ADDRESSING INEQUITY IN ACCESS TO HEALTH CARE IN URBAN CHINA

A REVIEW OF HEALTH CARE FINANCING REFORM EXPERIMENTS

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January 1 – December 31

ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CHC</td>
<td>Community Health Care</td>
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<tr>
<td>FFS</td>
<td>Fee-for-Service</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GIS</td>
<td>Government Insurance Scheme</td>
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<td>LIS</td>
<td>Labour Insurance Scheme</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>MOLSS</td>
<td>Ministry of Labour and Social Security</td>
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<tr>
<td>SARS</td>
<td>Severe Acute Respiratory Syndrome</td>
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<tr>
<td>SSB</td>
<td>State Statistics Bureau</td>
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<td>STDs</td>
<td>Sexually Transmitted Diseases</td>
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<td>TB</td>
<td>Tuberculosis</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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ACKNOWLEDGEMENTS

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# TABLE OF CONTENTS

Executive Summary .............................................................................................................. ii

Introduction ................................................................................................................... ........ 1

Problems in Urban Health Insurance Schemes Prior to Reform ........................................... 2

Experience with Reforming GIS and LIS ............................................................................. 4
  Experiments in Zhengjiang and Jiujiang ........................................................................... 6
  Supplemental Health Insurance Schemes and Medical Financial Assistance Schemes ....... 9

Main Findings from the Reform of Urban Health Insurance ................................................ 10

Impact on Equity in Financing of and Access to Health Care .............................................. 13
  Impact on Population Coverage ....................................................................................... 13
  Impact on Financing and Cost Sharing ........................................................................... 14
  Impact on Access to and Use of Health Services ............................................................. 15

Development of Sustainable Urban Health Care Systems: What Lessons ......................... 16

Have Been Learned and What Challenges Lie Ahead
  Lessons Learned ............................................................................................................ 16
  What Challenges Lie Ahead ........................................................................................... 17

References ......................................................................................................................... 22

Bibliography ...................................................................................................................... 24

**Boxes**

Box 1: Three Tiers of Payment for Medical Care in Zhengjiang and Jiujiang’s Health Insurance Experiments

Box 2: Policies and Regulations Regarding Benefit Arrangements for the Urban Poor in Shanghai

Box 3: Thirteen Policy Documents on Urban Health Service Delivery in China

**Tables**

Table 1: Selected Socio-Economic and Health Indicators in China (1990-97)....................... 1

Table 2: Percentage Change in Health Insurance Coverage of Urban Chinese Population (1993 and 1998) ........................................................................................................ 1

Table 3: A Comparison of Characteristics of the Old GIS and LIS with the New Basic Health Insurance Schemes in Urban China .................................................................. 8

Table 4: Policies and Regulations on the Use of Funds ...................................................... 9
EXECUTIVE SUMMARY

China has enjoyed impressive and sustained economic growth since the economic reforms launched in the late 1970’s. The living standards of the majority of Chinese people have increased significantly over the past two decades. However, the social development agenda in China is not finished. Inequity in health and health care remains a major concern.

Until the 1990’s, the Government Insurance Scheme (GIS) and the Labour Insurance Scheme (LIS) covered fully or partially about one-half of China’s urban population. The recent national health service survey showed a significant decline in coverage by health insurance schemes during the 1990’s.

The objective of this paper is to review attempts made by the central and local governments in China to reform urban health insurance schemes over the past two decades and to assess their impact on equity in financing of and access to health care. It specifically examines how changes in characteristics of new health insurance schemes have affected equity in terms of insurance coverage, financing, and access and utilization.

Methods of research include a review of government policy documents, regulations on various health insurance schemes issued by various municipal governments, relevant reports and both grey and peer-reviewed literature in China. In addition, a limited number of in-depth interviews were conducted with health policy-makers and leading Chinese academics.

From the start of the GIS and LIS in the 1950’s to the reforms in the 1980’s, these two schemes had the following characteristics:

♦ Public financing. GIS was financed by the government through recurrent health budgets; LIS was financed by state enterprises through welfare funds. Beneficiaries of both schemes were not required to pay for coverage.

♦ Self-insurance. Both schemes were organized at an institutional level (e.g., a government organization in the case of GIS and an enterprise in the case of LIS). There was no risk pooling among individual institutions. Employers functioned as the third party payers.

♦ Fee-for-service (FFS) reimbursement. Providers were reimbursed on a FFS basis, according to a regulated fee schedule, with some exceptions. For example, some institutions ran their own clinics and some large institutions operated their own hospitals; the latter were financed through institutional budgets.

♦ Free care. Beneficiaries of these two schemes paid virtually nothing for services. In some cases, they were required to pay a nominal registration fee for outpatient services. If they sought care outside of contracted providers after obtaining permission to do so, they were required to pay the providers out-of-pocket and later received reimbursement in full from the insurance schemes.
Addressing Inequity In Access To Health Care In Urban China

The above characteristics gave rise to a rapid escalation in urban health insurance costs, the main driving force behind reform. With the rise in costs, the financial risk to individual institutions or employers increased; the rate of insurance coverage decreased. The major objectives of the reforms were to control costs, maintain population coverage, and assure access to basic health care.

Free care meant there was no financial responsibility associated with use. FFS offered a strong incentive for providers to render more and costlier care. Comprehensive coverage, not associated with individual contribution, was beyond the financial capacity of employers. There was a low level of risk pooling among individual institutions. These were the chief problems to be addressed in the reform of urban health insurance schemes.

The reform of the GIS and LIS, which began in the early 1980’s, consisted of three distinct phases: Phase One from early 1980’s to 1987; Phase Two from 1988 to 1997; and Phase Three from 1998 to the present. During Phase One, several initiatives were developed by some municipal governments and industrial sectors. Key features of those initiatives were as follows:

♦ Introduction of cost-sharing mechanisms. People covered by two health insurance schemes were required to make a coinsurance payment (say, 10-20% of medical care expenditures) out of pocket. This was aimed at controlling demand for health care and minimizing unnecessary services by consumers least qualified to make such determinations.

♦ Establishment of catastrophic disease insurance arrangements. Industrial sectors, such as mining and railway, in some cities set up catastrophic disease insurance schemes for their employees and retirees to increase risk-pooling capacity and scale. This initiative was mainly developed in LIS.

♦ The use of capitation in the management of GIS. Some municipal governments gave designated hospitals annual capitation payments out of the GIS fund. These hospitals were then expected to provide defined services to beneficiaries. Usually, these hospitals had to share some financial risks if they overspent the funds allocated to them. However, if they spent less than the amount budgeted, they were allowed to keep a portion of the savings for hospital development.

In Phase Two, the reform of urban health insurance schemes was led by the central government in Beijing and experimented in many cities, such as Shenzhen, Hainan, Zhengjiang and Jiujiang. These experiments varied a great deal amongst different cities, but they focused on the areas of: (1) resource pooling through the integration of GIS and LIS and joint ventures between foreign companies and other organizations; (2) cost-sharing between the insurer and the insured by the introduction of deductibles, coinsurance, and a maximum benefit or ceiling for the insurance schemes; and (3) rationalization of health services by developing a list of essential drugs and guidelines for the use of high technology by the health insurance schemes.

Since the beginning of Phase Three, basic health insurance schemes have been established in Chinese cities. Supplemental health insurance schemes have also been developed in some cities. The new health insurance schemes receive contributions from employers and employees. Employers were required to pay a premium equivalent to 6-10% of payroll for their employees; employees were required to pay 2% of their salary/wage. Retirees often received waivers
and did not need to contribute. The monies collected were divided into two parts – individual accounts and social pooling funds. The former covered outpatient services or the first tier of payment; the latter covered inpatient services or served as the last resort of medical care payment. The proportion used to split the monies into two parts was based on age. Cost-sharing mechanisms were used in a variety of health insurance experiments.

Rationalization of health services has never been formally recognized as a reform, but it is underway. A list of essential drugs and guidelines for the use of high medical technology has been developed in many sites for the purpose of health insurance experiments. Drugs outside the list are not covered. The use of high medical technologies may require beneficiaries to satisfy a much higher co-payment.

