CHINA'S HEALTHCARE REFORM AND RESOURCES REDISTRIBUTION: LESSONS FOR EMERGING NATIONS

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Abstract: *Following China's recent economic growth and healthcare reform, medical services quickly merged into the market economy. The burden of healthcare expense on the Chinese people has become a serious political issue. This research project reviews the changes in health expenditures made during the last two decades. This paper explores the cause of this rapid change in the healthcare sector and analyzes the corresponding statistics during the entire economic reform period. In addition, the paper articulates that the lack of healthcare coverage existed even before the healthcare reform formally started. As a direct result of this reform, medical resources were quickly concentrated in urban hospitals and the individual out-of-pocket expense as the share of total health expenditures sharply increased. Recommendations are made for further healthcare reform.*

Keywords: *Healthcare, Economic transition, Redistribution, China*

JEL Codes: *I11, I18, P21*

1. INTRODUCTION

China's continuous, fast economic growth and development in the last three decades has become a world economic miracle. Such marvel is credited to the Chinese economic transition that began in the late 1970s. But beneath these superficial benefits, economic and social inequalities have increased substantially since the start of this economic reform (Khan, Griffin, Riskin, & Zhao, R. 1993;

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Chen and Ravallion1996; UNDP 2000; Zhang and Kanbur 2005). Following the agricultural reform and the industrial reform, the health care system has changed in the early 1990s and officially started its reform in the late 1990s. During the healthcare reform, many public goods and services were ignored in the market system. Since this reform, the national health expenditures have dramatically increased. During 1990-2004, China's national health expenditures have tripled, while the GDP has only doubled. After SARS[1] broke out in 2003, people started to look at the healthcare sector in a different way. Many news agents and researchers have been focusing on this problem in recent years. In 2005, the Development Research Center of State Council, a Chinese central government research agency, officially announced the failure of this healthcare reform (DRCSC 2005).

The people's health is directly related to the nation's labor participation and productivity. The healthcare system plays an important role in people's health. The inequality of income and redistribution of welfare could create social problems. The purpose of this paper is not to support or refute the argument of this failure, but rather to provide some factual information about the healthcare resources and rising costs that have been related. This research focuses on the increasing health expenditures at the national level over the last ten-year period. Inasmuch as the huge social economic difference between urban areas and rural areas in China, the healthcare reforms are not compatible in these two areas. This paper focuses on the changes in health care sector in general, but will not discuss the detailed changes in urban and rural areas separately.

The remainder of the paper is organized as follows: Section 2 discusses China's government policy changes and the healthcare reform, and reconstruction and redistribution in the healthcare sector. Section 3 shows the concentration of healthcare resources into major cities after the reform. Section 4 discusses the redistribution of the shares in healthcare expenditures. Section 5 analyzes the hospital expenditures increase. Section 6 concludes by offering recommendations for further healthcare reform and stronger government regulations.

2. CHINA'S HEALTHCARE REFORM

To better understand the impacts of healthcare reform in the society, we review and compare the old health care system with the newly reformed health care system. After the Communist government was founded in China in 1949, the public healthcare system was quickly established in the urban areas, which had

universal health care coverage[2]. Under this system, health care services were available for all of the employees in the state-owned or collective enterprises and institutes. In rural areas, healthcare was also available in communal health centers which provided a relative low quality services. By the end of the Cultural Revolution (late 1970s), the communal healthcare system of "bare-foot doctors"[3] and clinic centers were well established and covered almost all of the rural areas in China (Zhang and Kanbur 2005). The services provided by "bare-foot doctors" were almost free for the peasants. Even though the combined Western and Chinese medical treatments were not very effective when compared to the industrialized countries' standard, they were, in fact, much more effective than no medical practices.

