

Private Health Insurance and Health Actuary in Mainland China

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Abstract

The central concern of this paper is the sound development of the private health insurance and health actuary in Mainland China. It first reviews the history of the Chinese social health insurance (SHI) reform and private health insurance (PHI) industry, and hence makes clear the importance of actuary in the construction of SHI institution and the promotion of PHI business. Then, based on the analysis of current drawbacks in this field, the paper puts forward suggestions to speed up the development of Chinese health insurance and health actuary. Finally, it analyses the role of health actuaries and the challenges they face in a predicted framework of the new Chinese health insurance system.

Key Words: China; private health insurance; health actuary

1. History of Social Health Insurance Reform and Private Health Insurance Industry in Mainland China

In 1950s, Chinese government launched Government Insurance Scheme (GIS) for employees in governmental institutions and Labour Insurance Scheme (LIS) for workers in state-owned enterprises. Both benefited a lot the health maintenance of urban employees, the economic development and the social stability. But the once prominent systems, suitable for a planned economy, turned out to be incompatible with the social and economic reforms. Since the early 1980s, the Chinese government has begun reforms on its health care system in urban areas. It first aimed simply the cost containment of the old GIS and LIS. Then, with the emergence of risk pooling funds for catastrophe medical expenditures, the reform became a procedure to substitute the old GIS and LIS by using SHI mechanism. In 1994, ZhengJiang (of JiangSu province) and JiuJiang (of JiangXi province) pioneered the reform on health care system which was soon extended to many other cities. The promulgation of Decision of the State Council on Establishing the Urban Employee's Basic Medical Insurance (UEBMI) in 1998 marked the implementation of the new social health insurance reform, which was then complemented by the reforms on health service system and drug providing system.

The situation in rural areas is a different story. During the 1960s and 1970s, with the Rural Cooperative Medical System (RCMS), China became a model of health care for low income, agrarian countries. However, with the agricultural reform in the early 1980s, many rural cooperative medical organizations break up because of losing financial support from collective economy. The farmer peasants have to pay for medical service by themselves again. So in 2002, the Chinese government decided to launch a new type of Rural Cooperative Medical System (NRCMS) to help farmers against the heavy economic burden and hospital expenses resulting from critical diseases.

According to the Ministry of Labour and Social Security (MLSS), P.R.C., the UEBMI has covered more than 157 million urban employees around Mainland China at the end of 2006 and will gradually expand to all the urban labours (about 250 million in the near future). Since UEBMI guarantees simply access to basic medial service for the main body of urban employees, it leaves room for private health insurance

schemes. In rural areas, with a strong financial support from central and local government, NRCMS plans have benefited more than 400 million farmers. Furthermore, some insurance companies provide the fund and claim management for the NRCMS in rural area.

The past 20 years in Mainland China also saw the great development of private health insurance industry. At the beginning of 1980s when all the life insurance products were resettled in Mainland China, the former People's Insurance Company of China (PICC) launched pilot products like Cooperative Employee's Medical Insurance and Suburban Farmer's Medical Insurance. Henceforth, with the maturation of domestic insurance market and the advance of social health insurance reform, PICC and later the PICC LIFE introduced group hospital expense insurance plan, comprehensive medical insurance plan and DRG-based illness insurance plan, which paved the way for a bigger private health insurance market.

In 1995, individual dread disease insurance products were introduced to Mainland China with the new sales channel of individual life insurance sales agency. In the following years, insurance companies in Mainland China diversified their products and ran smoothly along with the nationwide urban employee's medical insurance reform. On December 26th 2002, Chinese Insurance Regulation Commission (CIRC) promulgated Instructive Guidance on Speeding the Development of Private Health Insurance. Several days later, on January 1st, 2003, the newly promulgated Insurance Law endowed property insurance companies the right to operate short-term health insurance, which accelerated the growth of private health insurance. In 2005, the practice of health insurance companies like PICC Health Insurance Co., Ltd, PINGAN Health Insurance Co., Ltd marked the trend of specialized operation in Chinese health insurance market. Till now, there are tens of life insurance companies, property insurance companies and health insurance companies, providing over 300 health insurance products. According to CIRC and National Bureau of Statistic (NBS), P.R.C., the premium income of private health insurance in Mainland China has increased from 1.36 billion RMB Yuan in 1997 to 37.69 billion RMB Yuan in 2006 (table 1).

