Transforming China's Urban Health-care System

Baogang Guo

Abstract

China launched its ambitious urban health-care reform in 1998. This paper takes a closer look at three key areas of the reform: the new health-care insurance scheme, the reorganization of health-care institutions, and the new pharmaceutical distribution system. A critical assessment of the past five years indicates that although the reform has had some success in reducing health-care costs while improving access, the new system also has some structural problems. The success or failure of the new system will be determined by the ability of the program to collect and mange health-care trust funds, and to provide adequate funding for the large number of elderly beneficiaries covered by the program.

Since 1998, China has made tremendous progress in remaking its health-care policy. The new policy is designed to broaden insurance coverage, contain runaway health-care costs, and improve the quality of health services. To accomplish these goals, a comprehensive restructuring is underway of three systems: existing urban public health insurance, health-care delivery, and pharmaceutical distribution. New market mechanisms have been gradually introduced, including built-in incentives for consumers to reduce unnecessary utilization of health services, consumer choice of doctors, a prospective payment system, a public bidding system, classification of hospitals as non-profit or for-profit, and separation of pharmacies from hospi-

Baogang Guo is Assistant Professor of Political Science at Dalton State College, Dalton, Georgia, and Research Associate at the China Research Center at Kennesaw State University. He wishes to express thanks for comments made by Andrew J. Waskey, He Li, Pat Carmoney, and the anonymous reviewers of earlier drafts of this article. Email: <bguo@em.daltonstate.edu>.

Asian Survey, 43:2, pp. 385–403. ISSN: 0004–4687

tals. By February 2003, 94 million urban employees were already enrolled in the new basic medical insurance system. The official target is to extend the number of enrollees to 100 million at the end of the year.[1] Over the next few years, the new system is expected to cover about 210 million urban employees and self-employed persons.[2] Furthermore, China is accelerating its process of urbanization by reforming its outdated household registration system. The number of rural laborers moving to live and work in urban areas permanently is expected to grow at 1% or around 10 million each year.[3] Therefore, the number of the insured will continue to grow in the next couple of decades.

Most people outside China have very limited knowledge of this ongoing, large-scale reform. Western scholars also have showed limited interest in the subject, and many have failed to understand the political motivation as well as political implications behind this latest move. Why is China suddenly shifting its attention away from urban enterprise reform and investing so much energy in reforming its health-care system? What will the new reform accomplish? In what ways will the new health-care system differ from the old state-sponsored urban public health-care system? What are the strengths and weaknesses of the new system? This paper will address each of these questions. Part one provides some background information on the health-related reforms. Part two examines some key components of the new health-care system. Part three assesses the possibilities if the new system meets its goals and reveals some potential problems that may hinder the realization of those goals. Finally, because most of the reforms are still in their infancy, it is still too early to give a detailed quantitative analysis. Therefore, this paper only attempts to make some initial assessment based on documents and data available at this time.

Background

The Old Health-care System

For nearly 50 years, China offered health services for free to urban, public employees at government-run health services facilities. There were two types of publicly financed schemes: public health insurance and labor insurance. The public insurance scheme covered all employees in government, academia, and political institutions, as well as college staff and students, military personnel, and disabled veterans. The labor insurance scheme provided

1. Ministry of Labor and Social Security, *Chinese Labor and Social Security News* (*CLSSN*), February 20, 2003, <http://www.clssn.com>.

2. *People's Daily*, December 29, <http://www.people.com.cn>.

3. Currently, the household registration system is undergoing major changes to allow farmers to move to urban areas more easily.

coverage for workers in all state-run enterprises, as well as some large collective-owned enterprises. At the end of the 1970s, these two plans covered 137 million people, or 75% of the urban labor force. Overall, they covered less than 15% of the country's total population. The only health-care finance scheme for farmers, who made up 75% of the total population, was the cooperative health-care scheme subsidized by rural collective communes.[4] All health-care clinics, hospitals, and research institutions were run entirely by the state, and they performed essentially a welfare function for the government. Like all other social security services, basic health-care services were directly provided by health clinics and hospitals run by individual enterprises and local *danwei* (work units).

The Need for Reforms

When China began its ambitious economic reform in 1979, the health-care system was not given sufficient attention. Health-care costs continued to go up at an average rate of 19% per year. From 1978–97, health-care spending under the two health insurance plans rose by 28 times, far greater than the overall inflation rate.[5]

Overutilization of health services and abuse of free medical care were widespread. According to an official estimate, from the 77.4 billion Chinese *yuan* (US$9.39 billion) spent in 1997, 20–30% fell in the category of unreasonable and unnecessary spending.[6] No cost-control mechanism was in place to effectively detect and reduce the widespread abuse in utilization of public health services, hospitalization, and medications. In addition, there was no incentive for individuals and enterprises to save health-care dollars. To increase revenues, it was very common for hospitals and health-care facilities to prescribe expensive medications and import much high-tech equipment.