Since the agricultural and industrial sectors' immergence into the market economic system in the 1980s, China's GDP has been increasing at 9% average annual growth rate for more than two decades. From the central government to the rural peasants, everyone believed that the market economic system would work with the Chinese culture. Even as the economic inequalities became more and more obvious, the hope of becoming rich still drives most members in the labor force to work harder and harder. As the economic reform moved the country forward into a market system in 1990s, the urban employees and their families started to receive less health insurance coverage while the rural cooperative medical system started to collapse (Hu, et al. 1999). Workers' wage rate is increasing in the economic reform, but they did not expect to pay the high medical expenses out of their own pockets when they were used to having free healthcare. This unexpected psychological change enraged most people in the population.

When The State Council of the People's Republic of China issued *Decision on Health Care Reform and Development* in 1997, the healthcare reform had formally started. In 1999, many public hospitals and healthcare centers were sold to private entrepreneurs arranged by the local governments. In 2000, the General Office of the State Council of The People's Republic of China issued *The Directive Proposals on the Reform of Urban Medical and Health Care System* (from the Economic Restructuring Office of the State Council and other departments). Following the same direction, the Ministry of Health of The People's Republic of China and other departments issued *Administrative Rules of Urban Medical and Health Care Agents Classification*, which allowed the former state-owned nonprofit healthcare agents to be transferred into profitable organizations[4]. As a

result, the health care sector was merged into the market economy. China's healthcare reform is strongly influenced by the successful reformation in the agricultural and industrial sectors, both of which proved that the market economy is the most efficient system for China. Guided by the government, two important changes took place: first, health and medical services merged into the growing market economy; and second, newly established health insurance systems replaced the state budget system in partially covering hospital expenses.

The healthcare reform in urban areas had four major outcomes: (1) deregulation, administrative relaxation, and corruption within the governance of the healthcare sector; (2) the lack of support from the government budget led to the competitive nature of hospitals as non-profit institutions within the market system; (3) the privatization of medicinal producers and pharmaceutical companies along with the weakening of government regulations allowed the companies to establish mutually beneficial relationships with the medical doctors; (4) unlike the old universal healthcare coverage, the newly established urban health insurance system[5] (such as Social Health Insurance) only covers part of the hospital expense for patients. In 2003, the government established Social Health Insurance schemes in urban areas. Later, some private insurance companies moved into the market. However, these schemes covered less than 50% of urban residents at that time. But at the same time, the hospital costs also dramatically increased. In rural areas, the collapse of the rural communal health center system caused the poor patients to seek help from urban hospitals. In 2003, to reduce the damage from the reform in rural areas, the government decided to develop a New Cooperative Medical System (NCMS)[6]. Although the NCMS only covers about 10 percent of rural population, the NCMS scheme could help some peasants. Despite that, there was still a shortage of quality health care services in rural areas. China's new health insurance schemes have increased the risk of high levels of out-pocket expenses, and in the case of "catastrophic" expenses, it has become even larger (Wagstaff & Lindelow 2005).

A great deal of the contemporary Chinese literature in professional journals, popular newspapers, and internet articles blame the failure of this healthcare reform on the unexpected increase in health expenditures and the new unsuitable insurance system. The economic burden of healthcare cannot be removed just by having the government pay for it. Most of developed countries are using the distinction between collective financing (social insurance) and user fees (direct patient

charges) to cover the health expenditures. China is trying to adopt this model. Scholars are still debating on whether the Canadian universal health insurance coverage or the American market health insurance system will fit China better.

3. CONCENTRATION OF HEALTHCARE RESOURCES

After the healthcare reform, nationwide medical services were quickly merged into the market economy. Since 2000, most urban state-owned hospitals gained partial financial independent from the government budget and began running as business firms in the market system (Gu 2001), at the same time, they were also competing with rising private clinics (Eggleson 2004). As the economic reform moved forward, the local governments in rural areas started cutting the social development budget (which included healthcare) and relocating the financial resource to regional business and market development (West & Wang 1995; Zhang & Kanbur 2005; Wang et al. 2010).

According to economic theory, the market forces would redistribute the resources following the change in demand and supply. Due to the movement of China's healthcare sector into the market system, the resources in the healthcare sector had been redistributed by the market forces. The healthcare providers were seeking profit, so China's limited medical resources had thus been concentrated in fast growing economic centers. Table 1 below shows the change in the number of hospitals and other health/medical centers in the period before and after the healthcare reform.