The impact of health insurance reforms on equity in financing and access to health services has been significant. The integration of GIS and LIS at the city level, together with the participation of private companies and joint ventures in social health insurance schemes, has increased the capacity for risk pooling. Evidence shows that, except for a couple of cities where over 90% of employers enrolled in the schemes, participation rates in a majority of cities were no more than 50% and as low as 20% in some cities. Enterprises with a younger workforce and lower health care costs as well as enterprises, which were unable to pay insurance premiums were less likely to participate in health insurance schemes. Meanwhile, enterprises with an older workforce and many pensioners were more likely to join the schemes because they were able to reduce their medical bills. Therefore, the cross-subsidization of the sick and the healthy and rich and poor organizations through insurance was achieved to a limited extent.

The introduction of individual accounts and a social pooling fund has also had an effect on financing and access to health care. The elderly, particularly with chronic diseases, quickly used up the money in their individual accounts for outpatient services. After that, they may have been eligible to access the social pooling fund, but were required to share the cost of medical care up to 35% (coinsurance). Some studies reported that elderly people felt that the scheme had more advantages for the young and those with higher salary/wages; younger people could accumulate more funds in their individual accounts because they enjoyed good health; elderly people had less opportunity to accumulate funds in their new individual accounts because they had just started paying into them.

Cost-sharing mechanisms to control unnecessary use of health services have been somewhat effective. However, they have also had a negative impact on access to health care, particularly by the poor. The national health service surveys showed that fewer people, especially the poor, visited health facilities and more people bought drugs from pharmacists in 1998 than in 1993. Hence, the quality of care might be compromised if pharmacists or patients did not know how to treat their illnesses.

Several lessons can be learned from the reforms of urban health insurance schemes in China. Developing a basic city-wide health insurance scheme has improved equity in financing health care for beneficiaries. High-income earners now subsidize those on low incomes. The capacity for financial risk pooling has also increased under the new schemes. In addition, the overuse of health services has been controlled by individual accounts. However, people with chronic diseases and low incomes are at a disadvantage in paying for the care they need.

Money-losing enterprises and enterprises with a substantial number of retirees are less likely to afford the financial contributions required by the new schemes. In addition, the new schemes do not cover the
Addressing Inequity In Access To Health Care In Urban China

dependents of employees, such as children and their spouses who are unemployed, as the old LIS and GIS did.

At present, the labour and social security bureau responsible for the design, organization and management of the health insurance schemes has not been adequately staffed to carry out functions, such as auditing, monitoring and evaluation. The main reason is they lack personnel and expertise in health insurance.

Many challenges lie ahead in developing sustainable urban health care systems in China. Many municipalities and cities in poor regions have formidable difficulties in making financial contributions to the new basic health insurance schemes for a number of reasons. Meanwhile, fiscal transfers from rich regions to poor ones has weakened since the economic reforms, although the poor regions still receive financial subsidies from the central government. How to help poor regions develop sustainable urban health insurance schemes remains a challenge to both local governments and the central government.

Health care financing for the urban poor and other vulnerable groups raises great financial and political challenges to the central and local governments in China. What the Chinese government has not done so far is to develop appropriate policies to improve equal access by the urban poor and vulnerable groups to basic health care. Due to the restructuring of industrial sectors and China’s joining the WTO, more workers in many formal industrial sectors will be laid off. The unemployment rate in urban China may rise. While the fiscal status of many municipal governments is poor or will become worse, more urban poor and vulnerable groups need to get government subsidies for health care as well as other social services.

To meet these challenges, the Chinese government has started to address issues related to equity, efficiency and effectiveness in health service delivery by developing a series of health policies. While these new policies intend to improve equity in financing health care, whether or not these policies can be effectively implemented in China remains to be seen.
Addressing Inequity In Access To Health Care In Urban China

Introduction

China has enjoyed impressive and sustained economic growth since economic reform was launched in the late 1970’s. The average income of the Chinese people in 1997 was 14 times that of 1979, a 212% increase in real terms, according to the State Statistics Bureau (SSB) of China (SSB, 1998). The GDP per capita rose from 1,622 Yuan in 1990 to 7,437 Yuan in 2001 (Table 1). Living standards of the majority of the Chinese people have increased significantly over the past two decades. More than 100 million people have moved on to above $1/day and another 130 million to $2/day. However, the social agenda in China is incomplete. Inequity in health and health care remains a major concern. Some health indicators, such as the under-five mortality rate, have remained stagnant since the mid-1980’s (World Bank, 1996). Because of the collapse of rural cooperative medical schemes in most rural areas (Tang, et. al., 1994) and the dismantlement of the Government Insurance Scheme (GIS) and the Labour Insurance Scheme (LIS) in urban areas (Gu and Tang, 1995), inequity in health care in the urban and rural areas has widened (Liu, et. al., 1999). Within both urban and rural areas, there is increased inequity in the financing of and access to health care between the rich and the poor. Inevitably, the ratio of public to private sources of health care financing declined from 1.7% in 1990 to 0.76% in 1997 and to 0.67% in 2001 (Table 1).

Table 1. Selected Socio-Economic and Health Indicators in China (1990-97)

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<tbody>
<tr>
<td>GDP per capita (RMB)</td>
<td>1,622.27</td>
<td>4,828.07</td>
<td>6,024.00</td>
<td>7,437</td>
</tr>
<tr>
<td>Health expenditures per capita (RMB)</td>
<td>75.28</td>
<td>197.77</td>
<td>277.90</td>
<td>403.60</td>
</tr>
<tr>
<td>Health expenditures as % of GDP (%)</td>
<td>4.6</td>
<td>4.1</td>
<td>4.6</td>
<td>5.4</td>
</tr>
<tr>
<td>Ratio of public to private source in health care financing</td>
<td>1.7</td>
<td>0.99</td>
<td>0.76</td>
<td>0.67</td>
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Table 2. Percentage Change in Health Insurance Coverage of Urban Chinese Population (1993 and 1998)

<table>
<thead>
<tr>
<th></th>
<th>GIS/LIS</th>
<th>Commercial Insurance</th>
<th>No Insurance</th>
<th>Others*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>53.5%</td>
<td>0.3%</td>
<td>27.3%</td>
<td>19.0%</td>
</tr>
<tr>
<td>1998</td>
<td>38.9%</td>
<td>3.3%</td>
<td>44.1%</td>
<td>17.4%</td>
</tr>
</tbody>
</table>

Sources: The national health service surveys conducted in 1993 and 1998 by the Centre for Health Statistics and Information, Ministry of Health, Beijing.

*Others include a variety of health plans enjoyed by those living in urban areas (including rural cooperative medical schemes for rural migrants and financial subsidies for dependents of LIS beneficiaries).

Until the early 1990’s, the GIS and LIS covered fully or partially about one-half of China’s urban population. A recent national health service survey showed that the coverage of health insurance declined significantly from 54% of the urban population in 1993 to 39% in 1998 (Gao and Tang, 2000). Table 2 shows the percentage change of health insurance coverage among the urban Chinese population between 1993 and 1998. Not surprisingly, there has been an increase in the proportion of the
Addressing Inequity In Access To Health Care In Urban China

The decrease in urban health insurance coverage can be attributed to four factors. First is the continuous urbanization of the past two decades. In 1978, only 20% of the Chinese population was urban, compared to about 36.1% of the population by the year 2000 (State Statistical Bureau, 2001). Many rural counties, where the percentage of the population covered by the GIS and LIS was low, have been upgraded to urban cities. Second, more adults in urban areas were unemployed in 1998 than in 1993. The vast majority of these people lost work-related benefits, including health insurance, when they lost jobs or were laid off. Third, many enterprises and local governments have experienced financial difficulties in paying for medical care for their employees, undermining the financial viability of the GIS and LIS. Finally, although there are no official figures reported, a significant number of rural emigrants live and work in economically-developed urban areas.