However, uncontrolled health-care spending is only part of the problem. More urgent issues have to do with how to provide health-care services to a population that is increasingly mobile. As economic and personnel system reforms continue to unfold, more and more state-owned factories have started laying off large numbers of surplus workers. Many money-losing companies went bankrupt under the new bankruptcy law. The *xiagang zhigong* (laid-off workers) from these companies will eventually lose their entire welfare bene-

4. Government of the People's Republic of China, Ministry of Health (MOH), *Health Statistics Digest (1998)*, Table 2–59, <http://www.moh.gov.cn>. [Accessed February 19, 2003.]

5. Data compiled from MOH, *Health Statistics Digest (1997)*, Table 11–129, <http://www.moh.gov.cn>. [Accessed February 20, 2003.]

6. Government of the People's Republic of China, Ministry of Labor and Social Security (MOLSS), "Why Do We Need to Reform Existing Public and Labor Insurance?" *Questions and Answers on Health-care Insurance Reform*, no. 4, <http://www.molss.gov.cn>. [Accessed May 30, 2002.]

fits package, including their health-care coverage. Many laid-off workers will end up finding jobs in private sectors. Generally, there is very limited—or no—health insurance coverage being offered at those companies or to people who choose to be self-employed. In addition, as more and more workers reach retirement age or are forced into early retirement, companies find it very difficult to provide them with adequate pensions and health-care benefits.

Extending health-care benefits to temporarily or permanently unemployed workers, and, at the same time, paying for escalating health-care costs to cover full-time workers and retirees in both the public and private sectors have become a top priority for policy makers in China. The problems of inadequate health-care services and coverage are no longer just an economic issue. Increasingly, they have become a political issue that could jeopardize the entire economic reform and stability of the regime. It is this political implication that has really triggered the latest efforts to establish a new social security system in China. As one official document reveals:

> Due to the imbalance in economic development, and the appearance of all the old contradictions which existed in the state-run enterprises during the economic transition time, some poor regions and troubled enterprises failed to provide employee health-care security, and others have problems with unpaid health-care compensation. These problems have a negative impact on employees' health-care, and even cause some hardship on some employees who become ill. Their motivation for productivity and trust toward the reforms as well as the government are in serious doubt . . . [this] has intensified social contradictions, and become a potential threat to social stability.[7]

Therefore, establishing a risk-pooling social insurance system has become the only viable policy option. Chinese leaders understand this very well. They have consistently emphasized that health-care reform as well as other social security reforms are strategically important to the overall success of the entire economic reform, and even to the survival of the Chinese Communist Party (CCP) itself.[8]

Incremental Approach Toward Health-care Reform

As with all other reform measures, Chinese policy makers have taken a cautious and incremental approach toward health-care reform. Different reform plans are first experimented with, on a small scale. These are followed by expanded trials, and then, promoted with nationwide campaigns. The incremental approach is used for three reasons: first, health-care affects everyone.

7. Ibid., no. 13, "Why Health-care Insurance Reform Is Essential to the Long-term Stability of the Country."

8. *People's Daily*, July 26, 2000.

Any change in the system could have an explosive impact on the lives of ordinary people. For a regime that is still overwhelmingly concerned with stability issues, this certainly involves great risks. Second, the new health-care policy will have distributive effects on the economic and political interests of a variety of people and groups, and it is expected to face many political barriers and turf battles. The reform will definitely reshape the political and economic interests of consumers and providers, enterprises and governments, and the central and local governments. Many people and groups involved will resist the reform unless they can see clear benefits for themselves. For many consumers, for example, the reform simply means that they will have to pay more out of pocket. For some retired revolutionary veterans, the reform may curtail the free perks they enjoyed for years. For some bureaucrats, the reform means that they will lose their jobs or their lucrative economic gains. To overcome such anticipated resistance, policy makers need to plan carefully to balance all interests, and to mobilize the propaganda machine to create a supportive atmosphere. Finally, health-care financing and delivery are interconnected. Reform in one area will depend on reform in others as well.

Uncoordinated health-care reforms began in the early 1980s. The purpose of these reforms was to slow down the runaway growth rate of health-care expenditures at the local level. Co-payment for some health services such as clinical visits and hospitalization was introduced in some areas. In some places, co-payments went as high as 10% for clinical visits and 5% for hospitalization. In 1993, the Central Committee of the CCP passed a resolution on market reform that set out the direction for health insurance reform.[9] According to this resolution, the new health insurance system should no longer be unit-based or enterprise-run; it must be in the form of social insurance in which premiums collected from individual and enterprises will be pooled, and managed by a regional organization. Furthermore, it was decided that the government and enterprises should no longer bear the entire burden of health-care finance. Each employee would have to contribute to his or her own medical fund. This recommended new system is apparently based upon a careful analysis of public health-insurance schemes in different countries, including the U.S., Germany, and Japan. The separation of employer-paid group medical funds and employee-paid individual medical funds is entirely new. No other country has a similar combined system. This new system

