



Shanghai Flash

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Current situation and future development of healthcare in Shanghai

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Current Situation and Future Development of Healthcare in Shanghai

1. General Information

1.1 General Figures

By the end of 2008, Shanghai boosted an actual population of over 18 million, with over 13 million registered and 5 million migrant workers¹. In 2008, **the average life expectancy** extended to **81 years old**, with women 83 years old and men 79 years old. Compared with 79 for men and 84 for women in Switzerland², Shanghai's average life expectancy comes up to the advanced world standard. Hospitals at all level reached 2809 and **workers engaged in health sector** in Shanghai represented **127'700** last year. **Emergency ambulances** have played important role in providing **390'000 first aids** during the past year, realizing a year-on-year growth of 12.8%.

With the deepening of Healthcare System Reform, up to 7.7 million people (including retired workers) joined the Basic Medical Insurance for Urban Workers while 166'700 self-employed workers contributed to another type of Basic Medical Insurance. 588'700 college students are also covered by the Basic Insurance³.

The **scandal of milk powder** in 2008 caused in Shanghai over **2700 babies sick of stones**. Shanghai has been doing an effective work of providing free treatment to these children and almost all but 2 patients have recovered after prompt treatment.

Shanghai's medical situation is considerably ahead of national average level. However, **the tensions between patients and doctors** are often reported. The patients complain the doctors are being impatient and even have to give doctors extra money for getting better treatment while the doctors think they are overtired and lack of understanding and trust from the patients.. The **sky-rising medicine prices** are a great burden for low- to middle-income classes, which to a large extent subdue the normal people's consumption in case of major costing diseases. It is generally believed that the doctors' high income with a high proportion of **bribes from medicine manufacturers** further pushes the medicine prices high. There is still a long way to go for authorities in charge.

2. Shanghai's Healthcare System

2.1 Founding of Shanghai's health care system

From 1979 **Shanghai became the first domestic city entering the aging society**, with more than 20% around **2.8 million people over 60 years old**⁴ **till the end of 2007**. The figure represents double proportion of the national average and is estimated to increase.

The change in the population structure partly attributes to the Shanghai's strict implementation of the **birth-control policy** over the years and **improvement of medical conditions**. However, this kind of population structure also reflects the potential shortage of labour force in Shanghai thus the Municipal government eased its One-child Policy into encouraging a second child if both parents are from only-child families since 2004.

To serve the large population and to meet the need of growing old-aged group, its Healthcare System Reform is under great pressure to be improved and deepened.

¹ Data from: Shanghai Population Bureau:

http://www.popinfo.gov.cn/popinfo/pop_docrkxx.nsf/v_tjzl/04EE0F42BD7A3495482574590014FCE9.

² Data from: Swiss Statistics <http://www.bfs.admin.ch/bfs/portal/en/index/themen/01/06/blank/key/04/04.html>.

³ Data from: Shanghai Statistic Bulletin <http://www.spic.sh.cn/TJGB/SHTJGB2008.htm>.

⁴ Data from Shanghai Research Centre on Aging: <http://www.shrca.org.cn/2771.html>.

⁵ Primary Health Care: Primary health care is essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and country can afford.

Shanghai has built its **initial form of healthcare system** right after the founding of the People's Republic of China in 1949. At that initial stage, united clinics have made great contribution to provide basic health care services to local residents.

At the beginning of 1980s, the Chinese government introduced the concept of **Primary Health Care**⁵, aiming at meeting basic health care needs and accomplishing the goal of "Health for all". Shanghai Municipal Government responded actively to the national call and took great effort to utilize health resources to serve the grassroots level, one of which is the **implementation of "Six in One" Principle** in the vast community hospitals, integrating **prevention, health protection, medical treatment, rehabilitation, health education and consultant for family birth-control**.

2.2 Responsible Authorities

The healthcare system in Shanghai is **headed by the Shanghai Municipal Health Bureau(SMHB)**¹ and its sub agencies. SMHB represents an administrative department of the Chinese Ministry of Health and its main duties are to implement the national policies, carry out plans for developing Shanghai health services, supervise public health and so on.

The sub agencies of SMHB include 7960 health institutions, consisting of licensed medical hospitals and clinics providing health care services, Diseases Control Centres at all levels and medical supervision and research institutions.

2.3 Shanghai Municipal Centre for Disease Control and Prevention(Shanghai CDC)

The establishment of the **Shanghai Municipal Centre for Disease Control and Prevention(Shanghai CDC) in 1998** marked a significant step forward in improving public health in Shanghai. The Shanghai CDC was the first such centre to be established in China and can be considered a model program. The goal of the Shanghai CDC is to **provide a central public health organization with integrated responsibility for community and individual health needs**. Shanghai CDC, as a **non-profitable institution**, implements public health management such as food safety, health care for children and women or health-related products. It also performs preventive medicine research with the aim of health intervention and staff training and public health control as well.