This demographic shift has created a sense of urgency for urban health. Numerous studies and reports, particularly those published internationally, focused on rural health care in the 1980’s and early 1990’s. However, because of the Chinese government’s heightened interest, attention has now turned toward urban settings. Since the late 1980’s, the central and some local governments in China have supported a number of experiments with various health care financing reform experiments in many urban cities to increase efficiency and coverage. Nevertheless, there exists a deficit of data and analysis on how reforms in health insurance schemes have affected access, utilization, and quality of health care among urban populations, particularly the urban poor.

It should be noted that while enhanced equity and access are major objectives of these reforms, policy makers have practical concerns about financing and cost containment. The objective of this paper is to review those attempts to reform urban health insurance schemes in China over the past two decades and to assess their impact on equity in financing of and access to health care. It specifically examines how changes in characteristics of new health insurance schemes have affected equity in terms of insurance coverage, financing, access and utilization.

Research included a review of government policy documents, regulations of various health insurance schemes by various municipal governments, relevant reports and both grey and peer-reviewed literature in China. In addition, a limited number of in-depth interviews were conducted with health policy makers, leading Chinese academics, and government officials responsible for the reform of health insurance schemes. The paper was written based on the analysis and synthesis of all the information collected.

Problems in Urban Health Insurance Schemes Prior to Reform

After the founding of the People’s Republic in 1949, the Chinese government set up two work-related health insurance schemes in urban areas: the Government Insurance Scheme (GIS) and the Labour Insurance Scheme (LIS).

The GIS originated in the old liberalization zone controlled by the Communist Party of China in the mid-1930’s. It was officially...
established after the State Council issued a document entitled, “Implementation Method of GIS for State Employees” in August 1952. Its beneficiaries included civil servants, university students, and retired veterans. Dependents of these beneficiaries were never covered by GIS although some places allowed individual institutions to use the budget for employee benefits to subsidize the costs of medical care for direct dependents. Financing for the GIS came from the finance department of central or local governments out of their annual government budget. A fixed amount of money per person was allocated by the finance department to the GIS management office. That office was often located in the health bureau/department of the local governments that managed the fund. Since the late 1970’s, the allocated GIS funds did not fully cover employees’ medical costs (Gu and Tang, 1995). Therefore, it was not uncommon to see institutions use their own revenues to supplement the costs of medical care for their employees.

The LIS was formally established in 1951 when the State Council of the Chinese government issued, “Regulations for Labour Insurance of People’s Republic of China.” Its beneficiaries included employees working at state-owned enterprises and their direct dependents. The LIS provided full coverage of medical costs for employees and partial coverage for their dependents. The government required collective-owned enterprises to implement the same policies related to LIS as state-owned enterprises. LIS also covered medical care and other services, such as maternal leave benefits. Funding for the LIS came from the benefit/welfare budget of each enterprise. On average, before the early 1990’s, expenditures for the LIS represented 11-14% of gross wages/salaries to the enterprises.

The gravity of the financing and management problems of the GIS and LIS are nothing less than alarming. While the number of beneficiaries covered by the two schemes rose from 92 million in 1978 to 153 million in 1997, the total amount of GIS and LIS expenditure increased from 3.16 billion Chinese Yuan to 77.37 billion Chinese Yuan over the same period (Cai, 2001). After accounting for inflation, the escalation of medical care costs for GIS and LIS over that twenty-year period is striking. Medical care accounted for 9.1% of wage/salary costs in 1997, much higher than the 5.8% figure in 1978. Not surprisingly, both governments and enterprises suffered formidable difficulties paying these medical bills.

It became apparent that the government and many enterprises could no longer afford to fund the GIS and LIS as they once did. A major problem was the lack of an appropriate mechanism for financing GIS and LIS. Although the central government offered guidelines to the local governments and enterprises on the allocation of financial resources for the GIS and LIS, the implementation of these guidelines was often ineffective. This was due to a decentralized fiscal system and financial difficulties faced by many institutions. In 1996, for example, GIS expenditures clearly demonstrated the degree of seriousness of these financing constraints. Total GIS expenditures in that year were 16.43 billion Chinese Yuan. However, central and local governments allocated about 11.02 billion or only 67% of total expenditures. Because of directives from the central government, public hospitals in China used their revenues (3.18 billion Chinese Yuan) to pay part of GIS expenditures on behalf of the central or local governments; they accounted for 19.1% of total GIS expenditures in 1996. Meanwhile, GIS management offices still owed 753 million Chinese Yuan (4.6% of total GIS expenditures) to their designated hospitals. The shortfall was covered by public institutions within the GIS and their employees via co-payments.

What happened? First, the regulations of GIS and LIS required central and local governments and enterprises to pay almost the entire medical care costs incurred by
their employees. They acted as “Third Party Payers,” but they did not have any capacity for monitoring and supervising the provision of services, nor did they have the means to influence the behaviour of service providers. Providers benefited significantly from fee-for-service payments; there was no mechanism for evaluating whether the services and procedures offered were appropriate or necessary, let alone cost effective. For example, the price structure of pharmaceuticals allowed for markups of 15% at both the wholesale and retail levels. Profits were generated from prescription drugs and the use of more expensive drugs. As a result, 52% of health spending in the early 1990’s was for prescription drugs. Despite excessive and superfluous services, many of the urban population, particularly those working in money-losing enterprises and those not covered by any health insurance, were not able to access even the most basic health care. It was a case of feast or famine.

Another problem was that neither the GIS nor the LIS had a capacity for risk-sharing. Each institution or enterprise was responsible for its own beneficiaries. There was no financial pooling or risk sharing between the institutions within the GIS and between the enterprises within the LIS. Therefore, a catastrophic illness by a couple of employees could bankrupt the health plan of a small enterprise. By functioning as independent entities, enterprises lost valuable cost-savings opportunities, such as collective bargaining, economy of scale and purchasing power. While institutions and enterprises with sound financing could provide their beneficiaries with good medical care packages, those with poor fiscal status or with a substantial number of retirees to take care of may have provided limited coverage.

It was apparent to the central and local governments that the GIS and LIS needed reform. Since then, both local and central governments, acting either in concert or separately, have tried a variety of experimental reforms. All tried to transform the two crippled insurance schemes into more equitable, affordable and sustainable ventures.

Experience with Reforming GIS and LIS

GIS and LIS reforms, which began in the early 1980’s, consisted of three distinct phases:

- Phase One from early 1980’s to 1987;
- Phase Two from 1988 to 1997; and
- Phase Three from 1998 to the present.

During Phase One, the GIS and LIS reforms can best be described as local initiatives. Several local municipal governments and enterprises developed initiatives to tackle rapidly increasing medical costs, and to increase the risk-pooling capacity and scope of the GIS and LIS. These initiatives included the following features:

- Introduction of cost sharing: People covered by the two health insurance schemes were required to pay a coinsurance (say, 10-20%, of medical care expenditures) out-of-pocket. This was aimed at controlling the demand for health care and minimizing unnecessary services by consumers least qualified to make such determinations.

- Establishment of catastrophic disease insurance arrangements: Industrial sectors (e.g., mining and railway) in some cities set up catastrophic disease insurance schemes for their employees and retirees to increase risk pooling. This initiative was mainly developed in the LIS.
The use of capitation in the management of GIS: Some municipal governments gave designated hospitals annual capitation payments out of the GIS fund. In turn, these hospitals were expected to provide defined services to beneficiaries. Usually, these hospitals had to share some financial risk if they overspent the funds allocated to them. However, if they spent less than the amount budgeted, they were allowed to keep a portion of the savings for hospital development.

It is difficult to assess the reforms undertaken during this period. There was almost no scientific research done in this area and health economics was new prior to the late 1980’s. The first two approaches of the three described previously concentrated on the demand side of services. The main actions taken were the introduction of regressive co-payments. The last one tackled problems associated with supply-side behaviours. As a whole, few reforms attempted to influence the behaviour of service providers. In addition, this uneven approach may have reduced the demand for services in general rather than those that were unnecessary. Cost-recovery mechanisms, such as co-payments\(^2\), can also reduce access to non-acute/preventive care. This leads to an initial drop in costs which is not necessarily cost-effective over the long term.