9. Central Committee of the CCP, "Decisions on Market Reform," <http://www.molss.gov.cn>. [Accessed February 20, 2003.]

began experimentally in 1994 in two small cities.[10] Two years later, 40 more cities were asked to test the new program.[11]

In 1994, the Chinese government also asked the World Bank for suggestions to improve the equity and efficiency of China's health services. The World Bank, after three years of intensive research, published its report: *Financing Health Care: Issues and Options for China.* It identified three main problems with China's health system: growing disparity in financial access to health care, increasing inefficiency, and rising costs. The World Bank recommended, among many other things, that the government reform prices and provider-payment mechanisms, and promote efficient risk-pooling in rural and urban areas. The report pointed out that "[i]nternational experience suggested that China's health policy is at a critical juncture—and that if China continues on the present course, the problems will deepen and become more difficult to remedy."[12]

In 1998, China finally decided to accelerate its social security reforms in light of the difficulties it encountered in reforming the state-run enterprises. In health-care areas, the focus became one of changing the outdated health insurance system. In December, the State Council issued the "Decision on the Establishment of Basic Health Insurance for Employees in Cities and Towns."[13] The document stipulated that the new insurance would cover all urban employees except the self-employed. Medical funds would be established at the city or county level, with both employers and employees making contributions. It was clear that the central government wants to focus primarily on expanding health care access with very basic coverage and benefits. Fifty major regulations and guidelines have been published to guide the nationwide health-care reforms since 1998. Initially, The State Council wanted the health insurance system reform to be completed by the end of the year. However, due to the sensitivity and complexity of the reform, by mid-August 1998 only one-third of the cities had begun the implementation process and only 14 million people had been covered under the new system. It became clear that reform would not be as smooth and as swift as the planners had

10. Government of the People's Republic of China's Commission on System Reform and State Council, "Decision on the Experiments on the Employee Health-care System," Commission on System Reform Document, no. 51 (1994), <http://www.molss.gov.cn>. [Accessed February 20, 2003.]

11. Government of the People's Republic of China, Office of the State Council, "Decision on Expanding Employee Health-care Reform Trials," Office of the State Council Document, no. 16 (1996), <http://www.molss.gov.cn>. [Accessed February 20, 2003.]

12. World Bank, *Financing Health-care: Issues and Options for China* (Washington, D.C.: World Bank, 1997), p. 63.

13. Government of People's Republic of China, CCP Central Committee, and the State Council, "Decision on Health-care Reform and Development," CCP Party Document, no. 3 (1997), January 15, 1997, <http://www.molss.gov.cn>. [Accessed February 20, 2003.]

thought. Lack of experience, bureaucratic red tape, and the complexity of the process may have caused the delay. It became clear, nonetheless, that it would take much longer to have the new health insurance system fully put into place.

The reform of health-care institutions and the pharmaceutical production and distribution system started in 2000. Although the CCP and the State Council issued a decision to push for health-care institution reform in 1997, it did not materialize until early 2000. Nevertheless, despite all the delays, by 2000, health-care reforms were finally launched at full speed. On average, nearly 20 million people enrolled each year. About 94 million people had enrolled by February 2003.[14]

What do the reformers intend to achieve? According to the government, the reform is intended to accomplish three goals:

- To break monopolies, encourage competition mechanisms in the health area, and improve the quality and efficiency of service
- To promote a healthy development of medical care and health care through re-orientation, reorganization, and regrouping
- To contain the rapid cost increases for medical and health care and lighten the social burden so that people can enjoy quality services and pharmaceutical supplies at reasonable prices.[15]

The overall mission of the health-care reforms is to create a safety net so that economic reform, especially the crucial reform of state-run industries, can be pushed ahead. By taking the health care role away from enterprises, it is believed that enterprises can become more cost-effective, and can pave the way for creating a Western-style modern enterprise system. Mostly importantly, the reform has a political agenda, which aims at maintaining political and social stability and easing the potential for labor unrest and urban riots. These goals cannot be achieved within a health system that was the product of the planned economy. To make the health-care industry itself more market-oriented, a major restructuring of the existing system is necessary.

The New Health-care System

Since 1998, many high-level party and government discussions have been conducted, and many decisions, detailed regulations, and guidelines at the national and local levels have been issued. The new system has been established in all cities, with enrollment growing continuously.[16] If you walk on the streets of Chinese cities today, you will likely hear much talk about

14. *CLSSN*, February 20, 2003.

15. Office of the State Council, "Reform of China's Medical Care System," May 25, 2000, <http://www.china.org.cn/>. [Accessed May 30, 2002.]

16. *People's Daily*, February 19, 2002.

health-care reform, ranging from premium payments to choice of doctors. One can easily ascertain the magnitude and impact the reforms have had on the lives of ordinary people, in both positive and negative terms.