On February 17th 2009 the **Shanghai Public Health Emergency Command Centre** was officially put into operation, after the establishment of the "**Shanghai public health emergency response information system**". The centre, called the "nerve centre," handles **public health emergencies and controls the spread of epidemic diseases**. The system gives priority to emergency situation, but at the same time also addresses the daily needs of early warning, prevention and control.

3. Health care facilities

3.1 Hospitals

3.1.1 Public hospitals

After an evaluation of 17'368 hospitals and clinics in all parts of China in 1998, Chinese Ministry of Health has put forward standards to clarify hospital classification. According to that, Shanghai public hospitals are divided into three different tiers.

The first tier hospitals are Health Service Centres at the community level. They are mostly situated near the densely inhabited districts, offering neighbouring residents with **general medical treatment like taking blood pressure, putting on a drip against fever or cold or such kind of mild discomfort**. In addition to common medical care, these hospitals also provide health consultant, maternal and child care and assist patients in their recovering process as well.

The second tier hospitals are provided by each district respectively. However, each of these hospitals, also providing inpatient and outpatient services, owns about **300 to 400 beds**. These hospitals of district level focus more on the **diagnostic of diseases and are responsible for their**

¹ Originally from Shanghai Municipal Health Bureau: <http://www.smhb.gov.cn/website/>

districts. Less complicated operations can also be performed there such as fractures or appendix operation.

The third tier hospitals refer to those which offer comprehensive and high-quality medical treatment or research provided by **municipality or university-affiliated hospitals**. At this level, there are **33 hospitals each with more than 500 beds**. These facilities are not only for local residents, but for patients with difficult and complex diseases from all over the country. Among all these hospitals, **ten key hospitals are linked to the teaching universities**(Fudan University, Jiaotong University, Shanghai University of Chinese Traditional Medicine, Tongji University, Second Military Medical University) or People's Liberation Army Medical Corps.

The public hospitals have **a high degree of financial autonomy**. With a subsidy of only 10 percent from Shanghai Municipality, public hospitals are expected to generate revenues, while this part covers 70% to 90% of their operating expenses. The additional revenue is freely available for paying staff bonuses and buying advanced equipments. Large hospitals with better equipments and more skilful doctors therefore attract more patients.

3.1.2 Private hospitals in Shanghai

Principally Chinese government does not allow private hospitals before. From 1990, the central government began to allow investors to establish private health care facilities. The government doesn't allow wholly-foreign-funded private hospitals and investors have to oblige strict regulation regarding the licensing contracts. According to related laws, **with a term of 30 years the joint venture investment has to be more than 20 million Yuan and the Chinese share must be over 30 percent**.

The qualified hospitals have constantly emerged in recent years and almost all **the third tier hospitals in Shanghai offer VIP services** to foreigners and special patients with most specialized doctors and modern equipments. Doctors normally do not provide home visits, as a result patients should go to hospitals by themselves in case of illness. These VIP services in the third tier hospitals are willingly chosen by foreigners in Shanghai when they need medical treatment, especially the foreigners' departments are close to western standards. Even at night-time, an English-speaking doctor should be available. He will contact the respective medical specialist who then conducts the treatment. If necessary, specialists of other hospitals will be consulted.

Huashan Hospital, jointly cooperated with World Link, opened the first private medical VIP services named Huashan Worldwide Medical Centre in 1997. **Ruijing Hospital and Singapore Parkway Medical Group jointly established 7 different private clinics:** Shanghai Gleneagles International Medical Dental and Surgical Centre, Hongqiao Medical Centre, Jinqiao Medical and Dental Centre, Mandarin City Medical Centre, Shanghai Centre Medical and Dental Centres, Specialty and Inpatient Centre and International Expat Clinic in the First People's Hospital.

The United Family Hospital, set up in Shanghai in 2004 after the first branch in Beijing, offers a full range of an international standard of inpatient and outpatient services under one roof. The medical staff include expatriate physicians from more than 10 countries, complemented by international trained local experts.

3.1.3 Current situation

At present, Shanghai's public health sector is confronted with some problems. Attracted by excellent reputation and better medical and human resources, **normal people would rather choose the third-tier hospitals than choose the community centres nearby**. Even for slight discomfort as cold, fever or superficial injuries, patients are queuing to be treated in the municipal or university-affiliated hospitals. This partly reflects the lacking of confidence in the medical conditions and diagnostic skills in small hospitals. Such kind of thoughts result in the long line waiting to be treated in the third tier hospitals, which will eventually reduce the time and quality of doctor's consultation and even affect their diagnosis. **The polarization on the choice of hospitals calls for a redistribution of medical resources and improvement of small-sized hospitals' medical standards.**

Shanghai started to promote its plan among densely inhabited districts to encourage residents go to community hospitals nearby for common diseases from February 2007. **For that, patients can save the registration fee and cost of consultation by signing a contract with a fixed community hospital.** Round **4700'000 residents have already signed** with neighboring community hospitals. The policy is an opening of Reform of Shanghai Healthcare Services and proves to be a huge success.