Phase Two began in 1988 when the central government established a group to guide the reform of urban employee health insurance schemes. This group was headed by the Ministry of Health, but it also involved nine ministries, including the ministries of finance, personnel, and labour, among others. A draft document entitled, “Considerations on the Reform of the Employee Health Insurance System,” was issued in July 1988. This document set out the direction for reforming the GIS and LIS. An experimental reform of the GIS and LIS commenced in the four cities of Dandong, Siping, Huangshi, and Zhuzhou in early 1989.

The main purpose of these experiments was to establish city-wide health insurance systems and introduce cost controls. Unfortunately, the systems in the four cities did not develop as expected because of a lack of interest on the part of local governments and fiscal difficulties facing these cities. Only Dandong completed the design of the health insurance scheme. However, Dandong was unable to implement its plan\(^3\). A few years later, the Hainan Provincial Government and Shenzhen Municipal Governments tried to reform the GIS and LIS under the auspices of the central government.

In 1992, the leading group responsible for the reform of the GIS and LIS was upgraded. It was directed by one State Councillor and under the direct leadership of the State Council. Its main purpose during Phase Two was to guide the reform of the GIS and LIS in two demonstration cities (Zhengjiang and Jiujiang), and later expanded to 57 cities. A brief description of an urban health insurance reform experiment implemented in Zhengjiang and Jiujiang during Phase Two appears below. In fact, in the early 1990’s, there were a number of urban health insurance reform experiments initiated in other cities and provinces, such as Hainan, Shenzhen and Shanghai, with the support of the central government. However, the experiment in Zhengjiang and Jiujiang has played the most important role in shaping new basic health insurance schemes in urban China during Phase Three.

\(^2\) The term “co-payment” indicates amounts paid by the insurance beneficiary as a result of coinsurance and deductibles.

\(^3\) Personal communication between Shenglan Tang and Renhua Cai of the Ministry of Health (MOH) China in 1998.
Experiments in Zhongjiang and Jiujiang

In 1994, a demonstration health insurance reform experiment began in the Zhongjiang City of Jiangsu Province and Jiujiang City of Jiangxi Province under the auspices of the State Council. These two cities, each of which has about 2.5 million inhabitants, set out to develop a new model of urban health insurance. Both cities required that every institution which had GIS and LIS should participate.

Newly-established health insurance management centers collected insurance premiums from the government agencies, public institutions, and enterprises, then allocated these funds to individual accounts and to a social pooling fund. A percentage of these funds allocated to individual accounts from employers’ contributions was based on the age of beneficiaries. Financial contributions from employees’ salaries usually went to their own individual accounts. Three tiers of payment were developed using individual accounts and a social pooling fund (Box 1).

Box 1. Three Tiers of Payment for Medical Care in Zhongjiang and Jiujiang’s Health Insurance Experiments

The first tier: All individuals used their own individual accounts to pay for medical care. The amount deposited into their individual accounts depended on their wage/salary and age. Approximately 5-7% of their wage/salary was deposited periodically into their individual accounts; the amount varied according to age.

The second tier: Once the insured had used up the funds in his/her individual account, medical care was paid out of pocket until the payments reached 5% of his/her annual income. Then the social pooling fund was accessed to cover the cost of his/her medical care.

The third tier: After paying 5% of his/her annual wage/salary out-of-pocket for medical care, the insured was eligible to use the social pooling fund to pay for medical care. However, the new health insurance schemes in both cities required a deductible and coinsurance payment of up to 20% of medical care expenditures.

The introduction of individual accounts and co-payment mechanisms was expected to encourage moderation in the demand for medical care in the two cities. In addition, the new health insurance schemes also developed an essential drug list consisting of about 1,400 Western pharmaceutical products and about 500 manufactured Chinese medicines. Only the drugs on the list were covered by the schemes in the two cities.

However, due to overspending of the social pooling fund in Zhongjiang, in 1999 the health insurance management committee decided that the fund from the individual accounts could only be used to pay for outpatient services; the social pooling fund was used to pay for inpatient services and special outpatient services for a limited number of chronic diseases (Wang and Wang, 1999). Such an approach has implications for equity in financing of and access to health care, issues that will be discussed later.

After more than a year of experimentation in the two cities, the State Council decided to expand the experiment to 57 cities in 1996, using the same principles, but allowing these cities to modify the model according to their local situations. About 40 of these cities actually reformed their GIS and LIS. Among those cities undertaking reform, some cities
Addressing Inequity In Access To Health Care In Urban China

Drawing from lessons and experiences derived from the experiments performed during Phases One and Two, in 1998 the new ministry advocated a new plan for reform over a period of 3-5 years. Overall, the structures for the new health insurance schemes and financial frameworks developed in Phase Two were maintained in Phase Three, with some modifications. The scheme aimed at providing: (1) a low level of health benefit (low depth); (2) a high level of population coverage (width); and (3) variation, which means that differing levels and types of health insurance (from basic health care coverage to sophisticated and supplemental insurance) could be developed. These plans were incorporated into an official document entitled “Decision of the State Council on establishing urban employee basic health insurance scheme,” issued by the State Council in 1998. And finally, a medical financial assistance program was also advocated to help the urban poor receive basic health care. By offering these options of health care financing, the government expected to meet the differing constituents’ health care needs and expectations.

Phase Three began with the arrival of a new government led by Premier Zhu Rongji in 1997. The new government was restructured in a manner consistent with the new socio-economic order in China. One significant change related to urban health insurance was that the Ministry of Labour and Social Security (MOLSS) was established, building upon the old Ministry of Labour. MOLSS was mandated by the State Council to take charge of urban health insurance and its reform. The Department of Medical Insurance of the MOLSS was created to oversee the reform of the GIS and LIS.

While Zhengjiang and Jiujiang were experimenting with new health insurance schemes under the leadership of the State Council, many other cities in China launched reforms of the GIS and LIS. It is neither possible nor practical to describe all of these reforms in this paper. However, experiments worth mentioning are ones in Shanghai and Beijing. In order to increase the capacity and scope of social pooling, the Shanghai Municipal Government developed the “Hospital Insurance Scheme” in 1996, which was mainly funded by payments from employers (4.5% of employee’s wage/salary). In 1997, the contribution from employers increased from 4.5% to 6.5%. In 1995, the Beijing Municipal Government introduced “Serious Diseases Insurance.” All enterprises were asked to contribute 6% of the average city employee’s income to the fund for each of their employees and retirees. Employees contributed 1% of their own wage/salary into the fund which was mainly used to cover inpatient services.

Basic Health Insurance Schemes. The basic health insurance schemes being developed were designed to be less expensive and covered a larger percentage of the population. Careful consideration was given to program affordability for local governments, enterprises and individuals. Therefore, employers were asked to contribute 6%, instead of 10-11% of employees’ wage/salary for health insurance, as in Zhengjiang and Jiujiang and Shanghai, while employees were asked to pay 2%. The low contribution by employers was to enable the vast majority of enterprises to participate in basic health insurance schemes. In addition, private companies/firms and enterprises, joint ventures and the self-employed were also required to participate in the schemes. Table 3 compares the main characteristics of the old GIS and LIS with new basic health insurance schemes established in different

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4 Quoted from the document entitled, “Regulations on Beijing’s Basic Health Insurance Scheme,” issued by the Beijing Municipal Government in 1995.
Addressing Inequity In Access To Health Care In Urban China

cities/municipalities in China. It describes key changes in insurance coverage, financing, risk pooling and cost sharing mechanisms, as well as use of health services. Some of these changes were intended to make health care more equitable.

In June 1999, to help municipal/city governments design an appropriate health insurance scheme, the MOLSS, together with the State Development and Planning Committee, Ministry of Finance, Ministry of Health, and State Chinese Medicine Management Bureau, issued a proposal on the management of diagnostic and treatment services for a basic health insurance scheme to every province and municipality. This proposal set out rules and guidelines regarding health services or health benefits not covered by the basic health insurance scheme and the kinds of services requiring a co-payment. Using these rules and guidelines, each province and municipality was to develop a scope and list of health services to be fully or partially covered by the new schemes. An essential drug list was developed at the same time (State Council, 1998).