Some initial results have already been reported. According to one official estimate, the overall reduction in drug costs had reached 19%, and the annual rate of increase in the cost of hospitalization had been significantly reduced from more than 20% in 1998 to just 4% to 6% in 2000.[17] In another official estimate, the average growth rates for a hospital visit and a hospitalization were 25% and 23.7%, respectively, for hospitals managed by the Ministry of Health between 1990 and 1998. By 2001, the growth rates for the two indicators were kept at 9% and 5%, respectively.[18] More independent and scientific field studies are needed to verify these and other results.

Since the three reforms are still in their early stages, many important implementation guidelines and programs have yet to be formulated. Therefore, the direction of some reforms is unclear. The following is merely a summary of the announced policies and programs, supplemented with some initial implementation results.

Key Components of the New Health Insurance System

The new health insurance program has made at least three major changes to the old health care system. First, it consolidates the old public insurance and labor insurance programs into a one-tiered program, and extends its coverage to urban workers in both public and non-public sectors. Second, the enterprise-based health-care system has been transformed into a social-based insurance scheme in which the limited resources of enterprises and individuals will be pooled together to better meet the needs of the insured. Employers and employees share the cost. Third, the program separates health-care delivery from health-care finance, with a separate management system to avoid potential conflicts of interest. The management of medical funds is to become a self-sustaining, public-subsidized, non-profit economic operation.

Coverage. The new health insurance coverage is mandatory for employees in all types of enterprises, governmental institutions, and semi-official social groups in urban areas, including private-owned and foreign-owned companies. The coverage also includes laid-off workers and retirees. The self-employed business owners and township enterprises, however, are exempted from mandatory enrollment at this time. But cities like Shanghai have begun to offer the plan to the self-employed as well. Local authorities may decide on their own if people in these two categories should be included. Farmers in rural areas, however, are still excluded from the state-sponsored system, and

17. Ibid., January 27, 2002.
18. *CLSSN*, February 20, 2003.

the State Council is in the process of formulating a catastrophic health insurance program for the rural areas.[19]

Financing. Both employers and employees need to contribute to the medical trust funds. Currently, an individual employee contributes 2% of his/her wages or salary. This contribution goes to his or her individual medical account. This account will be used mostly to pay for outpatient services and medications. Employers contribute around 6% of the sum of their employee's total wages or salaries. Most of this money will go to the general medical trust fund, and 30% of that amount will be allocated to employees' individual accounts.[20] The general medical trust fund will be pooled at the city and county level, primarily to pay for in-hospital services.[21] There are many built-in cost-cutting mechanisms—such as co-payments, deductibles, minimum and maximum payments, and formularies of permitted prescription drugs—designed to ensure the solvency of both funds.

Management of the medical funds. Local governments at the city and county levels will provide operating budgets and personnel to collect, manage, and run the general trust funds and the individual medical funds. Designated public agencies will negotiate with health-care providers on the terms, coverage, and reimbursement of health-care services. The central government has given some flexibility to local governments in determining the percentage for employee and employer contribution, the actual allocation of the funds, and the coverage of individuals based on economic and social conditions in their respective jurisdictions.[22] So far, it has been reported that all medical trust funds have managed to maintain a positive balance. At the national level in 2001, it was reported that the net income of all trust funds was 17 billon yuan ($2.06 billion), and the net expenditure was 14 billion yuan ($1.7 billion), with a surplus of 8.9 billion yuan ($1.08 billion).[23] Recent official data suggested that in the first quarter of 2002, the total income

19. The new program is to be put in place by 2010. Each participant is to pay only 10 yuan ($1.1), and the local and central government will each pay 10 yuan for the participant. See State Council, "Decision to Establish a New Rural Co-operative Health Care System," January 23, 2003. Experiments have begun in Hunan Province and Ningbo City, Zhejiang Province. See *People's Daily*, February 19, 2003.

20. It varies between different age groups. Younger workers will get much less from the employer's contribution, while older workers will get more.

21. Although it is currently pooled together by cities and counties, it may go up to an even higher level in the future, according to the official documents.

22. The Government of the People's Republic of China, the State Council, "The Decision on the Establishment of Urban Labor Health Insurance System," State Council Document, no. 44 (1998), December 14, 1998, <http://www.molss.gov.cn>. [Accessed February 20, 2003.]