The number of urban hospitals had been increasing before and after the healthcare reform. In 1996, there were 15,833 urban hospitals. This number rose to 16,318 in 2000 and continued to rise to 18,703 in 2005. From 1996 to 2000, the number of urban hospitals increased by 3 percent. From 2000 to 2005, the number of urban hospitals increased by 14.6 percent. Evidently, the number of urban hospitals increased much faster after the healthcare reform formally started than before. On the other hand, the number of rural health centers dramatically decreased, moving in the opposite direction. In 1996, there were 51,277 rural health centers. There were 49,229 rural health centers in 2000, and only 40,907 rural health centers left in 2005.

Table 1 *Changes in health service institutes in 1996-2005*

Year	Urban Hospital	Rural Health Center	Medical Clinic	Sanatorium	Maternal and Child Hygiene	Prophylaxis - Treatment Center	Epidemic Prevention Station	Total
1996	15,833	51,277	237,153	528	3,172	1,887	3,737	322,566
1997	15,944	50,981	229,474	506	3,180	1,893	3,747	315,033
1998	16,001	50,071	229,349	503	3,191	1,889	3,746	314,097
1999	16,678	49,694	226,588	485	3,180	1,877	3,763	300,996
2000	16,318	49,229	240,934	471	3,163	1,839	3,741	324,771
2001	16,197	48,090	248,061	461	3,132	1,783	3,813	330,348
2002	17,844	44,992	219,907	365	3,067	1,839	3,580	306,038
2003	17,764	44,279	204,468	305	3,033	1,749	3,584	291,323
2004	18,393	41,626	208,794	292	2,998	1,583	3,588	297,540
2005	18,703	40,907	207,457	274	3,021	1,502	3,585	298,997

Note: (1) Total number includes other health care agents.
(2) Village health offices in rural areas are included in the category of rural health center.
(3) Since 2002, medical schools and government health agents are no longer included in the total number of health service institutes.
Source: Ministry of Health of the People's Republic of China, *China Health Statistics Yearbook 2006*.

From 1996 to 2000, the number of rural health centers was reduced by about 4 percent. From 2000 to 2005, the number of rural health centers was reduced by about 17 percent. The number of rural health centers decreased much faster after the health care reform formally started than before. For those existing rural health centers, a shortage of financial budget was the main threat. Many of them had not been in operation. As a result, the "bare-foot doctors" quickly disappeared and nearly all rural communal health centers vanished[7]. This data clearly shows that the healthcare resources had concentrated into urban areas, which were the economic centers in the region. It meant that there was a shortage of health services in rural areas in that period of time. The NCMS scheme, which started in 2003, significantly increased both outpatient and inpatient utilization in rural areas (Wagstaff *et al*. 2007). It may not have been a perfect solution, but at least it was better than nothing for the poor peasants in China.

In this period of time, the number of medical clinics[8] first increased and later dropped. In 1996 the number of medical clinics was 237,153. This number increased to 248,061 in 2001 and then reduced to 207,457 in 2005. From 1996 to 2000, the number of medical clinics increased by about 4.6 percent. From 2001 to 2005, number of medical clinics dropped by 16.4 percent. This tells us that the open market policy first brought a competitive situation, thus many private medical

clinics rose. Then, the weaker players fell out of competition. The large urban general hospitals attracted more patients and pushed the small medical clinics out of business. Then, large urban general hospitals quickly turned into local oligopolies. The number of prophylaxis-treatment centers, epidemic prevention stations and other medical agents also decreased in this period of time. In this event, the market failed to provide public goods and services to the people. This data clearly shows that the market economy tends to funnel resources towards the economic centers and away from the periphery.