Table 1: Premium Income and Claim of Private Health Insurance in Mainland China (1997-2006)

Year	Premium income (billion RMB)	Claim amounts (billion RMB)
1997	(1.36)	(0.87)
1998	(2.81)	(1.35)
1999	3.65 (4.15)	1.10 (1.10)
2000	6.55	1.29
2001	6.16	3.35
2002	12.24	4.99
2003	24.19	6.99
2004	25.99	8.91
2005	31.23	10.79
2006	37.69	12.51

All from CIRC, except () from NBS

The table shows that in the past 10 years, the premium income of domestic private health insurance increased annually by 40%. But we should realize that the current

health insurance industry still cannot meet the intensive demand for private health care, neither are the products and service provided by all the insurance companies. Great efforts should be taken to perfect the private health insurance market, regulate the market competition, eliminate extensive management and handle the lack of management professionals.

2. The Growth of Health Actuary in Mainland China

Health insurance represents both long-term and short-term features. The short-term feature is embodied in the claim settlement of most short-term health insurance contracts is short tail(so the health actuary, especially in the medical expense insurance, works mainly on the setting and re-rating of the annual premium rate) and the short-term financial risk. While for the long-term health insurance products, actuaries must evaluate and manage long-term risk. Hence comes the long-term feature of health insurance: the possible deterioration of the insured of a long-term health insurance policy or whole life health insurance policy, the poor sustainability of insurance contracts, the net investment income of long-term investments, and the liability reserve of long-term health insurance. All these call for the actuary that is unique and suits health insurance, rather than life insurance or non-life insurance.

There is a popular misconception that actuaries should be specialists. Indeed, in order to handle the complex situations of health insurance, a health actuary should be a generalist that acquires adequate knowledge of economics, accounting, mathematics, health science, health management, and medical sociology. Thus we may define health actuary as 'an ethical professional that possesses the above expertise and can therefore solve the financial problems in the field of health care.

The private health insurance in Mainland China has developed greatly so far, but it is still far from meeting the market demands. The reason lies in several factors: the nation-wide weak awareness of insurance from common people, the absence of favorable markets regulations and laws, and the lack of professionals, most urgently, the lack of health actuaries. According to the author's investigation, there are no more than 100 actuaries, full time or part time, active in health insurance business, especially in life insurance companies. Worse still, only a small fraction of the actuaries have the necessary certification. The scarcity of health actuaries in property insurance companies is even more severe. The increasing want for health insurance actuaries is even enhanced by the revealing fact that foreign reinsurance companies and actuary consultant firms attracted comparatively sufficient health actuaries in mainland market.

The routine of Chinese health actuaries is, different from developed countries, to estimate and price premium, since many companies prefer new insurance products to the market reaction resulted from re-rating premium. According to the author's investigation, the actuaries make great effort on hospital expense insurance, dread disease insurance, and other supplemental medical insurance. They pay little attention to comprehensive medical expense insurance, major medical insurance, income protection insurance, and long-term care insurance. Besides, there is also little concern for evaluating policy risk, underwriting, loss ratio, and experience analysis.

Compared with developed countries, Chinese health actuary is in its infancy. There is

a long way to go to cultivate an actuary industry that can meet the increasing domestic demand for health insurance. The task involves a sound private health insurance market, market-oriented premium rate and professional health actuarial standards. All these call for acceleration of health actuarial technique and set a higher standard for health actuaries.

The characteristics of health actuary are dependent on the feature of health insurance. Because of the intricacy of premium rating and the risky environment of management in health insurance industry, the actuarial pricing of health insurance is faced with tremendous risk. The infinite demands of insurance consumers put insurance liability in constant change, and hence frequently impact the actuarial pricing process, which is meanwhile hindered by the uncertainty of expected medical expenditure and its growth. That's why in the health insurance industry, few companies can operate successfully, not to mention maintain a long-term steady financial condition. Health actuaries also find their job challenging because their definition of a professional actuary dissimilates the public understanding of the consumers, the supervisors and even the mass media, which have unavoidably manifested influence on health actuarial pursuit.