23. MOLSS et al., *2000 Annual Statistical Report of the Development of the Labor and Social Security System*, <http://www.molss.gov.cn>. [Accessed May 31, 2002.]

of all medical funds was 11.6 billion yuan ($1.4 billion), and the net expenditure was 7.8 billion yuan ($0.94 billion), with a surplus of 7.8 billion yuan ($0.94 billion).[24]

Key Components of Health Institution Reform

Health institution reform is much in line with reforms in other areas. Its main objectives are to separate the administrative function of the government from the health-care delivery function, and to make health institutions compatible with the new market economy. A total of 19 official regulations have been issued so far to guide the process.[25] Some of the major changes are listed below:

A new classification system. The majority of state-run health-care institutions will be reclassified as non-profit institutions. They can receive government subsidies, but their prices are subject to government control. Other non-profit health-care institutions will not qualify for government subsidies. Their service charges are only regulated by government guidelines. For-profit health-care institutions will be left entirely on their own, regarding profits and losses. Their service charges are not subject to government control or regulation.[26] By early 2002, this process was complete. So far this reform has had little effect on the efficiency of these hospitals. Without fundamental changes in ownership and management style, hospitals in China remain noncompetitive and heavily subsidized by the government. On the other hand, permitting foreign- or private-owned hospitals to operate in China may eventually pose formidable challenges to public hospitals. Although these private hospitals charge higher prices, their Western style of management and services may divert more and more upper- and middle-class patients away from traditional public institutions.

Reallocation of health-care resources. Enterprise-run health-care facilities and institutions in the cities are in the process of being transferred to local governments, albeit with some resistance. Only poor-performing enterprises have welcomed the move, since it often helps to reduce cost. Financially stronger companies have been reluctant to do so for fear of reducing the quality of health services to their employees. To make the hospital care industry more efficient, a six-province trial of the personnel reform is underway.[27] In Shanxi Province, in 2002, more than 20% of hospital logistical support per-

24. *People's Daily*, April 30, 2002.

25. Ibid., August 4, 2000.

26. MOH, "Implementation Guidelines for Classification and Management of Health-care Institutions," <http://www.moh.gov.cn>. [Accessed May 30, 2002.]

27. CCP Organization Department, Ministry of Personnel, and Ministry of Health, "Implementation Guideline on Deepening Personnel System Reform in Health-care Institutions," Min-

sonnel were laid off.[28] More consolidation and change of services for many health-care institutions are expected. Most small hospitals will be changed into community health service centers, responsible for providing primary care. A total of 308 cities had begun to offer primary health services through these new centers by early 2002.[29]

Giving consumers more choices. Hospitals now have to compete for service contracts. Doctors have to compete for patients. Good doctors can charge higher fees because of demand. These measures will give consumers more choice by encouraging competition and improving services. In Beijing and many other big cities, doctors have already begun to advertise in order to attract more patients; some doctors have raised ethical concerns about these practices.

Reform of the Pharmaceutical Distribution System

The rise of retail drug prices is one of the important factors boosting overall health-care costs. The government has decided to streamline the pharmaceutical production and distribution system. But this reform is the weakest of the three, and many problems remain unresolved. The following measures have been slowly implemented across the entire system:

Separation of hospitals and pharmacies. In the past, hospitals ran their own pharmacy stores, and 60% of hospital income came from in-hospital pharmacy stores. After early experiments, the Ministry of Health initiated a trial run on the separation of pharmacies from hospitals. The goal is to turn pharmacies into retail drugstores with no financial links to hospitals, thereby avoiding any conflict of interest. This could cause financial difficulties for a majority of hospitals as their dependency on the pharmacies is so great. One key government official has acknowledged that hospitals have strongly resisted this measure for fear of losing a significant portion of their regular income, and almost none of them has come up with any implementation plan yet.[30] The MOH now has postponed the reform, pending further trial results. A few accounting practices at hospitals are being streamlined to address the conflict-of-interest concerns.

---

istry of Personnel Document, no. 31 (2000), <http://www.moh.gov.cn>. [Accessed February 20, 2003.]

28. Personnel Department, MOH, *Newsletter of Health Personnel*, vol. 12, December 27, 2002, <http://www.moh.gov.cn>. [Accessed February 20, 2003.]

29. *People's Daily*, January 27, 2002.

30. *Jiankang Shibao* (Health Times), April 19, 2001, <http://www.people.com.cn>. [Accessed June 1, 2002.]

Capacity control and quality improvement. The state will tighten its production licensing procedure, and reinforce quality control standards. In 2000, the state issued the new *National Drug Index* to help determine drug benefits. In February 2001, the Standing Committee of the National People's Congress (NPC) revised the Pharmacy Control Law. A set of new quality assurance certification systems was adopted to regulate the pharmaceutical industries, and strict punishments were added in an effort to prevent fake and low-quality pharmaceutical products from entering the market. New standards meeting international requirements, as well as certification processes, are being formulated. Some companies have failed certification, and some have been shut down.

A new public bidding system. To prevent corruption and to lower drug prices, the State Council has promoted a public bidding system for the purchase of pharmaceutical products. It is hoped that eventually, 70% of all pharmaceutical acquisitions made by hospitals will be made through an open bidding process in which drug companies will compete with each other. By the end of 2001, only 15% of all drugs purchased by hospitals nationwide were acquired through the new bidding system. According to an official account, the average drug price in urban hospitals managed by the MOH has dropped 20% as a result of the new system.[31] However, few of these savings have been translated into a reduction of retail prices. Consumers, so far, have not yet benefited from the reform.[32]

While the reforms are very comprehensive and radical, their goals are overly ambitious. All three reforms are designed to reduce health-care costs, to allow consumers to obtain high-quality service at reasonable prices, and to make the outdated health system more compatible with the emerging market economy. The three reforms have progressed very unevenly. In some areas, very little progress has been made. It not only will take much longer than advocates had anticipated to complete these reforms, but also it will create new tough problems for the reformers down the road (see below). These problems will be no less painful than those that the reforms were intended to resolve in the first place.