Table 1 clearly shows healthcare resources had been drawn into the cities and away from the rural areas. At the same time, the resources in each city were further concentrated in the large hospitals. The structure of health sector had been severely shaken since the beginning of the national economic reform, causing great change in the lives of the people. Inconvenient access to their medical needs mainly caused by the concentration of medical resources in urban hospitals. Whether a person was an outpatient or an inpatient, suffered from a mild cold or a severe illness, lived in the city centers or rural areas, they had to visit the centralized major hospitals for quality services. In this situation, urban hospitals became very crowded as well as expensive for those who sought standard medical treatment.

4. REDISTRIBUTION OF HEALTH EXPENDITURES

The healthcare reform and related policy changes also impacted health insurance. Before the economic reform of 1980s, urban healthcare laid under the Socialism health coverage system, which was mainly financed by the government budget. Urban patients' out-of-pocket expenses were limited and healthcare was very cheap. In rural areas, many government subsidized health centers and village health offices existed to provide basic healthcare services to peasants at very low cost. For many years, these virtually free medical services had been considered as one of the most favored systems under the Communist regime. Since the adoption of the market economy in 1990s, providers ceased to offer free goods and services to the people. At the same time, the government tried to reduce the federal and local budget. One of the main goals of the healthcare reform in 1998 was to replace the direct Socialist government financing in exchange for a Western model of medical insurance coverage. The health insurance programs were thus set for this purpose. Following the social economic change from the Socialism to Capitalism,

the old universal healthcare coverage was considered as an outdated Socialist phenomenon and thus eliminated by the reform.

The national health expenditures contained three parts: (1) the government financing on public health and administration; (2) individual patients' out-of-pocket healthcare expenses; (3) social health care expenses including non-governmental health insurance coverage[9] and institutional health care coverage paid by employers. As part of the national health expenditures, the definition of "social expenses" has been changing during the reforms. Before the economic reform, social expenses meant the employers' contributions to the universal health insurance coverage in urban areas. Healthcare was almost free to every employee and their family members. As the economic reform moved forward, the private-owned firms would not pay for employees' health insurance, and employees had to pay for the insurance premiums individually. Table 2 below shows the national health expenditures distribution before and after the health care reform.

Table 2 *National health expenditures distribution in 1990-2004*
[Billion RMB Yuan (¥)]

Year	Total national expense	Total as % of GDP	Government expense	Share of government expense	Social expense	Share of social expense	Sum of individual expense	Shares of individual expense
1980	14.323	3.17%	5.191	36.2%	6.097	42.6%	3.035	21.2%
1985	27.900	3.11%	10.765	38.6%	9.196	33.0%	7.939	28.5%
1990	74.739	4.03%	18.728	25.1%	29.310	39.2%	26.701	35.7%
1995	215.513	3.69%	38.734	18.0%	76.781	35.6%	99.998	46.4%
1996	270.942	3.99%	46.161	17.0%	87.566	32.3%	137.215	50.7%
1997	319.671	4.29%	52.356	16.4%	98.406	30.8%	168.909	52.8%
1998	367.872	4.70%	59.006	16.0%	107.103	29.1%	201.763	54.9%
1999	404.750	4.93%	64.096	15.8%	114.599	28.3%	226.055	55.9%
2000	458.663	5.13%	70.952	15.5%	117.194	25.5%	270.517	59.0%
2001	502.593	5.16%	80.061	15.9%	121.143	24.1%	301.389	60.0%
2002	579.003	5.51%	90.851	15.7%	153.938	26.6%	334.214	57.7%
2003	658.410	5.62%	111.694	17.0%	178.850	27.2%	367.866	55.9%
2004	759.029	5.55%	129.358	17.0%	222.535	29.3%	407.135	53.7%

Note: (1) Calculated in current price.
(2) Since 2002, medical school expense was no longer included in the total health expenditures.
Source: *Ministry* of Health of the People's Republic of China, *China Health Statistics Yearbook 2006*.

