Market in China

As mentioned in paragraph 2.3.3, the public health checkup centers have unbalanced supply and demand. To mitigate this situation, the private-owned health checkup institutions started up since year 2000 in several major cities such as Beijing, Shanghai, Guangzhou, and became more and more popular due to the new operating model of better service level and separation from infection by patients who are taking disease recovery in public hospitals. They set up the practice of a new business model and fastly expanded to more than twenty major cities. Businesses such as Ciming, iKang and Health 100 set their prices at low to medium level (USD 50 to USD 150 per visit). There are typically the individual and corporate customers. It was found clearly that the corporate customers who send their employees for health checkup are the key revenue source for most of the health checkup centers. It is regarded as one of the compensation packages to offer free health checkup service by corporations. Through the list of the major checkup centers in Beijing in 2009, I found there has been another pricing strategy on higher end customers such as MeiZhao (MJ in short). MJ targets the top high-income customers who could afford a higher price of up to USD600 per visit. Here is a list of major health checkup centers in Beijing in 2009:

Name	MJ	Hua Zhao	Ci Ji (Ciming)	Qian Fu	Jiu Hua	Bai Zhong	Zheng Qing Yuan	Xiandai Yang Guang	Beijing Health Checkup	Health care service center
Price (CNY)	2500	1680	380	/	380	/	/	/	500	136
Area (m2)	3000	/	800	2000	/	1800	1400	800	800	/
Floor (unit)	1	1	1	2	/	2	1	1	2	1
Daily capacity	180	/	300	/	/	250	200	180	/	170
Report available time	4hours	/	7days	7 days	/	1 days	7 days	7 days	/	7 days

Table 3 The major health checkup centers in Beijing in 2009. Source: 2011-2015 Health Checkup Industry Report. China Commodity Marketplace. Chinacm.com.

## 4.2 Key Players and Their Strategy Through Media Review

It would be helpful to understand the current market players and their business strategy. This information was collected from different media reviews and summarized in paragraphs below:

### **CiMing Health Checkup Management Group Co.,Ltd.**

Ciming Health Checkup Management Group, one of the largest healthcare providers in China, applied for an IPO on the Shenzhen Stock Exchange. Although there were delays during the approval process, this indicated the confidence of the management team to compete in this business sector. According to the prospectus released in March, Ciming Health Checkup planned to issue 40 million shares to raise as much as USD28 million (CNY175 million). The company had engaged a number of Chinese private equity funds and venture capital firms as investors since its founding in 2002 in Beijing. Hu Bo is the current Chairman of Ciming HealthCheckup. (<http://www.forbes.com>). Ciming obtained great success in Beijing. The revenue of the 16 health checkup centers in Beijing accounted for 57% of Ciming's total revenue. Ciming has acquired 'Shen Zhen Wo Jia Health checkup centers' aggressively in South China, trying to get a strong winning position across China. This is a deal of twelve health checkup centers under the total valuation of USD250Million (CNY1.5Billion).

It is worth to zoom in on the services provided at Ciming's center. One of Shanghai Ciming dispensary is located in central business district of Lu Jia Zui-Bund with comfortable surroundings and convenient space of around 2,000 square meters. Ciming claims the whole checkup process uses clear air, amiable service, easeful environment and warm atmosphere. "Good Health, Happy Mood" is an updated comprehension of life proposed by Ciming. Different from the normal hospitals in China, The individual space is provided in Ciming. Customers enjoy a feeling of being home; there is no time wasting on walking up and down seeking offices, and guided all the way by nurses. Customer is never afraid of the cross-contamination there. A face-to-face explanation by specialists during the checkup results and suggestions are provided. There would be lectures on health care and health improvement available

afterwards. (<http://www.shmtppp.com>) Furthermore, Ciming offers post-checkup services for those who need further medical care such as hospitalizing, personal nutritionist consulting and psychological consulting, etc.

### **iKang Guobin Healthcare Group, Inc**

iKang is one of the largest providers in China's fast growing private preventive healthcare services market, accounting for approximately 11.6% of the market share in terms of revenue in 2012. The founder is Ligang Zhang, who graduated from Harvard University and had a dream of building China's healthcare system. iKang filed its IPO on NASDAQ on March 3<sup>rd</sup> and started trading on Apr 9<sup>th</sup>. This is a smooth IPO process.

iKang provides comprehensive and high quality preventive healthcare solutions including a wide range of medical examinations services. The customers are primarily corporate customers who contract with medical examination services to provide their employees and clients with these services at pre-negotiated prices. iKang also directly markets the services to individual customers.