The State Council gave each province and municipality autonomy concerning the allocation of health insurance funds collected into individual accounts and social pooling funds; deductibles, ceilings and percentage of coinsurance payments. The recommended ceiling was roughly four times the annual income of an average city employee. On the whole, the State Council sought to ensure that each province and municipality developed a basic health insurance scheme appropriate and acceptable to its local socio-economic development and political environment.

<table>
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<tr>
<th>Table 3. A Comparison of Characteristics of the Old GIS and LIS with the New Basic Health Insurance Schemes in Urban China</th>
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</thead>
<tbody>
<tr>
<td><strong>Old GIS and LIS</strong></td>
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<tr>
<td>Insurance coverage</td>
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<td>Financing</td>
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<td>Risk pooling</td>
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<td>Cost sharing</td>
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<td>Use of health services</td>
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Source: Compiled by the Authors.
Table 4. Policies and Regulations on the Use of Funds

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<th>Individual Account Fund</th>
<th>Social Pooling Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient and emergency</td>
<td>Eligible for use of the fund</td>
<td>Eligible for use of the fund in some cities under certain</td>
</tr>
<tr>
<td>services</td>
<td></td>
<td>conditions</td>
</tr>
<tr>
<td>Special treatment at</td>
<td>Eligible for use of the fund</td>
<td>Eligible for use of the fund in some cities under certain</td>
</tr>
<tr>
<td>outpatient department</td>
<td></td>
<td>conditions</td>
</tr>
<tr>
<td>Inpatient services</td>
<td>Eligible for use of the fund in some cities</td>
<td>Eligible for the use of the fund, but subject to</td>
</tr>
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<td></td>
<td></td>
<td>deductible, coinsurance and ceiling arrangements</td>
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Source: Compiled by the Authors.

The allocation of the health insurance fund into individual accounts and the social pooling fund was straightforward, using methods tested in the Zhengjiang and Jiujiang experiment. A common rule is that the individual contribution goes to the individual account, while the employer’s contribution is split between the individual account and the social pooling fund based on age groups. Recently, however, the use of individual accounts and the social pooling fund has become more complicated (Table 4). Each municipal government that established a basic health insurance scheme has developed regulations on the use of individual accounts and social pooling funds.

Supplemental Health Insurance Schemes and Medical Financial Assistance Schemes

Many cities, especially those with relatively developed economies, have started supplemental health insurance schemes; the goal is to protect their employees and retirees from paying for services not covered by basic health insurance schemes. This is in line with the central government’s policy of establishing a multi-layer health insurance system in urban China.

However, progress in developing medical financial assistance schemes for the urban poor has been very slow. Only the Shanghai and Guangdong governments have developed schemes to provide the urban poor with limited health care benefits. Benefit arrangements for the urban poor provided by the Shanghai medical financial assistance scheme are described in Box 2. Those eligible for medical financial assistance apply first to the social assistance unit of the local street management committees in urban areas or to township governments in the rural areas. Their applications are reviewed, those that qualify are forwarded to the district/county civil affairs bureau. Funding for medical financial assistance in Guangdong and Shanghai comes mainly from municipal governments, although in 2000 Shanghai began to use the so-called “welfare lottery” and other means to generate funds to support the scheme.

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5 Medical financial assistance schemes do not include mutual security funds which are organized and financed by employers, employees and trade unions. The purpose of the fund is to help employees pay part of the expenditures they incur from catastrophic illnesses.
Box 2. Policies and Regulations Regarding Benefit Arrangements for the Urban Poor in Shanghai

1. Those who fully rely on the financial support of the civil affairs bureau receive reimbursement for the cost of outpatient, emergency and inpatient services.

2. Those whose families receive income support from the municipal government receive reimbursement up to 25% of the cost of out-of-pocket inpatient services in excess of 1,000 Chinese Yuan.


Main Findings from the Reform of Urban Health Insurance

Most of the findings presented in this section derive from health insurance experiments conducted during Phase Two. Few studies have been conducted and not many papers/reports are available to review the new basic health insurance schemes implemented since 2000.

One important innovation most of the health insurance experiments have made over the past decade is that the formerly separate GIS and LIS have combined into a single health insurance scheme. Usually, a health insurance fund center or bureau has been established at the municipal/city level to collect, manage and monitor the funds. This has significantly increased the extent and capacity of risk sharing.

Different rules have been developed regarding the use of funds deposited into individual accounts and social pooling funds. However, there are two main approaches: (1) individual accounts can only be used to pay for outpatient services and drugs provided from designated health facilities and pharmacists; the social pooling fund can only be used to pay for inpatient services; and (2) individual accounts can be used to pay for outpatient services and drugs as well as deductible payments required for inpatient services, etc. The social pooling fund can only be used after the individual account has been exhausted and the insured has paid a certain amount of money out-of-pocket for health services. A number of cities, including Hainan and Nantong, are using the first approach. Cities like Shanghai, Shenzhen, are using the second approach. However, there is a trend that more cities are adopting a mixed approach to achieve cost containment and equitable access to health care.

The central government expected that all enterprises and public institutions which had the GIS and LIS would participate in the new basic health insurance schemes. However, the participation rate in some health insurance experiments was as low as 20-30%. According to one study conducted in Nantong City, Jiangsu Province, about one-quarter of the eligible public institutions and enterprises participated in the health insurance experiment in 1998. Not surprisingly, while 92% of the cities at the prefecture level or higher had action plans for implementing basic health insurance reform, only 81% implemented the new scheme by the end of year 2000. By mid-2001, 43 million employees and affiliated retirees were covered in urban China.

Before 1998, the participation of eligible institutions and enterprises in different health insurance schemes piloted in various cities differed a great deal. In the Zhengjiang experiment, about 95% of eligible institutions and enterprises participated in the health insurance scheme, covering 95% of the eligible population (Wang, 1998). The hospital insurance scheme introduced in Shenzhen tried to encourage these enterprises to buy hospital

6 Personal communication between Shenglan Tang and Xianjun Xiong.
insurance for their contracted workers who were unlikely to be permanent residents of the city. This scheme has been popular. The number of people covered by hospital insurance in Shenzhen rose to 83% of the population in 1996, from 1.38 million in 1994 to 2.53 million (Ou, 2000).

However, the proportion of the population covered by both the new health insurance schemes and the traditional GIS and LIS and commercial health insurance schemes in many cities increased slightly. Based on national health service surveys, in Haikou, the capital city of Hainan Province, the percentage of the population having any health insurance declined from 45% in 1993 to 31% in 1998; the percentage of the population paying out of pocket for health services increased from 54% to 68% during the same period. The main reason was that not all the enterprises and public institutions participated in the new health insurance schemes; some of them stopped GIS and LIS.

In general, almost all institutions covered by the former GIS participated in the new health insurance schemes, mainly because the municipal governments use the government’s budget to pay for health insurance premiums. However, the participation of enterprises, joint ventures and private firms in the new health insurance schemes varied. A study conducted in Nantong City, Jiangsu Province showed the following results (Tang, et. al., 2001).

- Money-losing enterprises were unable to make financial contributions (usually 8-10% of employees’ salaries/wages) to the health insurance fund and chose not to participate in the scheme. Management thought that they could use fewer financial resources to provide better health services to their employees and retirees.

Those working at money-losing enterprises are rarely covered by the new health insurance schemes. In theory, they were still covered by the traditional LIS. These employees were less likely to get adequate access to health care. A study in Zibo City, Shandong Province and Nantong City, Jiangsu Province, indicated that many workers in the money-losing enterprises were unable to get reimbursed in a timely manner for the expenses they incurred (Yan, et. al., 2001). This finding is supported by a study conducted in Shanghai (Liang, et. al., 2001). There were also reports that some non-profitable enterprises gave their employees a fixed amount of money (10–50 Yuan) per month as a medical care allowance, thus relinquishing any further responsibility. There has not been any concrete policy developed by the central or local governments to tackle the financial difficulties facing these money-losing enterprises in paying for health services.