A Critical Assessment

From the previous discussion, we can see that none of the three crucial health-care reforms has been very well planned or implemented on a trial basis. Serious concerns remain over certain aspect of the new system. The

31. *People's Daily*, January 27, 2002.

32. Chinese Central Television Station (CCTV), *Focuses and Dialogues* program, aired July 28, 2000.

following discussion will evaluate stated reform objectives against the promulgated policy measures.

Will the Reforms Contain the Rising Costs of Health Care?

The increasing growth rate in health-care costs is a global phenomenon. All countries are struggling with the cost-control issue to some extent or another. Whether or not China can contain its runaway health-care costs remains to be seen. Many uncertainties lie ahead.

Compared to the old health-care system, the new system has adopted many cost-control mechanisms such as co-payments, deductibles, maximum benefits caps, and a prospective payment system in which overall spending will be predetermined between contracting hospitals and medical funds management agencies. There are signs that the utilization of health services has declined in the past few years. However, the cost of hospital services continues to go up. Recent data indicate that in 1999, average consumer spending on a doctor's visit was 79 yuan ($9.6), and the average cost per hospitalization was 2,891 yuan ($349.6), a 10% increase over the same period in 1998.[33] Compared with previous years, this rate of increase is relatively slow. But if we take the extremely low general inflation rate into consideration, it is still relatively high. Most of the increase can be attributed to higher drug prices.[34] The drug wholesale market and distribution system are under fire. It is believed that the mutually beneficial ties between hospitals and drug companies have exacerbated the problem.

According to recent research, health-care reform could have a major impact on cost reduction. A study of the new health-care system in Zhenjiang city in Zhejiang Province in eastern China, one of the earliest pilot cities to begin the reform, indicates that in 1999, the city's overall health-care expenditure decreased 8% for the general population and 18% for the system's users. There was a 17% drop in the length of hospital stay, and a 14% and 11% drop in the utilization of health services for outpatients, and inpatients, respectively.[35] As far as the impact of the reforms on health-care costs at the national level is concerned, it is clear that the new systems have slowed the overall growth rate but have not produced a net reduction.[36] The mechanism that seems most likely to be effective is the prospective payment system;

33. MOH, *1999 National Statistics Bulletin on the Development of Health-care Institutions*, March 26, 2000, <http://www.moh.gov.cn>. [Accessed February 20, 2003.]

34. *People's Daily*, August 18, 2000.

35. Gordon G. Liu et al., "Urban Health-care Reform Initiative in China: Findings in Its Pilot Experiments in Zhenjiang City (1)," *International Journal of Economic Development* 1:4 (1999), pp. 504–25.

36. *People's Daily,* February 19, 2003.

because each fund is responsible for its own financial solvency, it has to negotiate annually with hospitals to pay for all covered workers.

The new bidding system is supposed to enable hospitals to maximize their purchasing power and thereby reduce their operating costs, as well as costs for purchasing drugs and medical supplies. The question is whether or not hospitals will be willing to transfer their saving to patients. Some studies have already found that the opposite is the case.[37] The proposed separation of hospitals and pharmacies, if it is ever carried out, will reduce the income for hospitals significantly, probably requiring them to raise their charge for services to make up the loss. The state may have to deregulate price controls on hospitals so that they will be less dependent on prescribing and selling medicines to generate revenues. In the short term, this move will further increase overall health-care costs rather than reducing them. Hospitals will also need to find ways to discipline doctors who make extra income through kickbacks on prescriptions, as these doctors may refuse to prescribe cheaper medications that carry no extra benefits for them. The State Council has issued guidelines to regulate the pharmaceutical market.[38] At the present time, the state still determines prices for medicines listed by the *National Basic Health-care Insurance Drug Index*. It also reserves the right to regulate other products that are not indexed. This contradicts the state's effort to build a system of market competition, and may not be very well received by the pharmaceutical industry. China's entry into the World Trade Organization (WTO) may also pose another serious challenge to the domestic pharmaceutical market; the extent to which availability of foreign brand-name drugs will affect prices within China's health-care market remains to be seen.[39]

Nevertheless, the most troubling effect of the program so far is not cost containment. Instead, it is cost shifting. Consumers now pay a fixed portion of their wages or salaries to the medical funds to pay for their potential health-care services, where in the past they normally received those services for free. Because the benefits are very limited, patients will have to pay additional out-of-pocket expenses that are not covered by the program, such as co-payments and deductions. In Hunan Province, only 25% of all drugs were listed as Class A drugs, which will be reimbursed at 70%. The other 75% were all Class B medicines, and can only be reimbursed at 63%. On average,

37. Ibid., July 28, 2000. See also MOH, "Notice on Strengthening the Work of the Public Bidding System Trial," April 24, 2000, <http://www.moh.gov.cn>. [Accessed February 20, 2003.]