The national health expenditures have been rising since the founding of China's Communist government in 1949 as China's GDP increases. The total national health expenditures as percent of GDP also increased. In 1980, the

national health expenditures were only 3.17 percent of the GDO. In 1990, it was 4.03 percent of the GDP. In 2000, it increased to 5.13 percent of GDP. In 2004, it went up to 5.55 percent of GDP, which was RMB ¥759.029 billion. As national income increased, the nation's health expenditures increased at a higher rate. This indicates that the income elasticity of healthcare is positive. The economic reform and healthcare reform changed the contribution of the health expenditures among government, society, and individuals. Back in 1980, the government's share of health expenditures was more than 36.2 percent, the society's share of health expenditures was more than 42.6 percent, and the individual out-of-pocket share of health expenditures was only 21.2 percent. In 1990, the government's share of health expenditures was reduced to 25.1 percent, the society's share was reduced to 39.2 percent, but the individual out-of-pocket share increased to 35.7 percent. In 2001, the government's share of health expenditures dropped to 15.9 percent, the society's share dropped to 24.1 percent, but the individual out-of-pocket share went up to 60 percent. In 2004, the government's share of health expenditures recovered slightly to 17 percent, the society's share also increased slightly to 29.3 percent, but the individual out-of-pocket share still remained as high as 53.7 percent. Since the beginning of the economic reform, employers have been shifting the healthcare cost onto employees in order to reduce business expenses. The individual out-of-pocket share of health expenditures had been increasing since the economic reform started. This means that the individuals bore a heavier burden on healthcare expenses after the economic reform. While the hospital costs had not increased much during this period, individuals who worked for private firms had to take on all the economic burdens of healthcare by themselves. At the beginning of the healthcare reform, healthcare providers (hospitals, health centers, and clinics) moved into the market system before the health insurance system was rebuilt. The market forces and profit driven decisions caused the cost of health services increases, so that people had to bear heavier economic burden of healthcare. The transferring of health expenses from the government and the society to individual patients caused many poor households to fall into poverty. It also made working class people feel insecure. This result was a major failure of the healthcare reform.

One of the achievements of the healthcare reform was the newly established health insurance system. The government health department hoped that this newly established health insurance system could reduce the burden of hospital cost to

individual patients. But due to the lack of administrative experiences in insurance sector, the outcome was not as expected.

5. ANALYSIS OF THE HOSPITAL EXPENDITURES VS. INCOME

Many researchers have studied the increasing health expenditures in China in recent years. Some of the studies focus on the individual's hospital cost for different diseases (Huang, et. al. 2006). Some researches focus on the increase in hospitals' cost, such as the purchase of new medical equipment and their cost of maintenance, which in fact relates to one of the important causes of the increasing health expenditures (Ge, et al. 2006). Other research explores the economic impact of the health insurance system reform (Hu, et al. 1999; Liu 2002; Wang, et. al. 2010). In this section, health expenditures are analyzed from a different perspective. - a closer look at the average medicine expenses as share of the average income.

Table 3 provides information on the change in the average annual disposable income and the change in average individual health expense. To eliminate general inflation effect, the analysis focuses on the ratio of average individual health expense over the average individual income. Since the average income in urban areas is much higher than the average income in rural areas, under the same market price of healthcare, rural residents have to pay much higher percentage of income for healthcare than urban residents do.

This data shows that, in urban areas, the average individual healthcare expense as a percentage of average individual income has obviously increased during this period of time, and in rural areas, the average individual healthcare expense as a percentage of average individual income has dramatically increased during this period of time. In urban areas, this ratio was a little over 4 percent in 1990-1996, increased to above 5 percent in 1997-2002, and went up to 6 percent in 2005. In rural areas, this ratio was less than 13 percent in 1990-1996. Since 1997, the start of the health care reform, this ratio had continuously increased. In 2005, this ratio was up to 20.34 percent. From 1990 to 2005, the ratio of the average health expense over average income had doubled in rural areas. This data shows that the average individual healthcare expense increased much faster than the average individual income did. It is very obvious that, on average, individuals had to take on more and more health expense during the reform period. Without decent

health insurance coverage, Chinese citizens were burdened with a heavy out-of-pocket health care expense.