Weak state capacity has also enabled many enterprises to resist participation in these supposedly-compulsory health insurance schemes at the local level. Duckett (2001) identified three main reasons for weak capacity at the state level. First, the system of bureaucratic ranking made it difficult for local governments to force state enterprises to participate if they are ranked at the same or a higher level. Second, the institutions responsible for health insurance were unable to audit enterprises, which means that they often did not have adequate information on the economic situation of these enterprises. Third, there was no legislation requiring enterprises to participate. Therefore, the labour and social security bureaus at the municipal/city level were unable to enforce the schemes.
To encourage profitable enterprises to participate in the new health insurance schemes, some cities decided that financial contributions made by all employers to the health insurance scheme would be based on a fixed percentage of average salary/wage of city employees, not on salary/wage they actually pay their employees. This method has made profitable enterprises happier and more willing to join the new scheme. Nevertheless, those enterprises which pay their employees a lower salary/wage have had to make a relatively greater financial contribution to the scheme than originally intended.

People ask why the central or local governments in China have not yet made basic health insurance schemes compulsory at the national or municipal level. Some of the authors of this paper had a chance to discuss this question with a number of senior policy makers at the national and local levels. Among the difficulties in adopting legislation to make the schemes compulsory is that neither the central government nor the local governments can help a substantial number of money-losing state-owned enterprises pay health insurance premiums for their employees/retirees to participate in the new basic health insurance schemes. Once the schemes were compulsory, every enterprise and institution had to participate. Many money-losing state-owned enterprises struggled to find the money to pay salary/wage to their employees. They relied on bank loans to meet payroll. It was therefore impossible for them to find more money to contribute to basic health insurance schemes. In the meantime, the fiscal status of some municipal governments was not good enough to help these enterprises. Hence, if legislation for compulsory basic health insurance scheme passes at the local level, enforcement is doubtful.

The old LIS was responsible for paying part of medical care expenditures for their employees’ direct dependents. Likewise, the old GIS allowed public institutions and government agencies to use the budget earmarked for employees’ welfare to reimburse part of the medical care expenditures for direct dependents of their employees. Neither the health insurance experiments nor the new basic health insurance schemes implemented in many cities since 2000 have dealt with dependents. The regulations for these experiments and the new basic health insurance schemes usually said benefits for employees’ direct dependents should be maintained, based on the old LIS. So far there has been no evidence to estimate what percentage of employers are still providing health care benefits to the direct dependents of their employees, as they did before the 1990’s. In China, dependents covered by the LIS were said to enjoy “Half LIS.” According to the results from the national health service surveys, the urban population covered by “Half LIS” declined from 12.9% in 1993 to 5.8% in 1998. This implies that many enterprises no longer provide any medical care benefits to the dependents of their employees.

In summary, the new health insurance schemes, which have been or are being developed in most cities in China, are adopting a similar model in terms of financial contributions, population covered, health benefit arrangements, and the use of insurance funds. Among these cities, there are some variations in the level of financial contributions by employers, the use of funds from individual accounts and the social pooling fund to pay for outpatient and inpatient services as well as emergency care. The main financial contributors are local governments, enterprises, and individual employees. Local government as employers of government agencies and public sector institutions make their payments to the health insurance funds. However, there are usually no other funds from local governments to support money-losing enterprises and the urban poor.

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Addressing Inequity In Access To Health Care In Urban China

Although there was considerable effort by the Chinese government to establish a citywide social health insurance scheme, the vested interests of enterprises and beneficiaries of the old systems prevented many local governments from implementing these schemes.

**Impact on Equity in Financing of and Access to Health Care**

There has been scant literature and research reports assessing the impact of these health insurance schemes on equity in financing and access to health care. Based on limited evidence, this section examines the impact of these reforms on health insurance schemes in urban China regarding insurance coverage, financing and cost sharing, and access to use of health services from an equity perspective.

**Impact on Population Coverage**

All these new health insurance schemes implemented in several hundred cities in China targeted mainly employees and retirees from government agencies, public sector institutions, state-owned and collective-owned enterprises/companies, joint ventures, and private firms. They excluded children and adults who were unemployed. There was no policy about who was going to make financial contributions to the new basic health insurance schemes for this segment of the population. About 370 million people live in urban areas. Of them, around 178 million are employed and are supposed to be covered by the new basic health insurance schemes. The remaining 192 million of the urban population were not covered by the basic health insurance system. About 5.64 million of them have families who in theory are entitled to claim income support (Hu and Chen, 2001). Most of them are less likely to be covered by any health insurance scheme.

Often, illness causes poverty and keeps people in a state of poverty. A survey, based on a random sample of 1,400 households claiming income support from Shanghai Municipal Government in three Shanghai districts, found 49.5% of these households had no family members covered by the new scheme. Over one-half of these households claimed that poor health and expensive medical care bills were the most important factors which contributed to their living in poverty (Liang, et. al., 2001). In-depth interviews with 65 people from four vulnerable groups in Nantong City and Zibo City (the elderly, laid off/unemployed workers, rural immigrants, and the urban poor receiving a financial subsidy) found only some of the elderly people who retired from the former sector were covered by health insurance; a vast majority of those interviewed did not have any health insurance (Yan, et. al., 2001). Nevertheless, the most vulnerable have the greatest need for health services. Among those interviewed, about two-thirds had at least one chronic disease and one-half had at least two. Without adequate health insurance, these people often had to either give up medical treatment or borrow money from their relatives and friends to pay their medical bills. As Liang and his associates (2001) concluded, there were “One high and four lows” related to the urban poor and their access to health care. “One high” means a high need of health services, and “four lows” indicates: (1) low coverage of health insurance; (2) low use of health services; (3) low expenditures for health services; and (4) low effectiveness in treating their disease.

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8 Some cities like Shanghai set up “inpatient care insurance schemes,” covering children between four years of age and 18 years of age (Hu and Chen, 2001).

9 In 1998, about 13% of urban residents over 15 years of age had no jobs; 8% of them were laid off in the reform of state-owned enterprises, according to a recent survey (Gao, et. al., 2001).

10 Medical treatment was incomplete for financial reasons.
Addressing Inequity In Access To Health Care In Urban China

Impact on Financing and Cost Sharing

As previously discussed, the basic health insurance schemes with individual accounts and social pooling funds received contributions from employers and employees. The higher one’s salary/wage, the greater the contribution was made into his/her individual account. A study showed that many, especially the elderly, who were more likely to have chronic diseases, quickly used up the money deposited in their individual accounts. Once the money was exhausted, out-of-pocket payments were required for all outpatient and emergency services, with few exceptions. In-depth interviews with those of different backgrounds in Nantong City and Zibo City revealed the following (Yan, et. al., 2001; Qian and Tolhurst, 2001):

♦ Many complained that funds allocated to individual accounts were often inadequate to pay for prescriptions they took regularly.

♦ Several elderly people felt that the system offered an unfair advantage to the young and those with higher salaries/wages; younger people could accumulate more funds in their accounts because they enjoyed good health. By comparison, the elderly had only just started to contribute to their accounts and had less opportunity to accumulate funds.

♦ Many thought that differences in salaries/wages meant that financial contributions by employers on behalf of each worker were unequal because they were calculated as a percentage of salaries/wages.

A majority of cities allowed the insured to use the social pooling fund to partially cover the cost of outpatient services for treating a limited number of serious diseases, such as ambulatory dialytic therapy for uremia patients, anti-rejection therapy for patients with organ transplants, and chemotherapy for cancer patients. To some extent, these funds helped those with serious chronic diseases bear a smaller financial burden. Nevertheless, the coinsurance required (usually up to 20%) still posed an obstacle to access.

Applications for using social pooling funds were complicated and varied. As previously discussed, the fund was used to cover the expenditures of inpatient services. However, some cities allowed patients with chronic diseases to use the fund to partially cover outpatient services. A deductible, which was equivalent to the average monthly salaries/wages of employees, was usually required for those hospitalized. Afterward, individual inpatients had to satisfy a coinsurance payment (up to 30-35% of the cost) during hospitalization. The ceiling was usually set at four times the average annual salary/wage of employees in these cities. Studies conducted in Nantong and Shanghai found that some people, particularly the poor, had financial difficulties satisfying the deductible and coinsurance payments (Chen, et. al., 2001). Liang and his associates (2001) attributed the deductible as the first barrier to the poor in seeking hospital care. Interviews with patients, the poor and health workers indicated that co-payments made many inpatients discharge themselves from hospitals much earlier than they were supposed to because they were unable to afford the co-payment.