As of December 31, 2013, iKang's network consisted of 42 self-owned medical centers in 13 big cities in China. The corporate customers include 71 of the 100 largest Chinese companies in 2012 as ranked by Forbes. iKang has since expanded the customer base from approximately 5,200 corporate customers in fiscal 2010 to approximately 11,200 corporate customers in fiscal 2012 and further to approximately 16,900 corporate customers in the nine months ended December 31, 2013. Total customer visits increased from approximately 1million in fiscal 2010 to approximately 1,381,000 in fiscal 2011 and to approximately 1.9 million in fiscal 2012, representing a CAGR of 34.5%, and the number of total customer visits was approximately 2.3 million for the nine months ended December 31, 2013. From fiscal 2010 to fiscal 2012, the net revenues grew from US\$68.2 million to US\$133.9 million, representing a CAGR of 40.1%. The net revenues reached US\$172.8 million for the nine months ended December 31, 2013. (From IPO prospectus, NASDAQ)

## **Health 100**

Headquartered in Shanghai, Health 100 has the most number of stores. Health 100 claimed that it became the biggest health checkup service institution in 2012, with more than 100 sites all over China. It had 130 sites in 55 cities in 2013, whose network covers a big scale in the Mainland China.

## **Beijing Meizhao Health Screening Co.,Ltd. (MJ)**

MJ originated from Taiwan. In 2003, MJ started the first Mainland China health checkup center in Beijing. It is located in the center of Beijing with the operating area of 3,000 square meters. The total investment was USD5Million. It aimed to provide health screening, health improvement and health management services. The price per visit was set higher than the market average. It was between USD 400 to 600, as interviewed by one of the customers who was enrolled in the annual checkup. MJ opened up its second center in Shanghai in 2009. The expansion speed of MJ is slower than Ciming and iKang. MJ only has two in-house centers now and the other centers are contracted, while Ciming and iKang have expended more than twenty centers respectively in China.

### **4.3 The Better Market Position Found Through Analysis**

In China, the size of the market can be huge if the right service is provided to the population. As shown in the income classification data in 2011 (appendix 1), there are 20% of population having middle income of CNY 21,439, which is USD 3,497; 20% upper middle income of CNY 29,059, which is USD 4,740; 10% high income of CNY 39,215, which is USD 6,397; 10% having even higher income of CNY 64,461, which is USD 10,515; (based on the rate of USD100=CNY613.06 on March 6<sup>th</sup>, 2014). These account for 810Million potential consumers who have buying ability for health checkup services. The 10% top high-income group has 135Million potential consumers who might need a high level of service in the health checkup center.

Therefore, a high tier health checkup center's target consumers can be the top 10% high-income group in first-tier cities of China. Assuming 1% of the top high-income group participates in annual health checkup, we have 1.35Million consumers. The minimum average expense on health checkup is USD400 per person in the current market. The total annual revenue of the market is USD540Million under this minimum estimation. The market size would be bigger if we take into consideration that once one family member gets involved in the health checkup practice, he/she will introduce this practice to all the family members in the foreseeable future.

To make the discussion clear, I grouped the existing market players to different categories according to the price set for one checkup visit in these health checkup centers. It is found that the majority of the business focuses on the category of low to medium price level. Specifically, Ciming and iKang started up the premium pricing level in the recent years, targeting the super rich group. MJ is in the range of high price level but not as high as the luxurious branding. This thesis proposes a startup in the same range of MJ, which is above the current average market price but not as high as luxury level. The reasons are 1) the low to medium category is already close to “red ocean”, where the competition is strong 2) it is too early to have the luxury category in China, since the super rich group is getting the healthcare services in Japan or the United States; it will take a long time to build the capability and win their trust.

Price for one time checkup	Categories	Examples
<USD 50	Low level	Community health checkup service
USD 50-150	Low to medium level	Health 100
USD 400-600	High level	MJ
>USD1500	Luxury level	iKang International Evergreen Medical

**Table 4 The different categories of health checkup centers by pricing. (Defined by Weibo Liu for this thesis)**



Besides positioning on income level, the health checkup business should consider age as another critical factor. The people who need this service the most are the ones who have a higher possibility of getting ill. The table 5 is generated by Ciming, which is the age distribution of 7752 people from 76 corporations that enrolled in the checkup from January to August in 2006 in one of Beijing's centers. The age group between 30 and 50 represents the majority in the corporations. Furthermore, people older than 60 typically are not involved in the corporate checkup activity but pay on their own. People older than 70 are closely involved with public hospitals' healthcare services. These senior people conduct frequent checkup while seeing their doctors. Hence they do not have strong need to conduct another annual checkup.

Age	People	Percentage %
20	1113	14.36
30	1839	23.72
40	1909	24.63
50	1480	19.09
60	811	10.46
70	587	7.57
Above 80	13	0.17

**Table 5** The age distribution of 7752 people who did health checkup in Ciming Beijing. Source: <http://www.ciming.com/zoujinciming/meitizhongxin/cimingxinwen/2010-12-10/269.html>

To sum up, the target group for this business plan is the people whose ages range from 30 to 69, with an annual income more than USD10,000 in the first-tier cities. This group has the strongest need to have the high service level health checkup, and this can definitely generate high profits in the current market in China. The following startup plan is focusing on discussing how to better serve this group.