38. At present, the health-care services charges are still regulated by the State Planning Commission.

39. Na Zi, "Joining WTO Will Alter the Survival Principles of China's Domestic Pharmaceutical Industry," *China Information* (Leiden, the Netherlands), December 17, 2001, <http://www.zgxxb.com.cn/paper/2066/2066-4-01.htm>. [Accessed May 30, 2002.]

the individual cost of health care has increased 25% compared with previously.[40]

Will the Reforms Improve Access to Health Care?

The new system has promised to broaden health-care coverage, and the increased access should materialize in several ways. First, increased coverage will put all urban laborers under full coverage. According to labor statistics issued by the Ministry of Labor and Social Security, there are currently 210 million active laborers in urban areas. China also plans to increase its urban population from 37% to 50% by 2020. This means a large portion of the rural labor force will find jobs in urban areas. They are expected to join the new health insurance scheme sooner or later. Million of small business owners and self-employed will eventually be asked to join the system as well. Therefore, although the existing insurance scheme is yet to be a comprehensive health plan for all urban residents, it may eventually cover 30–40% of China's total population.

Second, the reform will improve access to health care for workers in private-owned, joint ventures. These types of enterprise have grown very fast over the past two decades. Their overall work force has increased to more than 20 million and will continue to grow at nearly 10% annually. Finally, turning over more than 7,000 enterprise-owned and -operated hospitals and health-care facilities to local government should make those hospitals, doctors, and equipment available to the general public.[41]

However, there are two major problems with the existing system. First, by excluding rural areas and employees working in township industries, China falls far short of its stated goal of universal health-care coverage. It is said the people in the rural areas will continue to perfect their cooperative health-care system, and gradually develop it into a separate social health insurance scheme. Beginning in 2003, the State Council will begin to work on a new rural co-operative catastrophic health insurance scheme. Limited trials have been started in some provinces and cities already. The new system requires significant state financial subsidy. How state and local governments can come up with these funds remains to be seen. Currently, only 80 million farmers are covered by some type of cooperative insurance schemes—a significant decline in coverage, compared with the pre-reform era, due to the collapse of the rural cooperative health care system. Many farmers revert to

40. Hunan Urban Study Team, "An Analysis of Problems with the Current Health Insurance System," National Bureau of Statistics, <http://www.stats.gov.cn>. [Accessed May 17, 2001.]

41. Zhou Beichuan, "Investigation and Discussion on the Separation of Hospitals from Enterprises," *People's Daily*, November 24, 2000.

poverty due to illness and the burden of medical treatment.[42] As long as the majority of the population remains without health insurance, the inequality in health-care access will continue to divide the urban and rural areas.

Second, equity of access cannot be achieved through the existing financing scheme. Low-income employees may have greater needs for health-care services, but the savings they put into their individual medical accounts will be much smaller than those from employees whose incomes are higher. Also, enterprises that perform poorly will contribute very little to the pooled funds, compared with successful enterprises, and similarly with poor versus rich regions. In the long run, this will produce regional or sectional inequality in the relative quality of health services.

Will the Reforms Ensure Quality of Health Care?

The experience of many other countries, especially the United States, has shown that the emphasis on cost containment tends to have some negative impact on quality of health care. Quality is maintained by providing necessary care and services, and by improving health-care outcomes. In terms of patients' ability to receive necessary care, we can already see some troubling signs.

In 1990, individual health expenditure made up 39% of total national health expenditure. In 2000, individual spending increased to 61%.[43] This means the share of the government and enterprises in health spending has declined sharply. However, the health-care utilization rate nationwide has declined. Compared with 1999, doctor visits declined 10% by 2001, and the average hospital stay decreased from 12.6 to 11.8 days. The health-service utilization rate declined by 19%, and the hospitalization rate declined by 4.3%.[44] Over 50% of urban residents chose not to receive any treatment when they got sick, and 30% of people needing to be hospitalized chose to stay home or opted for traditional treatment methods, fearing that health-service options would be too expensive.[45] This survey was not related to the new medical insurance plan. But since out-of-pocket health-care expenses in future will be at least 10% of a worker's wage, we will see more and more of this kind of reticence. The drop in hospital utilization rates could be a correction for the old problem of over-utilization of health services, which was a by-product of the previous system for financing health care. The drop could

42. Susan V. Lawrence, "The Sickness Trap," *Far Eastern Economic Review* (Hong Kong), June 13, 2002, <http://www.feer.com>. [Accessed February 21, 2003.]

