



SOCIETY OF ACTUARIES

Article from:

# In The Public Interest

January 2012 – Issue 5

# HEALTH CARE SYSTEM REFORM

## 中国制造 (MADE IN CHINA)

By Davout Yeon



**Davout Yeon, FSA**, is an assistant president at Taikang Life Insurance Co Ltd in Beijing, China. He can be reached at [tofu.yeon@gmail.com](mailto:tofu.yeon@gmail.com).

**A**t almost the same time that the Obama administration pushed the U.S. health care reform, in another hemisphere, China (accounting for one fifth of the world population), was also engaged in a large-scale health care reform.

In April, 2009, the Chinese government launched the most comprehensive Health Care System Reform ever. The goal: to establish and improve the basic health care system covering most urban and rural residents, and to provide the people with safe, effective, convenient and affordable health care. There is no doubt that this “Made in China” health care reform will become the world’s most extensive health care system reform because it will inevitably affect many players in the game such as the local governments who currently administrate the program, the medical professionals who provide the care, the pharmaceutical manufacturers who provide the medicines, and the very large population who participate in the program, etc.

If we say that the U.S. health care reform is difficult and painful, then China’s health care reform is even more difficult and complex. To fully understand the reasons for this reform, we have to trace its history.

Mao founded the New China in 1949 and led the country under the planned economy for the following 30 years (1949–1978). The government was the only enterprise and established the first health care system. It used about 3 percent of GDP on health spending to provide the basic coverage for a very large population; the average life expectancy increased from 48 years to 67 years; infant mortality rate decreased from 180 per 1,000 to 40 per 1,000. The achievement was once recognized by the World Health Organization in the 1970s.

In this period, the government established the urban and rural medical service network with a large number of hospitals, clinics and health centers in cities and rural areas to improve the

accessibility. It also built a health and epidemic prevention system. Many highly infectious diseases were basically eliminated and a variety of endemic and parasitic diseases was effectively under control.

In terms of the health care coverage, there was a clear divide between urban residents and rural residents given two health care programs available. The “Urban Program” was clearly designed to meet the need of urban employees or retirees and their dependents. Government or enterprises paid for the health care expenses incurred by its participants where employees and retirees had zero co-payment and dependents had partial co-payment.

The “Rural Program” was under a mutual-assistance mechanism for rural population, i.e., voluntary mutual aid and collective masses by the farmers to raise funds for the co-payment. About 90 percent of the population was covered under this program.

The shortcomings of this period were very obvious. The government’s overall health spending was very low and leading to insufficient care, especially for farmers due to limited medical providers in the rural areas. It also hindered the development and advancement of the medical technology. Economic and social development was imbalanced, resulting in large differences in the quality of levels of health care and the development of the medical service network in urban and rural areas. The current funding scheme could not keep up with the pace of the rapid growth of medical costs. Lastly, the system lacked cost sharing and risk control. There was no doubt that this system could not effectively meet the public need.

The planned economy came to its end after Mao’s death. In 1979, Deng’s government promoted economic reform and opening up China to the world. China gradually made the transition from a planned economy to a market economy. In the next 30 years (1979–2008), many changes took place within the health care sys-

tem due to the external economic changes. On a positive front, the ownership of medical institutions (hospitals and clinics) was no longer solely under the government. Private-owned medical institutions emerged as well. The number and capacity of health care facilities and the number of medical professionals increased remarkably compared with the planned economy period. The quality of medical personnel and their diagnostic ability increased rapidly with the advanced medical technology and equipment. The internal operating efficiency and ability to carry out the complex treatments improved across the board.

Serious problems were encountered during 1979–1998. The urban program under the old health care system could not be sustained due to the rapid increase of the health care costs. It became a huge burden for both the government and the enterprises. The rural program quickly decomposed as a lot of farmers relocated to cities to seek out opportunities. The coverage rate hit a historical low in the late 1990s.

The Chinese government began to gradually reshape the health care system in 1998. The first program, Urban Employees’ Basic Medical Insurance (UEBMI), was established in 1998 for urban employees who work for state-, private-, or foreign-owned institutions or social organizations. There was a fundamental shift in the program funding from government to employer and employee’s contributions.

The second program called New Rural Cooperative Medical Scheme (NRCMS) was established for rural residents, who comprised 70 percent of the population in China at that time.

The third program, Urban Residents’ Basic Medical Insurance (URBMI), covers dependents of the enrollees of UEBMI—students, migrant workers and urban residents who don’t have jobs.

Though the coverage rate was much better under these new programs, they were not problem-free either. Government health spending had dropped and personal medical costs were rapidly rising. From 1979–2008, the govern-

ment health expenditure fell from 32 percent to 25 percent, once as low as 15 percent during the period. Personal health spending increased from 20 percent to 40 percent.

Health care resources such as advanced medical technology and skilled professionals were heavily concentrated in the big cities, which in turn attracted the influx of patients to the big cities for better care. The health care network in rural areas had shrunk and was left far behind the urban areas. The outbreak of SARS also exposed the vulnerability of the public health system. The drug production, distribution and price formation mechanism was greatly imbalanced and lacked fair competition. During this transition period, medical professionals who used to be on the government payroll during the planned economy, were only partially paid by the government fund or subsidy. At the same time, the government allowed the hospitals to keep the drug price margin as additional revenue. Thus the hospitals were heavily dependent on the revenue of the drug price margin to

The planned economy came to its end after Mao’s death. In 1979, Deng’s government promoted economic reform and opening up China to the world. China gradually made the transition from a planned economy to a market economy.