## **5 Primary and Essential Step: Obtain a Certificate of Business as a Healthcare Institution**

To start up this new business, the primary and essential step is to obtain the certification. Here is the detailed background information. The health checkup center is a medical institution that must obtain a

medical institution establishment approval certificate from the National Health and Family Planning Commission (NHFPC) or its local health bureau. This is defined by the ‘Regulations on Administration of Medical Institutions’ issued in February 1994 by the China State Council and the ‘Implementation Rules for the Regulations on Administration of Medical Institution’ issued in August 1994 by the NHFPC. The approval process will consider the population needs, existing medical care capability and the capability of new medical institution. All medical institutions practicing licenses are subject to an annual inspection. All personnel and employees who are directly performing medical services are required to obtain qualification certificates.

Additionally, there are two government officials who define and regulate this market. Government Municipal Administration of Quality and Technology Supervision monitor the calibration and quality assurance of all the checkup equipment. State Administration for Industry and Commerce of the People’s Republic of China monitors the business activities such as advertisement.

The State Council announced the policy to encourage private investment in the medical institution in March 2009; the National Health and Family Planning Commission defined the criteria to operate a health checkup center in August 2009:

- Have independent health checkup and awaiting area
- Include capability for checking internal, surgery and obstetrics
- Employ two or more associate senior title doctors
- Employ at least one certified medical profession in every department
- Employ more than ten certified nurses

The State Council kept announcing improvement policies between 2010 and 2013 to promote the private investment in medical care industry. Now it has become a standardized procedure and criteria to obtain and operate the health checkup center.

The startup business also needs to understand the medical responsibility of a health checkup center while obtaining a certificate. There are three categories of medical approaches and technology, defined by the National Health and Family Planning Commission of the People’s Republic of China in March 2009. They are as following:

Category	Description	Response
1	The technology is safe and has confirmed effect; the medical care centers can ensure its safety and effectiveness through routine management	Medical care centers
2	The technology is safe and has confirmed effect; there is moral standard or higher risk involved, which needs to be managed by government administration of health	Province/State government administration of health
3	The technology involves 1) high moral issue 2) high risk 3) unproved safety or effectiveness 4) need special resources 5) any other technology needs special management by government administration	National Health and Family Planning Commission

**Table 6 The three categories of medical approaches, defined by the National Health and Family Planning Commission of the People’s Republic of China**

A health checkup center is defined in category 1 that is responsible for the safety and effectiveness through routine management. The technology applied in a checkup center needs to be safe and has confirmed effect. This is the basic requirement to achieve. Relatively, the management of a checkup center is simplified by this definition, since no new technological development or high-risk operation is involved in a checkup center.

Obtaining an approved certificate can be time consuming, if the business does not understand the requirements clearly or does not meet with the requirements exactly. Once a certificate is obtained, the business starts to deploy these strategies as described in the following paragraphs.

## **6 Business Strategy – Creating a Flywheel**

### **6.1 Flywheel Model- More Awareness, More Trial, More Satisfaction and More Loyalty**

As indicated in chapter 3, Ciming, iKang and Health 100 are strong players with the low to medium categories of individual customers and corporate customers. On another range, Ciming started up its Osis Hospital in 2011, which is a super high tier health service institution. iKang opened its International Evergreen Medical in Dec. 2013 that is comparable with Osis. The price of these luxury health service centers can be as high as USD 1500 and more. Both of the firms have ambitions to invest on super high tier / luxury health checkup centers through their IPO prospectus.

Referring to Table 3 about the different categories of health checkup centers defined by price per visit, it can be found that there is relatively less competition in the high tier health checkup category of USD 400-600. Hence the target group of this business plan is the people age from 30 to 69, whose annual income is more than USD10, 000. The startup can play a leading role in this area to push the frontier of this market.

With identified target customers, the business strategy for the early stage of this startup can be summarized as “More Awareness, More Trial, More Satisfaction and More Loyalty”, as shown in the below figure. The author of this thesis would use this flywheel model to establish the business strategy and create positive feedback loop for growth. The first critical path is to drive the awareness of the new established brand in customer’s mind. Through doing so, some of the customers can be willing to try the new services. Meanwhile, the operational excellence ensures customer satisfaction during the checkup process. This creates loyalty from these customers and retains their business. All the related business goals should be designed to measure these four dimensions to drive on positive feedback loop. It is easy to understand, however, it requires a comprehensive market and operation strategy to realize and implement.



**Figure 15** The business strategy, developed by Weibo Liu for this business plan

## 6.2 Competitive Advantages

This startup business needs to gain four competitive advantages in order to keep the signature of the business and become successful. Brand, People, Operation and Culture are equally important to the development of this business. No sustainable profit can be generated without achieving excellence in these four elements of competitive advantages:

### (1) Brand Building

As a high tier health checkup center, the brand building is critical. It starts with the marketing strategy to increase customer awareness and initial trials. Then the brand is built through a high service level to give customers an excellent experience. This will definitely create the flywheel effect to enhance the overall business growth. A market team needs to be setup to continuously build the brand according to changes in the market.

## **(2) Retain and Develop People**

Certificated doctors and nurses, good management team and good supporting crew would clearly be a competitive advantage for this industry. The startup business should design the approach to retain and develop people. The salary can be set above the 75% percentile of the health checkup centers. More importantly, the day-by-day engagement activities are actually more appealing to retain the people and keep them motivated to work. For instance, a simple activity such as supplying free food on Friday or celebrating birthday monthly can create the feeling of belonging for employees.