Table 3 *Average income and average health expense*

Year	Urban average annual disposable income (RMB ¥)	Rural average annual disposable income (RMB ¥)	National average individual health expense (RMB ¥)	Urban health expense as percent of average income	Rural health expense as percent of average income
1990	1510.2	686.3	65.4	4.33%	9.53%
1991	1700.6	708.6	77.1	4.53%	10.88%
1992	2026.6	784.0	93.6	4.62%	11.94%
1993	2577.4	921.6	116.3	4.51%	12.62%
1994	3496.2	1221.0	146.9	4.20%	12.03%
1995	4283.0	1577.7	177.9	4.15%	11.28%
1996	4838.9	1926.1	221.4	4.58%	11.49%
1997	5160.3	2090.1	258.6	5.01%	12.37%
1998	5425.1	2162.0	294.9	5.44%	13.64%
1999	5854.0	2210.3	321.8	5.50%	14.56%
2000	6280.0	2253.4	361.9	5.76%	16.06%
2001	6859.6	2366.4	393.8	5.74%	16.64%
2002	7702.8	2475.6	450.7	5.85%	18.21%
2003	8472.2	2622.2	509.5	6.01%	19.43%
2004	9421.6	2936.4	583.9	6.02%	19.88%
2005	10493.0	3254.9	662.3	6.03%	20.34%

Sources: National Bureau of Statistics of China, *China Statistics Yearbook 2006* and Ministry of Health of the People's Republic of China, *China Health Statistics Yearbook 2009*.

Public dissatisfaction also comes from the presence of unexpected changes. According to the psychology theory "adaptation level phenomenon,"[10] people have the tendency to form judgments (of sounds, of lights, or of income) relative to a "neutral" level defined by their prior experiences[11]. It states that people will always compare their current circumstances to their recent past. The happiness (or unhappiness) is always relative the prior experience. So if a person currently pays significantly more for the same service than in the recent past, one feels a decrease in the quality of life and becomes unhappy. Because of the fact that the reform came so quickly and the out-of-pocket payment for individual household increased so sharply, the psychological delay on the expected change caused much resentment in the society. Patients were not used to the high hospital costs. Peasants were not used to the big, commercialized urban hospitals. Large amounts of defected and faulty medical products due to lack of government regulations

further angered the public. High profits within pharmaceutical companies along with inadequate patient insurance coverage made the income distribution even more unbalanced. All these unexpected social economic changes, imbalances, and resentment coalesce into the "Failure of healthcare reform."

6. CONCLUSION AND DISCUSSION

This study reviews the dynamic change of China's healthcare section before and after the reforms. The statistical analysis of this paper shows the lack of healthcare coverage as a problem that existed when the economic reform started, at least a decade before the healthcare reform formal started. As the direct results of this healthcare reform, medical resources were quickly concentrated in urban hospitals and the individual out-of-pocket expense as the share of total health expenditures increased sharply. The rise of health expenses moved faster than the increase of average income. Newly established health insurance programs in both urban and rural areas were helpful to some people, but it has a long way to go in relieving most people's economic burden of healthcare expenses. In the healthcare market, the shifting of supply and increasing demand also caused the healthcare expense to rise in the last decade. The next question is who should pay for these high cost healthcare services? This is the key problem in the healthcare reform. Several suggestions are made as follows.

6.1 Urban-rural dual system in healthcare sector

Because of the huge economic difference between rural and urban areas in China, the health care system should have different formats in these two kinds of societies. In rural areas, income level is still very low; people have little education about healthcare and insurance claims; and many areas are as poor as in the least developed countries. The free market system cannot be depended upon to solve the problem of income redistribution. Therefore governmental aids to health care must be deployed. Rural health centers, financed by government to provide virtually free services to peasants, should continue to play the main role in poor rural area. In the less developed areas, this model will work more effectively than the market system. The modern health insurance scheme can be deployed when these rural areas become more economically developed. Meanwhile in urban areas, since the income level has already reached the median of developing countries and some major cities are already industrialized, the healthcare sector can be merged into the

market economy. The health insurance scheme can play a major role in the health care sector. In this way, the burden of government expenditures as well as the financial risk can be reduced by a certain degree, at the same time this can redistribute the healthcare resources more rationally in the long run.