3. The Construction of new Chinese Health insurance System and the Duty of Health Actuary

Due to a long period reform, the Chinese public health insurance has spread its coverage, with over 100 million urban employees covered by UEBMI, and several hundreds million farmers benefiting from the NRCMS. But that's only a small fraction of the whole population. More than 50% people in Mainland China have not yet been covered by any health insurance plan, according to the author's estimate. So it's an urgent and significant task to establish a national health insurance system that will cover all the citizens.

The current funding model of UEBMI is a mix of a pay-as-you-go scheme and a medical savings account (MSA). The innovative practice serves well the present situation and the future development. But there are doubts as to whether the pooling funds, based on a district level, can cover the accelerating expenditure for basic medical service while the cost of future medical service keeps increasing for an aging population. Meanwhile, the insufficient MSA of the retired will exert negative influence on this model. In rural areas, farmers may benefit from the NRCMS, a voluntary health insurance plan with a strong financial support from central and local government. It is a sound health plan for self-employed farmers and their families. The problem is that its premium income is not enough to compensate for the basic medical service even in rural areas.

Many people think if for granted that with a reasonable premium rate, private health insurance will be an alternative (for urban employees uncovered by UEBMI) or a supplement (for urban employees covered by UEBMI) of UEBMI, and will benefit the rural health care system. But that's far from the reality. In China, there are still many people, especially those in rural areas, who cannot afford the hundreds to thousands Yuan RMB premium. Moreover, the private health insurance providers themselves are not ready to substitute for social health care scheme. So private health insurance will be act as a supplement for social and other public health insurance

schemes.

Given the economic performance and structure, the Chinese national health insurance system should be a mix of a public and a private one, in which the social health insurance develops harmoniously with the private health insurance. When the former aims to cover the whole population that needs social security and the latter attracts mainly people with high income, the innovative mix helps a lot for risk management and better use of health resources. In cities, UEBMI should cover all the employees and their family, while those with high income may select whatever private insurance they prefer. In rural areas, the farmers and their families should be protected from catastrophic loss by a compulsory insurance scheme with financial support from the government. There should also be some voluntary community health insurance plans for those who can afford the premium. Measures should also be taken to raise the tax free individual MSA to a level that can cover not only the current outpatient expense and other self-payment, but also the future expense of an aging population.

Health actuaries in developed countries have showed growing importance in governments and public affairs. While in China, the importance of health actuaries fails to gain a general recognition. In theory, actuarial technique is an important component of the social health insurance mechanism, and an indispensable instrument to maintain the financial security of social health insurance funds. Actuaries in social health insurance are primarily responsible for the evaluation and analysis of the risk of group health loss, estimate the total cost and allocating cost. Health actuaries are also expected to provide professional independence and technical support for the financial evaluation of social health insurance funds. So they should play a more active role in the ongoing Chinese UEBMI and the construction of the NRCMS.

In an age when the world keep a close eye on health care system and its reform, the importance of health insurance actuarial technique and health actuaries tells its own tale. In fact, neither the public health insurance nor the private health insurance can meet the increasing need for health service, in developed countries and in developing countries as well. Both the governments and the private institutes should take into consideration the total health care expense. Social health insurance must be supplemented by private health insurance to meet the nation's demand for health care. Accordingly, the products of private health insurance should be developed and priced in accordance with the development of social health insurance. Because of the constant rise of medical expense, it is difficult to estimate the cost for providing health service. And the increase of health service results in frequent re-rating of health insurance premium. All these challenge the social and private health insurance and hence bring greater responsibilities to health actuaries.

As far as health care is concerned, health actuaries should provide decision-makers with useful information that may help to cut down the risk of decision. The policy makers, traditionally thought as insurers and the insured / customers, also include health insurance institutes, health care providers and government consumers. Health actuaries should meanwhile cooperate with doctors, nurses and other medical professionals, so as to improve the quality and efficiency of all the health service (including public health, out-patient service and hospitalization), for example, rehabilitation and prevention, disease management, quality control of service providers, critical path analysis of diseases, evidence-based medicine, micro and

macro financial models. Only in this way can the actuaries widen their service in health care and complete the conversion from health insurance actuary to health actuary.

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