43. Rao Keqin, "Zhuanxing Jingi yu Weisheng Gaige," presentation, <http://www.moh.gov.cn>. [Accessed February 21, 2003.]

44. Data from MOH, *Health Statistics Digest* (1999 and 2001), <http://www.moh.gov.cn>. [Accessed February 20, 2003.]

45. Ibid., 2001, Table 2–56, <http://www.moh.gov.cn>. [Accessed February 20, 2003.]

also be a sign that the financial burden on medical care has become excessive, at least psychologically. If people postpone treatment and do not receive early diagnoses, minor illnesses may develop into more serious ones. Such a trend is worrisome because it may actually add to the overall healthcare cost in the long run. This impact will require future research.

Will the New Insurance System Be Cost-Effective?

The success of the entire new financing system depends upon the soundness of its fiscal management. Currently, the ratio of health insurance premiums to medical funds is determined on the basis of individual wages or total employee wages, not on the previous year's cost of running insurance programs. Therefore, the system could run into potential solvency problems, since there certainly will be incidents with discrepancies between funds available and actual program expenditures. At present, the overall balance sheet is still in black. But the program may have to manipulate both employee and employer contributions, should this become an issue. For instance, in Shanghai, the employer contribution is already double the national average.

One potential cause for budget deficits is the way retirees are being incorporated into the same insurance plan. Under the current plan, existing retirees will not pay any premiums to the system. Portions of funds from employers' contributions will be allocated to establish retirees' individual medical accounts. In considering the following three factors—the sheer number of retirees exiting jobs, the projected increase in retirement population in the near future, persons who have paid very little into the program, and much higher medical system utilization rates among the elderly—we can anticipate that the cost to cover these retirees can be a tremendous financial drain on the entire system. In Enshi in Hubei Province, for example, 80% of premiums for retirees has to be subsidized from the local government's general revenue. Enterprises only contribute 20% of the needed premium.[46]

Unlike Japan and the U.S., which have separate insurance plans for the elderly, the new Chinese system has a one-tiered schema in which workers will be covered from day of employment until death. Therefore, both employer and employee contributions are meant to provide not only for current medical needs, but also future prolonged retirements. This requires a significant accumulation of funds for future use. It may be convenient at the moment to use the money that is available to serve the retirees. However, in the long run, such an approach will create a generation gap similar to that within the U.S. social security system, where younger generations will have to pay for their parents' generation. Parents then will use up most of the medical money intended to be saved for the next generation's retirement. As the ag-

46. *CLSSN*, November 17, 2002.

ing population in China grows steadily over the next two decades, and life expectancy continues to increase, we can foresee that the system will encounter some major troubles.

One possible solution would include a special tax on enterprises in order to set up a retiree fund separate from the general funds. Funding should derive from employer contributions, and the accruals would pay for the medical costs of retirees who currently contribute little or nothing to the new system. Another solution might be an annual subsidy from the general government budget to each group medical fund. Whatever measures the government takes need to be done early, before the problem gets worse. Otherwise, China may end up like the United States, eventually facing a poorly structured social security system.

Conclusion

China's health-care system is the largest in the world. Even though the scope of the on-going reform is limited to urban areas, its magnitude is still impressive. The reform has changed many aspects of the old health-care system, yet many more require dismantling and restructuring. To accomplish all the reformers' objectives quickly is a daunting task. Chinese leaders so far have taken a cautious but active approach toward the reforms. While providing national guidelines, the reforms still give local authorities much freedom on implementation. Looking at the health insurance system as a whole, it is still very decentralized. There will be a lot of regional variation and difference. In the years ahead, serious problems, especially about funding mechanisms, will surface. Problems will continue to exist for reform of both health institutions and pharmaceutical distribution systems.

The outcome of the reforms will be determined by several factors. First, the management of various medical funds is crucial to the entire health insurance scheme. Many new problems such as poor management or lack of enforcement authority may cause some funds to become insolvent. The government not only needs to provide close supervision over related institutions but also should empower these agencies to be tough negotiators with providers and serve as true representatives of the insured. Second, the government must learn how to use market mechanisms to make its health-care industry more competitive. It is very easy for Beijing to use administrative measures to respond to demands from the people. As a result of recent demands, for example, the government has tightened price controls. In 2002, the State Council dispatched 5,000 inspection teams to 35,000 health institutions for price checks.[47] This may be counterproductive for healthy development of the new market economy. Finally, reforms must be realistic in their

47. Ibid., February 16, 2003.

goals. Cost containment, for instance, will not solve all the problems. As a matter of fact, to establish a modern hospital system, some price adjustment is inevitable in order to make hospitals self-sustainable once in-house pharmacies become independent. An excessive emphasis on cost reduction may also sacrifice the quality of health care.

Overall, the reforms will move China's health-care system in the right direction. Although their future may not always be smooth, it is likely that the long-term prospects for such changes will be positive. If successful, the current reforms will not only lay a solid foundation for China's health-care system in the twenty-first century but will also pave the way for the eventual establishment of a fully functional market economy in China.