## **(3) Operate Efficiently**

Whether the competition is high or not, the one who operates efficiently can gain the highest profits. Meanwhile, an efficient operation can deliver better services to customers. The following sections examine the details on operational excellence.

## **(4) Building the Company Culture**

It is essential for all the employees to have faith in their jobs. Therefore, they can perform well in role and gain career satisfaction through the daily work. The management team should pay greater attention on building the company culture even at the very early stage of the startup.

## **6.3 Startup Strategy**

The startup can establish its first site in Beijing, to implement, develop and refine the business strategy mentioned in above paragraph. It might take a while to get the certificates, hire right people, establish good location and start accumulating active customers. The first two years might not have substantial financial returns and all the profit generated from business operation would be re-invested back to the startup.

It is critical to get the certificate of health care institution from Beijing Municipal Health Bureau. This is one of the critical paths for the startup. For example, MJ's application process took as long as three years in Shanghai. To avoid this similar situation, the startup business needs to understand the policy well and hire a person who has done this right and fast before.

The startup has to connect with one or two well-recognized doctors who are influential in the healthcare area. They can help to build the initial brand image and attract customers to try this service. The majority of the doctors are retirees from public hospitals, with ages between 55 and 69. These doctors have the up-to-date knowledge about health and can plan the backbone role in the business. The doctors who have retired for more than 10 years are not preferred since they do not have updated knowledge any more.

The current identified location is near 'Ma Dian' area, which is north of the third ring road in Beijing. Firstly, this place is in the middle of many residential areas, which is close to customers. Secondly, north of Beijing is regarded as the preferred place of high-income people. Thirdly, these residential areas have been built for more than twenty years. Hence, many elderly are living in these neighborhoods. Fourthly, the transportation is relatively better since several highways and ring roads merge. Lastly, competition is avoided by being closely located with MJ, which is exactly in the middle of the city.

#### **6.4 Expansion Strategy**

With the first startup site, the operating experience can be gained and accumulated. The staffing team includes the crew and management team. The reputation of high-end service can be established through word of mouth and advertisement. Therefore, it will be a good foundation to expand to the second site. Per the principle of 'take strong position fast', the business expansion can be aggressive built by opening three to five new clinics each year using good risk control approaches. Nevertheless, the critical item is to find sufficient funds to support the expansion. Obtaining funding would be highly possible once the first site has proven to be successful and strategically right.

## **7 Marketing Strategy**

Since the business strategy is: More Awareness, More Trial, More Satisfaction and More Loyalty. The marketing strategy should be focused on increasing the brand awareness and attract target customers to try the service which can then gain more customer satisfaction and build the brand loyalty. The process can in turn influence more customers to join the practice and form a flywheel effect to enhance the brand.

First of all, the strategy can be applied to reach the target group through different approaches. It can be based on geography since the target group lives in the similar neighborhood. The startup company can build joint activity with the administrative office of the neighborhood to deliver the health care program to the target group. It can also be based on certain website that the target group visits frequently. The message of the new health checkup center with superior quality can be pushed in front of the target group.

Secondly, the strategy can be applied to build a community who is careful about his/her health through a well-designed and well-maintained website. There are many websites designed for this purpose in China, although the contents available on the website are really few now. These websites are lack of proper maintenance. This provides an opportunity to generate a platform for the target group to get necessary information about health, to discuss recent concerns about health and to learn from each other about healthy lifestyles.

Thirdly, initial promotion and smart promotion to ensure the target group tries the health checkup service is critical. The promotion may not be purely a function of low pricing. It can be implemented in a smart way, such as bundling with other services or a market champion to award the winner for membership in the health checkup center.

## **8 Operating Strategy**

Since the business strategy is: More Awareness, More Trial, More Satisfaction and More Loyalty. The operating strategy should be focused on increasing the service level to ensure satisfaction, which can



then gain more customer loyalty. The process can in turn influence more customers to join the practice and form a flywheel effect to enhance the brand and grow the business.

In this section, one Profit and Loss (P&L) form is assumed to this business. Then every item on the P&L form is analyzed to decipher the operating opportunity to enable business strategy and business goal.

### 8.1 Revenue and Cost Structure

To achieve the business strategy and business goal, the operation should have the advantage of high service level, efficiency and innovation. These three operating strategy can be supported by every aspect of business model and every decision made daily. To start the analysis, an assumption is made of the profit and loss form:

	<b>Assumed %</b>
<b>Net revenues</b>	
<b>Medical examinations</b>	80
<b>Disease screening</b>	5
<b>Other services (Dental, health management)</b>	15
<b>Total</b>	<b>100</b>
<b>Cost</b>	
<b>Medical consumables and outsourced services</b>	18
<b>Salaries and benefits</b>	18
<b>Rental and office expenses</b>	10
<b>Depreciation</b>	5
<b>Total</b>	<b>51</b>
Gross Margin	<b>49</b>
<b>Sales &amp; Marketing contribution</b>	8
<b>General administration</b>	12
<b>Research and development</b>	1
Profit before tax	<b>28</b>