Program	UEBMI	URBMI	NRCMS
Inception	1998	2007	2003
Eligibility	Employees	Residents w/o job	Farmers
Funding	Employer-6% payroll Employee-2% payroll	Resident-contribution Gov yearly Subsidy (at least \$30 pmpy)	Farmer-contribution Gov Subsidy (at least \$30 pmpy)
Administration	Local Gov agencies	Local Gov agencies	Local Gov agencies
Account	·Individual Account ·Public Account	Public Account	Public Account
Co-insurance	Co-payment Deductible Maximum amount: 6 times of local annual average salary	Co-payment Deductible Maximum amount: 6 times of local annual average salary	Co-payment Deductible Maximum amount: 6 times of average disposable an- nual income of local farmers
Coverage	OP and IP variation slightly different	Limited OP (certain chronic diseases), IP	Very limited OP, IP
Mandatory	Yes	No	No

support the operation, purchase equipment and partially compensate medical professionals. The practice of overly prescribing expensive drugs (due to high revenue gain) made health care unaffordable and led to negative social and economic consequences.

It is obvious that a comprehensive health care system reform must solve the above problems. In April, 2009, the Chinese government formally promulgated the “guidance” for the health care system reform. Four priority programs will be implemented and it aims at improvement of the medical security system, medicine supply system, health care services network and public health services by 2020.

The five major tasks are described with clearly detailed specifications for the next three years (2009–2011).

### **1. ACCELERATING THE ESTABLISHMENT OF THE BASIC MEDICAL SECURITY SYSTEM**

The first task is to expand the coverage of the basic medical security, it means that all three existing programs (URBMI, URBMI, and NRCMS) will cover most of urban and rural residents for three years, each with coverage rates over 90%. The goal for URBMI and UEBMI together is to cover 440 million people in the urban areas and for NRCMS is to cover 830 million for the rural areas. In order to enhance the level of basic health care, the government has increased the subsidies for URBMI and NRCMS. It also encourages the individuals through participation in various forms of commercial supplement insurance to meet their needs beyond the basic care under the government programs.

This is a positive move, but there is a concern that the great risk of adverse selection is likely because the participation under NRCMS and URBMI is not yet mandatory; the permission of later entry can result in more unhealthy people in the pool.

The efficiency and effective management of all the programs remain in question. Currently

there are around 2000 local government agencies that administrate UEBMI and URBMI, and a large number of local agencies that administrate NRCMS. Obviously these agencies are less efficient due to the lack of insurance and medical knowledge, and IT technology compared with the insurance companies. It is suggested to explore qualified commercial insurers to provide health care management.

### **2. ESTABLISHING THE NATIONAL ESSENTIAL MEDICINE SYSTEM**

The second task is to establish the management mechanism for essential medicines. It published the national drug list and recommended the retail prices for over 300 different kinds of medicines in 2009. Essential medicines used in government-run health care institutions shall be purchased through unified market with equal participation and fair competition. Since 2009, the grass-root medical facilities can only purchase and use the essential medicines due to this change. The goal is to make the medical care more cost effective.

The resistance to enforcement of the above reform is strong, because the hospitals heavily prescribe the expensive medicine to maximize the revenue to maintain the operation. Suddenly, they have to use the cost effective medicine. The revenue drops dramatically due to small drug margin of essential medicine. The survival of the hospitals will depend on how much subsidy they can get from the government for the income lost.

### **3. PERFECTING THE THREE-TIER RURAL HEALTH CARE AND URBAN COMMUNITY NETWORK**

The third task is to improve the three-tier rural health care service network, and give full play to county-level hospital’s leading role. The central government will give full support to build 2,000 county-level hospitals, 2,400 urban community health centers and 11,000 community health stations for the purpose of strengthening health care institutions at a grassroots level in the next three years. Efforts will be made to train millions of general practitioners and to

implement a staff recruitment system. There are needs to improve the counterpart support from urban to rural within the hospital system and establish the evaluation and incentive system with service quality and quantity as the core.

This will allow patients to get primary care instead of heading directly to the large hospitals. The challenge is how to keep the talented medical professionals in the network. How can the current recruitment system, training programs and compensation attract them to take the jobs at the grassroots facilities?

#### 4. PROMOTING THE GRADUAL EQUALIZATION OF BASIC PUBLIC HEALTH SERVICES

The task here is to continue major public health programs such as prevention and control of major diseases; for instance hypertension, diabetes, mental disorder, HIV/AIDS and tuberculosis; national immunization program; health education; individual's health records and its management nationwide; regular health checks for senior citizens over 65 and for children under three; regular prenatal examinations and post-natal visits for pregnant women. Efforts will be made to enhance the capacity of forecasting and responding to major diseases as well as public health emergencies.

The adequacy of government investment to carry out all the tasks above for the projects needed is still in question.

#### 5. PUSH FORWARD PILOT PROJECTS FOR PUBLIC HOSPITAL REFORM

Lastly, government will push forward pilot projects for public hospital reform. At present, the public hospital is the main body of health care providers in China. The external economic changes improved the efficiency of inside operations, but the public hospitals are still partially in the shadow of the planned economy. There are many conflicts between the supervision of the government and management by hospitals in the current structure. We have not found the

right model yet, but the pilot projects will allow us to explore the ideal model for public hospitals.

No matter how the pilot projects are carried out, all public hospitals shall stick to principles of maintaining the commonwealth nature, providing social benefits and adopting a patient-oriented approach.

#### COMMENTS

The total medical cost in recent five years has increased at a rate over 15 percent on average. The government has provided \$174.5 billion for this health care reform which is about 33 percent more than the initially planned \$130.7 billion. China, as a rapidly developing country, is facing significant social and economic needs. The government has experienced a substantial investment in 2009–2011, the ability to continue to maintain the investment in the health care system remains unclear. The reform will face enormous challenges in many aspects which may relate to the constraint of the financial budgets. 