Another widely raised problem is the **high medical expenses compared with residents' average income.** Doctors especially well-known experts are reported to accept bribes from medicine companies by using their products more. The sales of these medicine companies could therefore improve by committing bribery. The grey expenses push the medicine prices on a high level and will eventually transfer to patients. For this difficulty, Shanghai Municipality forced hospitals to charge only 15% of their purchasing prices and compensate hospitals' revenue from governmental appropriation.

It's worthwhile to note that **most of these third tier hospitals are located in central districts.** As a result, it is inconvenient for people from countryside to get proper medical care. In this regard, in the Shanghai 11th Five Year Plan a **scheme of "5+3+1"** is mentioned. That means the Municipality will **set up 5 third tier hospitals with a total of 4400 beds in Shanghai suburban districts** by 2012. **Three former district hospitals will be upgraded to the third tier ones and one former third tier hospital will relocate and expand its scope.** Experienced doctors are mostly welcome and encouraged to work there and thus to balance the medical level in suburban Shanghai. Suburban residents are expected to enjoy a complex medical treatment within one hour on foot or by public transportation.

3.2 Major Killing Diseases

In 1952, infectious disease topped the leading one of 36% of all death while in 2007 it dropped to the 7th and caused 1.6% of total deaths. The once dominating infectious diseases as smallpox and relapsing fever have been eliminated. Between 1952 and 2007, certain **circulation diseases like cardiovascular diseases** has boosted from 9% to 35% and became the **No. 1 killing disease.** **Vicious tumor** ranks the second place with a sharp rise from 3% to 30% over the last 50 years. **Respiratory diseases** are the **third killing** element of all kinds of diseases.

Breast cancer is dominating particularly in Shanghai, where the cancer rate for women presents the highest one in China with an annual **4500 new cases.** Diabetes, injury and mental health diseases also place an immense burden to Shanghai Municipality. Sexual transmitted diseases present ascendant trend especially in recent years. Although 70% of Chinese population still do not know much of AIDS, it is officially estimated that 8.4 million people in China are living with AIDS virus. The first HIV infection case in Shanghai was reported in 1987. In Shanghai, as the increase of **drugs addiction and the sexual trade,** the reported **AIDS patients reached around 3000** by the end of 2007 and **776 new cases were confirmed** in 2008¹.

3.3 Medical Equipment Trade

As one of the largest world market for medical equipment, the **Chinese market realized a trade value of 16.3 billion RMB in 2008,** among which **Shanghai ranked 3rd place** after Guangzhou and Jiangsu. **The largest equipment supplier is the USA** in the total trade volume. **Switzerland is the leading supplier of artificial teeth** to China while **Japan exports most X-ray apparatus to China.**

China has around 2900 medical device manufactures companies for producing basic medical equipments such as bandages, or medical/surgical instruments. These are mostly state-owned small to medium-sized companies. To reduce costs and promote the local medical device industry, the **medical equipments are purchased by the public health sector.**

¹ News from Press Conference organized by Shanghai Municipal Government on Feb. 18th 2009.
<http://www.shanghai.gov.cn/shanghai/node2314/node2315/node4411/userobject21ai321060.html>.

To expand their potential market share in China, a large number of multinational companies have been established in China. **Zhangjiang High-Tech Park**, in eastern part of Shanghai, is known as "**Medicine Valley**" and has been attracting foreign and domestic manufacturers to set up R&D centres and workshop. Most of them operate either as joint venture. For instance, Siemens Shanghai Medical Equipment Ltd equips the most important hospitals in Shanghai with 51% owned by Siemens and 39% by Shanghai Medical Equipment Works.

3.4 Traditional Chinese Medicine(TCM)

The TCM theory originated thousands of years ago through meticulous observation of nature, the cosmos, and the human body. Major theories include those of Yin-yang, the Five Phases¹ and the human body channel system etc. Investment in health protection is much more effective and cheaper than expenditure in treatment and has become one of key focuses of the Chinese health system. In this regard, TCM is an ideal choice of strengthening human body.