Table 7 The assumed profit and loss form, developed by Weibo Liu for this business plan

## **8.2 Net Revenue- Results of High Service Level, Efficiency and Innovation**

The net revenue is generated through the daily operating for the customers who come for health checkup and health management service. Initially, majority of the revenue comes from medical examinations, which are the current services provided in most of the health checkup centers. To enhance the service level, more disease screening services can be done to predict the potential disease. For instance, cancer related screening would be very helpful to identify the disease at the very early stage, thus allowing the patient to have a better chance of recovery. At the same time, the revenue can be driven by increased disease screening services. Another critical service from a high tier health checkup center is health management, which is about providing critical information about a customer's health and providing services to improve the customer's health. It is not well adopted at the moment in China but will definitely become a popular demand for the top high-income group. The revenue can be driven by increased health management services.

The price per customer is higher than average price of health checkup services in the current market; hence the revenue generated per customer is higher. This gives much room for enhancing the service level, such as hiring, training and retaining the best people. In another word, the expense can be increased to achieve the best services.

## **8.3 Cost of Medical Consumables and Outsourced Services – Enhance High Service Level, Efficiency**

The medical consumables costs are the costs of the consumables used in medical tests, instruments and treatments. The outsourced services costs consist of costs for outsourced medical tests conducted by qualified independent laboratories, and fees paid to third-party service providers. These are critical items to ensure high service level. The good standard of medical consumables shall be applied in the health checkup center. The outsourced services can be leveraged to provide better service and efficient response to customers. These include inpatient care, outpatient services, specialized testing or dental care. These

can be further expanded based on customer needs, such as Yoga or Gym training courses. To make the difference, this is a key area to innovate.

#### **8.4 Cost of Salaries and Benefits –Enhance High Service Level, Efficiency and Innovation**

The ranking of salaries and benefits to employees shall be above 75 % in this industry in order to attract, hire and retain the best people to deliver the best services. It is actually an entry barrier for having sufficient certified doctors and nurses in a health checkup center. The high tier checkup center shall involve the well-known doctors who can be employed on a part-time basis. The center shall hire the doctors who have expertise and are innovative. The center shall hire the nurses who deliver a high quality work results and care much about people.

<b>Professions</b>	<b>Number of people</b>
<b>Doctors</b>	22
<b>Nurses</b>	22
<b>Other supporting individuals</b>	10
<b>Sales and Marketing</b>	8
<b>Management team( include finance and operation)</b>	5
<b>Total</b>	79

**Table 8 The assumed Headcounts in one center, developed by Weibo Liu for this business plan**

#### **8.5 Cost of Rental and Office Expenses –Enhance High Service Level, Efficiency**

The cost of rental and office expenses primarily consists of rental fees and office expenses directly associated with the use of medical center. To enhance a high service level and efficiency, the location of the center shall be convenient for customers to reach. The quality of the decoration shall be higher standard to enhance the checkup experience. The design of the overall layout shall be scientific to ensure

operating efficiency and customer experience. The center need not be located at CBD center or busy area, nor occupy huge space to have low efficiency.

### **8.6 Cost of Depreciation with Facilities –Enhance High Service Level, Efficiency and Innovation**

The facilities in the health checkup center shall be in compliance with good standards to enhance service level. The purchasing of the equipment shall consider the factors associated with technology, reliability and maintenance. For instance, the X-ray screening equipment needs to be designed with advanced technology to ensure accuracy, with reliable operating to ensure utilization and with lower maintenance cost to ensure efficiency. The equipment will be depreciated over ten years; however, this will not limit the upgrade of them. The equipment can be replaced in advance if there is proof of improvement with the new model. All of these in turn can enhance the innovation in the daily operations.

### **8.7 Cost of Sales & Marketing –Enhance High Service Level**

The sales and marketing costs include the costs associated with hiring and training the sales force, and implementing of all the sales and marketing related activities. Eight percent is not high number at the stage of starting up a new health checkup center. The consideration is that the business positioning is very clear: targeting on the top high-income group in first-tier cities. Due to this clear niche market, the sales and marketing team can stay focus on increasing the brand awareness and trial, which can then gain more customer satisfaction and build the brand loyalty.

### **8.8 Cost of General Administration- Management Team–Enhance High Service Level, Efficiency and Innovation**

The costs of general administration consist of costs of hiring the management team and other business administrative professions. An organization chart can be the same as in figure 6. A management team of five people can steer the business. The general manager is the decision maker and has to assume the leading role in the business. An operating manager is responsible for the operation excellence to

ensure high service level and efficiency. A sales and marketing manager is critical to champion the marketing strategy. A customer service manager is in charge of providing high service level in pre-checkup consulting and after-checkup review. A finance manager can take care of the P&L form and ensure the clear track of the business financial result.