6.2 Public goods and private goods in healthcare sector

Healthcare services should be distinguished into two parts: public goods and private goods. Since infectious diseases have severe negative externality (such as SARS and AIDS[12]), the epidemic prevention and treatment must be considered as public goods. The research into finding cures for these diseases is also public good. Those public goods, which have lost funding in the past, should be continually financed by government tax revenue. Since the non-infectious diseases do not have as much negative externality to the society (such as heart disease, cancer, and diabetes), these medical treatments should be considered as private goods, and belong to the individual's responsibility. Therefore, the cost of non-infectious disease treatment should be paid by insurance companies (collective financing) and individual patients (user fees).

6.3 Health insurance is the key to the reform

The healthcare system in the past, a system completely financed by the government, is no longer suitable to the new age economy in China. The central government cannot afford to have universal healthcare coverage for every citizen in the entire country. These years of experimental health care reform tell us that we also cannot totally depend upon the market system to distribute the costs and benefits. In such a case, the healthcare resources were unequally distributed, that caused much resentment and unhappiness. While the government expected the newly established health insurance to carry the burdens of the health expenditures, the public believed that this health insurance system did not cover enough expense. Fine tuning the health insurance system would reduce the pressure of patients' economic burden and unhappiness. The government policy makers should emphasis on establishing a better health insurance system.

Neither total government control nor total market enforcement will work well in China's healthcare sector. No foreign health care model will fit perfectly into China's situation. Therefore, the healthcare reform should combine both governmental administration and market function, based on regional economic conditions and culture differences. Since there is a huge social economic gap

between urban and rural areas in China, the healthcare systems and reforms in these two areas are not the same. This research only focuses on major themes in healthcare reform. As a limitation, it does not differentiate between the reform impacts in urban and rural areas in detail. Further study can be done on how healthcare reform impacts a particular area.

6.4 Lessons for Emerging Nations

While the major focus of this research was China, it should be noted that the entire conclusion section is applicable to any emerging and developing nation. While it may, in the short term, seem prudent to copy the successes of an entrenched capitalistic system for economic reform, applying this same model across the board to health reform seems questionable. This is supported by the research here, especially when private and public sectors cross boundaries. The suggestions here for some combination of capitalistic and socialized systems is certainly warranted. This also allows for the adaptation of best practices from other environments into differentiated cultures. Perhaps each nation/state could first assess their own strengths in private and public reform and THEN adapt modified programs from the more supposedly advanced nations.

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[1] Severe acute respiratory syndrome.
[2] Employees and their family members' hospital expense could be reimbursed by the employers.
[3] Among "bare-foot doctors", some of them were medical doctors and nurses from urban hospitals; most of them were rural health workers with a little medical training.
[4] In reality, most of urban hospitals were registered as non-profit organization.
[5] The number of people enrolled in new urban health insurance was 94 million out of 502.12 million urban residents in 2002, 109 million out of 523.76 million urban residents in 2003, and 124 million out of 542.83 million urban residents in 2004 (Annual Labor Statistics 2005 & Annual Labor and Social Security Statistics 2005, Ministry of Labor and Social Security, P. R. China).
[6] According to NCMS, households' contributions started from RMB ¥10 per person and paid on a voluntary basis - will be supplemented by a RMB ¥10 subsidy from local governments, and by a RMB ¥10 matching subsidy from central government in the case of household living in the poorer central and western provinces. The NCMS is being piloted in more than 300 of China's more than 2000 counties in 2003.
[7] Many rural communal health centers were still listed in the government's registration, while they no longer were in business.
[8] Medical clinics included community and private individual medical practitioners.
[9] The shares of insurance premium between employers and employees vary during the reform period.
[10] This theory was first described by Harry Helson.
[11] Myers, D. G. (2007). *Psychology* (8th edition, p. 542), New York: Worth.
[12] Acquired immune deficiency syndrome**.**