Some municipal governments, such as Shanghai and Guangzhou, have set up medical financial assistance schemes for the urban poor. Unfortunately, the level of financial support to these urban poor is very low. For example, the scheme implemented in Shanghai said that eligible people can be reimbursed 25% of inpatient expenditures paid to hospitals from the scheme. There are two problems here. First, before patients are admitted to hospital wards, they are required to pay a deposit to the hospital in most
Addressing Inequity In Access To Health Care In Urban China

cases. Those eligible for medical financial assistance often do not have enough cash to pay the deposit. Second, the percentage of reimbursement (25%) provided by the scheme is not sufficient to provide meaningful financial assistance.

Impact on Access to and Use of Health Services

Many socio-economic factors can affect the use of health services. Among them are income, health insurance, gender, education and culture. The national household health interview surveys conducted in 1993 and 1998 showed that people in all income groups in urban China experienced a reduction in the use of inpatient services from 1993 to 1998. However, those in the lower income groups appeared to suffer the most. A positive relationship between income and utilization of inpatient services, which did not exist in 1993, developed in 1998. Furthermore, the average health expenditure per capita among 20% of the poorest urban population was less than one-half of that among 20% of the richest urban population in 1998 (Gao, et. al., 2001). Gao and Tang (2000) identified two main reasons for these changes: (1) a rapid rise in medical care costs, and (2) a decrease in insurance coverage. Gong and his associates (2001) found in their study conducted in Nantong City, Jiangsu Province and Zibo City, Shandong Province that those covered by health insurance used more health services than those not covered by any health insurance.

In addition, the introduction of individual accounts by the new basic health insurance schemes also affected the type and amount of services used by the insured. Fewer people, including those covered by basic health insurance schemes, visited health facilities; more people bought drugs from pharmacists (Gao, et. al., 2001). That was mainly because people wanted to spend less money out-of-pocket or save money in their individual accounts. However, quality of care may ultimately be compromised since pharmacists or patients themselves may not know how to treat their illnesses. Increasingly, the level and type of service provided is determined not by medical need, but ability to pay from regressive individual accounts.

In their evaluation of the Zhengjiang health insurance experiment, Gordon Liu and his colleagues (2002) found that the experiment had a positive impact on improving access and equality of care. For instance, their analysis of data collected from a multi-year survey indicated an increased likelihood of seeking care among the general population after reforms. Meanwhile, among those who accessed care, the quantity of care declined. They concluded that more people obtained care of various types, indicating improved access among the general population after reforms, utilization decreased, suggesting a more equal distribution of care among the general population.

Although there have not been many studies assessing access of the urban poor to basic health care, both central and local governments understand the seriousness of this problem. That is why Guangdong and Shanghai developed medical financial assistance schemes to help the urban poor get access to health care. However, authorities in both places did not make a great effort to publicize the schemes; thus, implementation of the schemes was ineffective. A survey of 1,200 poor households in Shanghai showed that only 7.4% of the households were aware the scheme existed. Less than 10 percent of eligible poor households received a financial subsidy from the scheme.

Many new mechanisms introduced in the new health insurance schemes have had an impact on cost containment and economic efficiency. The traditional GIS and LIS provided virtually free health services to their beneficiaries; they had no incentive to economize their use of health services. Since the implementation of the individual accounts and social pooling fund and the
adoption of deductible and coinsurance arrangements, the insured now have a sense to ration their use of health services. In addition, different payment methods give service providers different incentives and thus have a different impact on efficiency of services rendered (Barnum, et. al., 1995). Hospitals and other health facilities in China have swiftly responded to new provider payment methods introduced in the reform of urban health insurance schemes. For example, in cities where a fixed payment for outpatient visits was used by the service purchasers to pay service providers, patients were often asked to come back to see service providers shortly after their first visit. As a result, patients were sometimes given only two to three days’ worth of drugs to ensure an additional visit. Those patients who did not return to see doctors for various reasons were unable to get their diseases treated properly. As a result, the average number of outpatient visits per person rose dramatically, but the quality of service may have been compromised. In addition, according to some service purchasing arrangements, providers could not provide patients with some diagnostic tests or drugs unless the patients were willing to pay for them out-of-pocket. Some service users reported that this affected the quality of the service they sought. Furthermore, a ceiling set up for each hospital admission by one municipal health insurance management center made doctors discharge their inpatients earlier than they did normally (Tang, et. al., 2001). However, competition among providers, brought out by the new health insurance schemes in some cities, did have an impact on the improvement of service quality and efficiency. On the whole, many measures implemented have positively and negatively affected the quality of various services.

Development of Sustainable Urban Health Care Systems: What Lessons have been Learned and What Challenges Lie Ahead

In the final section of this paper, we will discuss what lessons were learned from the reform of urban health insurance schemes and what challenges lie ahead in developing sustainable urban health care systems in China.

Lessons Learned

A vast majority of Chinese cities and municipalities have started to develop new basic health insurance schemes under the guidance of the Ministry of Labour and Social Security as a result of experimental reforms in many cities.

Equity in financing of health care among the beneficiaries of the new schemes has been significantly improved. High-income earners are now subsidizing those on low incomes via social pooling funds at the municipal and city level instead of at the institutional level as in the old GIS and LIS. Capacity for financial risk sharing has also increased under the new schemes. However, the elderly and low-income earners, particularly those with chronic diseases, may be at a disadvantage because of individual accounts. On a positive note, some cities and municipalities have allowed the use of social pooling funds to pay for some outpatient services associated with common chronic diseases. Another positive of individual accounts is that overuse of health services is rare; more and more people have rationed their use of services.

Money-losing enterprises and enterprises with a substantial number of retirees are less likely to afford the financial contributions
Addressing Inequity In Access To Health Care In Urban China

required by the new health insurance schemes, although they are often keen to be part of them. A majority of these enterprises have left the new schemes. Unless local municipal governments or the central government develops special policies to facilitate their participation, it will be difficult for them to find financial resources to contribute to these new schemes.

The new basic health insurance schemes cover only employees and retirees. No special schemes are being developed to cover the dependents of employees such as children and their spouses who are unemployed. Dependents used to be partially covered by the old LIS and probably the old GIS. The population covered by the new health insurance schemes may have declined. This should have been expected by health policy-makers responsible for the reform of health insurance in China; and they could have addressed the problem better.

Based on an analysis of available data, to ensure access to health care by the vast majority of the urban population, other types of health insurance schemes and plans need to be developed with the support of the government. The development of supplemental health insurance schemes should speed up in order for financially-sound institutions to join and provide extra protection to their employees and retirees. Medical financial assistance schemes should be established in all urban areas to ensure the urban poor and vulnerable groups gain access to basic health care. Other health insurance schemes, for example, a plan to cover children, should also be developed. The new basic health insurance schemes are supposed to cover one-quarter of the urban population at best.

Finally, the labour and social security bureaus of municipal governments have been asked to design, organize and manage the new health insurance schemes. However, most of the civil servants responsible for health insurance do not have the training to carry out their duties. Hence, institutions do not have the ability to audit and monitor both enterprises; some of them would like to release information on their employees’ salary/wage to pay less than they should.

What Challenges Lie Ahead

Since the founding of the People’s Republic, access to basic health care has been regarded as a fundamental right for every Chinese citizen. The Chinese Constitution states that while the central government should develop macro-policies and regulations on health care, it is the local governments’ responsibility to finance and organize public services:

“…… local (provincial, municipal, county and township) governments should govern its territory’s economy, education, culture, health, sports, as well as finance, civil affairs, security, and family planning.”

Countries like China are experiencing a transition from a planned to a market economy. During the 20 years or so since China launched economic reforms, the Chinese economy has developed very well. However, this sound economic foundation has yet to benefit the development of the social security system. Providing social protections, including health care to all Chinese, remains a great challenge.