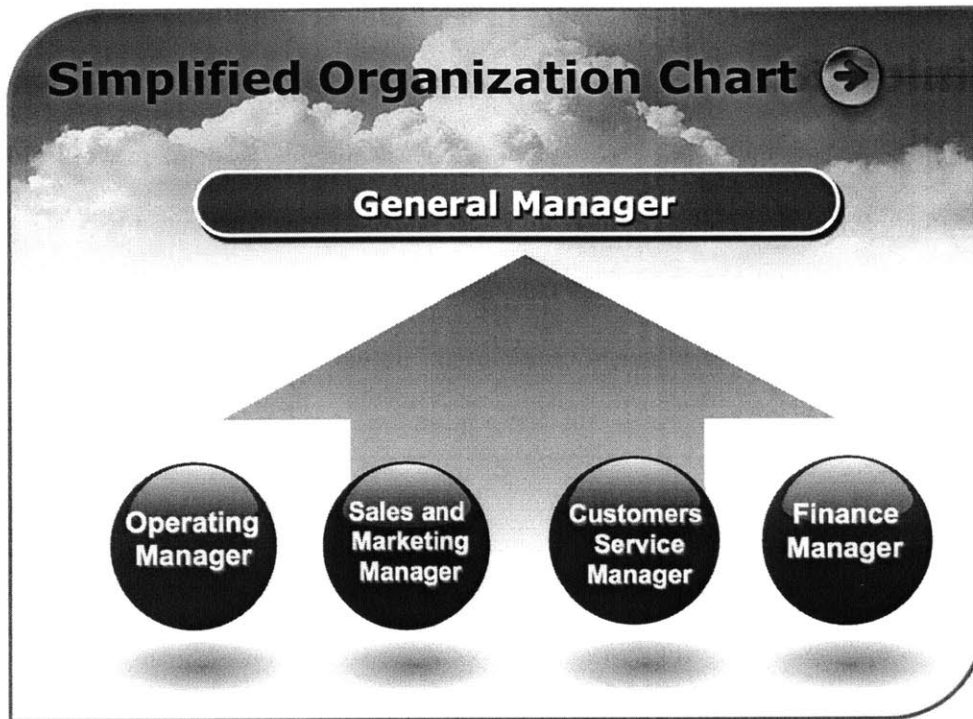


Figure 16 The Organization Chart, developed by Weibo Liu for this business plan

## 8.9 Cost of Research and Development–Enhance High Service Level, Efficiency and Innovation

R&D does not require high expenditure, but is critical to keep the business updated on good technology and industry trends. R&D shall be under the management of operating manager. This group shall focus on sourcing the new technology, collecting equipment related information and developing innovation business operating approaches.

### 8.10 Profit before Tax –Enhance High Service Level, Efficiency and Innovation

All in all, the overall profit before tax can reach 28%. To retain a profit level is essential to ensure the business operation and reward the startup efforts. The profit can be re-invested to the business for continuously improvement or opening up the second checkup center when the opportunity is proper.

### 8.11 Company Culture–Enhance High Service Level, Efficiency and Innovation

The work result will be much better if an employee has faith in her/his job. This startup business has the advantage to build company culture in a designed style as in figure 7. Systematic work procedure, care about people, feedback and sharing, rewards, fun and friendship, are elements for people to gain career satisfaction through the daily work. The management team shall pay great attention on the company culture building even at the early stage of the startup.