The TCM has been for a long period neglected by the modern medical science. At present the application of TCM is deeply embedded in the health system. The western drugs have immediate effect in the treatment of serious illnesses or urgent cases. **The TCM could be quite advantageous in post-operational therapy or long-term adjustment with little side effect by using Chinese herbs, acupuncture, cupping, and therapeutic massage.**

However, the TCM has been questioned of its scientificity and accuracy. Different from western medical treatment by means of modern equipment and machine, the traditional Chinese diagnose bases on the subjective observation, pulse-taking and interrogatoire. Therefore, some TCM research institutions are devoted to **applying modern technology into the traditional medicine and diagnosis**. The Shanghai University of Traditional Medicine has spent over 10 years to develop medical equipment, which standardises TCM and collects patient information through medical image and a pulse transducer for data analysis.

According to local health authority, by the end of 2009, around 20 to 25 medical institutions, mostly district-level hospitals and neighbourhood health centres, are to offer treatment and advice based on traditional Chinese medicine².

4. Medical Insurance System

4.1 History of its development

Shanghai implemented a **fundamental health care insurance system from 1950s to 1980s**. Funded by the public sector, the insurance system is centrally managed by the Government Insurance Scheme(GIS) and the Labour Insurance Scheme(LIS).

The GIS used to provide free health care and medical benefits to more than half of Shanghai population. The LIS covered 50 percent medical expense incurred by the dependant of almost all workers of state-owned enterprises and collective owned companies. Nonetheless, during the 1990s, the fund without individual contribution brought about an immense abuse of the benefit and waste of resources.

Therefore, the government introduced **Basic Medical Insurance(BMI)** to provide a new solution to massive people from 2000. The BMI aimed at providing a **wide-spread basic coverage** of employers working in state-owned, collectively owned, foreign invested and privately owned enterprises. The patients have to pay the bill in advance when receiving a treatment and the correspondent part of the expenditure will be given back by the fund. Expensive imported medicine and non-medical-insured medicine are excluded.

¹ In many traditional Chinese theory field, matters and its developmental movement stage can be classified into Five Movements of Metal, Tree, Water, Fire and Earth.

² News from Shanghai Daily http://www.shanghaidaily.com/sp/article/2008/200812/20081229/article_386279.htm.

4.2 Content of BMI

According to the principle of the BMI, each municipality has developed its own regulations in connection with its practical situation. The retiring age in China for women is 55 and 60 for men. In Shanghai, **normally each worker pays 2% of his salary every month into his individual insurance account and the employers contribute a further 10%**¹. The BMI is divided into the individual saving account and social pooling fund. **The individual saving account is used to pay for minor outpatient expenses and for inpatient diseases expenses have to pay in advance by patients themselves and will be returned partly later.**

The government has made massive improvement in expanding health insurance coverage to Shanghai population. Residents in Shanghai need **a fixed salary, a Chinese passport and a permanent resident card** to be insured in BMI. Thus, family members of insured workers do not enjoy the welfare. For those migrant workers, they will receive a comprehensive insurance.

Since 1998, Shanghai has gradually carried out “**Second Medical Insurance**” like “**special vicious diseases**”, “**on-the-job workers in hospital**”, “**retired workers in hospital**” and **special insurance for women staff**, which is supplementary to the BMI. From 2002, this insurance system has been expanded to workers, who were not in social security system before. Till November 2008, “Second Medical Insurance” has benefited 7.3 million workers.

4.3 Government Measures

The reform and development of health care programs has always been a prior concern of Shanghai Municipality. Main target of this year is to **resolve the difficulty and high cost of going to hospital**, which is common complaint of general public. In this regard, measures should be taken to **improve soft and hardware of the community hospitals**. Shanghai will gradually improve the plan of a “15-60 minutes Circle ”of seeing doctors, which means patients in urban areas can arrive at the hospital within 15 minutes walk and for those in suburban areas can receive treatment in 60 minutes in the coming 3 years.

On the other hand, to **develop top-level modern medical science** will be another key emphasis. Shanghai has put forward the idea of “Four Centres²” and will attract more foreigners to work and live in Shanghai. The improvement of medical conditions will better serve foreign talents and raise the image of Shanghai as a modern international metropolis.

Chinese central government pays great attention to **rural area and farmers medical insurance**. Shanghai Municipal Government will intensify financial investment in rural areas and promote the new type of rural cooperative medical care system.

Economic Section

Consulate General of Switzerland in Shanghai

¹ Detailed information from Shanghai Medical Insurance Bureau:
http://222.66.164.74/xxgk/xxgk_view.jsp?ml2bm=1&ml3bm=101&dirpkoid=79642&pkoid=79639&gklbdm=1.

² Four Centres: Shanghai Municipal Government has put forward the target of “Four Centres” in its future Eleventh Five Year Plan(from 2006 to 2010), which means the world economic centre, the financial centre, the trade centre and the shipping centre.