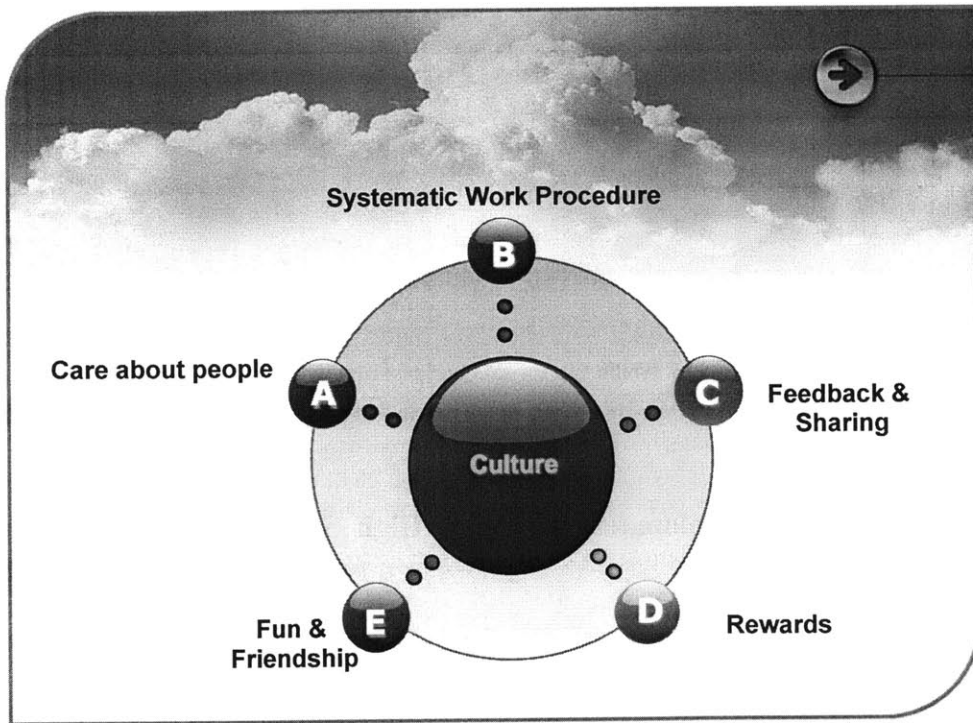


Figure 17 The Company Culture, developed by Weibo Liu for this business plan

## **9 Financing Plan**

The funding of a high tier health checkup center requires CNY20Million, which is USD 3.26Million; (based on the rate of USD100=CNY613.06 on March 6<sup>th</sup>, 2014). The area can be 1,000 square meters. There is no substantial quotation in this thesis regarding the total funds needed. The number is generated by benchmarking with industry practice. Ciming needed CNY15Million, which is USD 2.45Million to start up a new center targeting low and medium services. A high tier center would require more funding. The area can be smaller than Ciming's design since the expected total number of customers is lower. Nevertheless, this number is draft and requires more accurate quotation to finalize the budget.

The startup of first center can be funded through one or two investors who have confidence about this health checkup industry and who agree with the direction of this business plan. The entrepreneur who runs the business can gain some percentage of the share as incentive. More discussions are needed in this topic with the actual investor according to different scenarios.

## **10 Case Study of Beijing MJ Health Screening Center**

MJ started its first health-screening center in Beijing in the winter of 2003 after three years of preparation for this business. It was the early time of starting up the private health checkup services in China. MJ targeted at high-end customers. MJ had designed an efficient layout for customers to complete the checkup in different zones but on one floor; it had an IT system that could allocate customers to different departments and optimize the process efficiently; it uses high quality equipment and medical consumables; its decoration is comfortable for customers etc. MJ became the role model for the other health checkup to learn in terms of process design, services level and standardization. It quickly achieved the goal of serving 100,000 customers annually.

However, the speed of expansion has been slow over the last ten years. MJ only opened another in-house center in Shanghai. The other centers are all contracted sites. MJ has the ambition to expand

quickly across the big cities in China. It turned out the expansion was not smooth. Other competitors such as Ciming and iKang performed better than MJ. The key barrier is the difficulty to get an approved certificate, per one of the media report from Finance Sina.com.

The author has connected with Dr. Jiang Hongyi, the CEO of Beijing MJ Health Screening Center for the purpose of verifying the thinking in this thesis. The new management team had just taken over MJ at the end of 2013. The purpose of the interview with Dr. Jiang was to analyze whether the strategy generated from this thesis is practical and explore the MJ's strategy to see which improvements can be made immediately.

After the analysis, the opportunity identified for MJ based on the approaches of this thesis can be summarized as:

1. Upgrade equipment & Recruit new employees, especially doctors
2. Reach target consumer through different and focused channels
3. Achieve operation excellence

The rationale for this recommendation took into consideration MJ's developmental pace in the recent years, and it is time now to upgrade the equipment with newly developed technology, which can provide more accurate results. Some of the doctors have been working at MJ for 10 years even after retirement. They are unable to follow the new changes in this market. New doctors needed to be hired as fresh eyes to fill the talent pipeline. Furthermore, the marketing team could focus on specific channels to reach target customers and attract them to use the service. At the end, MJ will want to improve operation to enable high service level, and gain higher profit.

Once the new management team establishes these practices, they would be confident to expand the business to other cities through acquisitions. While applying for a certificate is time consuming, MJ can get this done fast through acquiring the medical institutions that already possess the certificate.



Meanwhile, MJ would need to benchmark itself against its competitors and see what can be improved in the process of applying for the certificate.

## **11 Key Risk and Mitigation Plan**

The health checkup center is one of the critical institutions in the healthcare system. It is critical to ensure the safety and health of all the customers. Many business-related risks are closely linked with the wellness of people. Hence, it is essential to understand the risks and develop mitigation plan to control the risks. These are the key risks identified by the best understanding of the author at the time of drafting this business plan; more risks are expected along the implementation of start-up activities. The business owner shall be sensitive about these critical items.

### **11.1 Wrong Results**

Due to equipment error, human operating mistakes or the uniqueness of individual customer, the checkup results might be wrong, or might not indicate the actual health status. It turns out the customer can get a different result in another institution or even get sick without any prediction.

The risk level is high. To mitigate the risk, a quality management system needs to be introduced and implemented in the checkup center. To be specific, the equipment maintenance and calibration procedure need to be established and executed with precision; the operating training and tracking procedure need to be executed.

### **11.2 Regulation Risk**

National Health and Family Planning Commission and all its administrative departments are the key stakeholders of a health checkup center. The policies made can change the rule of the game significantly. Presently, the health checkup center is strongly supported. It is clear that the regulators will continuously promote this industry. The key is how the business model can be adjusted agilely to accommodate the new policies.

The risk level is low. To mitigate the risk, the business owner shall understand well about the policies and follow the change of new policies. Furthermore, the business owner can join the association of health checkup institutions to leverage the power of all the participants and make necessary influence.

### **11.3 The Argument that Checkup is Not Useful**

The argument that checkup is not useful can reduce the customer base suddenly and dramatically if there is influential report coming up. One party views that although annual medical examinations are a routine practice in several countries, it is poorly supported by scientific evidence in the majority of the population. Cochrane (2012) did not find any benefit with respect to the risk of death or poor outcomes related to disease. People who undergo yearly medical exams however are more likely to be diagnosed with medical problems.

The risk level is low. No action is needed to mitigate this risk.

## **12 Conclusion**

Nowadays in China, the health checkup industry is enjoying the full force growth along with the taking-off of the economy. Through the analysis in this business plan, it is clear that people's needs on health checkup service and the affordability of the service match with each other. A kind of 'blue ocean' exists in the position of serving high income customers in tier one city. A high tier center with high service level positions for this group of customers makes sense. Therefore, there is an opportunity for a startup business to survive if the right business strategy is in place.

To leverage this great business opportunity, the business strategy developed for a startup in health checkup center can be summarized as a flywheel model - "More Awareness, More Trial, More Satisfaction and More Loyalty". This is the positive feedback loop of attracting customer to have first time experience in the checkup center, delighting the customer through high service level and retaining

the customer to build long term loyalty. Overtime, the business can gain significant competitive advantages in terms of high-reputation brand, engaged people, excellent operation and belonging culture.

MJ's case analysis is a good reference for this new startup, because the target customers are similar, the process design and operating approaches are similar. Therefore, the approaches generated in this thesis can be used to improve MJ's business strategy, while MJ's key course of learning can be applied in this startup business to accelerate the speed of success.

Last but not the least, the factor of people is the most critical one to achieve a successful startup business. The selection of management team, the search of investor, the recruitment of employees and the company culture building should be strategically planned, executed and optimized. By the time the company culture is created as indicated in figure 7, the startup business can be close to a great and profitable business.

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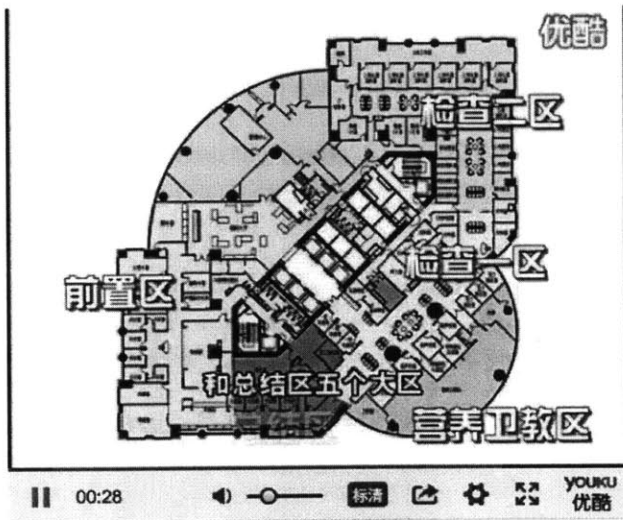
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# 14 Appendix

Appendix 1 Income Classification in China: 2011年我国按收入等级分城镇居民家庭基本情况 (《中国统计年鉴2012》之表10-7)

指 标	全 国	按收入等级分							
		最低收入户 (10%)	#困难户 (5%)	较低收入户 (10%)	中等偏下户 (20%)	中等收入户 (20%)	中等偏上户 (20%)	较高收入户 (10%)	最高收入户 (10%)
调查户数 (户)	65655	6505	3232	6566	13170	13178	13177	6572	6488
调查户比重 (%)	100.00	9.91	4.92	10.00	20.06	20.07	20.07	10.01	9.88
平均每户家庭人口 (人)	2.87	3.30	3.32	3.20	3.01	2.82	2.67	2.57	2.53
平均每户就业人口 (人)	1.48	1.29	1.16	1.51	1.52	1.49	1.48	1.48	1.58
平均每户就业面 (%)	51.57	39.09	34.94	47.19	50.50	52.84	55.43	57.59	62.45
平均每—就业者负担人数 (包括就业者本人) (人)	1.94	2.56	2.86	2.12	1.98	1.89	1.80	1.74	1.60
平均每人全部年收入 (元)	23979.20	7819.44	6445.45	11751.28	15880.67	21439.70	29058.92	39215.49	64460.67
平均每人可支配收入 (元)	21809.78	6876.09	5398.17	10672.02	14498.26	19544.94	26419.99	35579.24	58841.87
平均每人总支出 (元)	20365.71	8147.60	7290.91	10749.19	13926.13	18386.86	24276.24	32969.21	51203.46
平均每人现金消费支出 (元)	15160.89	6431.85	5575.56	8509.32	10872.83	14028.17	18160.91	23906.21	35183.64

## Appendix 2 MJ's Layout as a good practice



Source: <http://www.mjlife.com.cn/liuchengMovie.asp>

One floor is designed for this startup business. It can be divided to different function areas to standardize the process. The above drawing is MJ's current layout, which includes five areas: Preparation, Checkup area One, Checkup area Two, Dining/ Information, and Consultation. It requires a software system to direct the checkup flow and guide the customer to see the next physician. By doing so, the overall waiting time can be minimized and the checkup procedure can be clear to customer. This can increase the service level in this checkup center.