Economic policies have significantly affected the fiscal status of municipal governments, which are organizing the urban health insurance schemes. The financial reforms undertaken over the past two decades were centered on revenue sharing between the central and local governments and the development of new mechanisms in financial management. The goal of these reforms was to give greater autonomy to local governments and enterprises and to promote the development of local economies (Zuo, 1997). Generally speaking, each region assumes financial
Addressing Inequity In Access To Health Care In Urban China

responsibility for education, health and other social services.

The fiscal transfer from rich regions to poor ones weakened, although poor regions still receive financial subsidies from the central government. But the central government’s capacity has diminished greatly over the past two decades\(^{11}\). For example, in 1978-80, the central government provided each of the 15 provinces/autonomous regions that had a financial deficit with a subsidy equivalent to one-quarter to one-fifth of its GDP. Shanghai, the richest region in China, contributed over 50% of its GDP to the central government. In 1991-93, Shanghai contributed only 8.5% of its GDP to the central government. Hence, the municipal governments in these poorer regions have often had enormous financial difficulties in financing and organizing social services, including health care (UNDP, 1999).

Not surprisingly, the poorer regions in China have faced more challenges than the rich ones in financing health care. First, their fiscal status is usually unhealthy. The local economy is not strong. There are not many profitable enterprises or services that can increase local revenues. There are probably many enterprises in these regions that are money-losing and are unable to pay insurance premiums for their employees. Meanwhile, municipal governments are not in a position to help these money-losing enterprises. These municipal governments are short on funds to make financial contributions to the health insurance scheme for the people they employ. It is often in these regions where urban unemployment is most serious. These difficulties have led to a reduction in the demand for health services in these regions. Health service providers there try to survive or even maintain a reasonably good income through a variety of means. Money-losing is not conducive to effective provision of health services.

The central government in China has recognized many challenges facing the development of urban health insurance schemes in many poor provinces and regions. However, it no longer has the financial means to push these areas to adopt centrally-promoted health insurance reforms. What the central government has done is to develop relevant policies, requiring that all the municipal governments set up so-called basic health insurance schemes. Therefore, some people have argued that legislation is needed for the central government to ensure compliance and implementation of its policies and guidelines. Without legislation by the National People’s Congress or local assemblies to require for enterprises to participate in the city-wide health insurance schemes, it is difficult, if not impossible, for municipal governments to force them to do so. Given the lack of local financial and human resources to institute, and of political will to enforce legislation (Tang, 1999), the national government should provide stewardship to enable local governments to draft and implement such legislation, whenever appropriate.

The target that the Chinese government had set up to cover 80 million employees, or 20% of the total urban population by the end of year 2001 with the basic health insurance schemes appears to have been met. According to the information presented at the web site of Ministry of Labor and Social Security, the population coverage by the basic health insurance schemes was just over 70 million by the end of year 2001 and reached 94 million by the end of year 2002. Of those not covered by health insurance, a substantial proportion is likely to be poor and vulnerable. Health care financing for the urban poor and other vulnerable groups is therefore, another great financial and political challenge to the central and local governments in China. What the Chinese government has not done is to develop

\(^{11}\) The percentage of revenues shared by the central government increased after 1997 since the central government implemented tax reform (UNDP, 1999).
Addressing Inequity In Access To Health Care In Urban China

Appropriate policies to improve equal access by the urban poor and vulnerable groups to basic health care. Many senior policy makers in China think that this task is too big to be done properly in the near future. Due to restructuring of industrial sectors and China’s joining the WTO, there will be more workers laid off from many formal industrial sectors. The unemployment rate in urban China may rise. While the fiscal status of many municipal governments is poor or will become worse, more of the urban poor and vulnerable groups need to get government subsidies for health care. Apparently, many municipal governments, particularly in the western part of China, are not in a position to commit their financial resources to help the poor and vulnerable groups access to basic health care. Therefore, the central government should use fiscal transfers to help municipal governments that are in a poor fiscal status, especially since the fiscal status of the central government has improved significantly in recent years. Nevertheless, this is a hard decision for the central government to make, not only because a large grant would be necessary in the long run, but also because the balance of supporting the urban poor and the rural poor must be adequately maintained from a political standpoint.

Given the situation previously discussed, the Chinese government may not be able to address the problem of health care financing for the urban poor and vulnerable groups in the near future. However, it is probable for some affluent cities, such as Shanghai, to establish a realistic medical financial assistance scheme for the urban poor, which can be replicated elsewhere. Or the central government, and particularly local governments in rich regions, should consider using the government health budget to ensure that everyone in urban areas, regardless of health insurance status, can access preventive and promotive care, such as child immunizations, maternal and child health care, family planning services, etc. If financially possible, local governments should support services related to the prevention and treatment of several major infectious diseases, such as STDs and TB. Finally, the recent SARS outbreak which has exposed the structural weaknesses of the existing health care organization, is likely to prompt both the central government and municipalities to put in place the necessary intelligence and coordination mechanisms and be fully prepared and endowed for a timely and effective response to emerging public health emergencies. In short, there is a long way to go in assisting the urban poor to get access to basic health care in China. A pro-poor policy on health care needs to be developed by the central and local governments in China to reverse a situation that is getting worse.

To face these challenges, the Chinese government has started to address equity, efficiency and effectiveness in health service delivery. In January 1997, the central committee of the Chinese Communist Party and the State Council issued an important document entitled, “Decisions on Health Reform and Development,” setting direction and principles on reforming health care systems in China, including urban employee health insurance scheme reform. Almost two years later, the State Council issued Document No. 44 which laid out more detailed principles and guidelines on the development of basic health insurance. It covers eligible population coverage, sources of financing, fund allocation and management, and monitoring of fund use and services provided.

Based on previous reforms of the GIS and LIS, without appropriate changes in health service delivery system, it is a formidable task to develop successful health insurance schemes. Therefore, the State Council wanted to establish an urban health care system to provide the majority of the urban population with effective health care at an affordable cost. As a consequence, nine ministries, including the office of institutional reform of the State Council, the State Planning Commission, the State Economic and Trade Commission, Ministry
of Finance, the Ministry of Labour and Social Security, the Ministry of Health, the Bureau of Pharmaceutical Monitoring and Administration, and Bureau of Traditional Chinese Medicine, issued 13 policy documents in 2000, setting out a series of policies related to the development of non-profit and profit-making hospitals, the scope of government support for subsidized health services, drug income management, and reforms of health service and drug prices, among others (Box 3).

**Box 3. Thirteen Policy Documents on Urban Health Service Delivery in China**

**Document 1**: Guidelines on how to classify urban health facilities; i.e., non-profit and for-profit hospitals, and accordingly, their management.

**Document 2**: Guidelines on financial subsidy for health services. This document set out new principles for the use of the government health budget, including the scope of services to be funded or subsidized and funding methods, as well as the ways used to manage and monitor the government health budget. It also describes how the development of health infrastructure will be funded.

**Document 3**: Temporary methods for the management of income and expenditure of pharmaceuticals in hospitals. This document defines how hospitals should have separate accounts for purchasing pharmaceuticals and their expenditures, and how the profits from sale of pharmaceuticals should be used.

**Document 4**: Taxation policies for health facilities. This document drafted by the Ministry of Finance and the State Taxation Bureau defines different policies on taxation for preventive health facilities, non-profit hospitals and for-profit hospitals.

**Document 5**: Suggestions on the reform of pharmaceutical price management. This document suggested the adjustment for pharmaceutical price management, encouraged the use of market mechanisms in the management of pharmaceutical prices, and advocated transparency in setting up pharmaceutical prices and strengthening pharmaceutical price monitoring and auditing.

**Document 6**: Suggestions on reforming health services price management. In this document it is suggested to adjust the management of pharmaceutical prices, decentralize managerial responsibility for setting up pharmaceutical prices to provincial and prefecture levels, standardize the contents and prices of service items, and strengthen the monitoring and auditing of pharmaceutical prices.

**Document 7**: Guidelines on the procurement of pharmaceuticals by medical facilities. This document sets out the rules for medical facilities in the procurement of pharmaceuticals to improve economic efficiency, ensure fairness, and control corruption.

**Document 8**: Accreditation of pharmaceutical trade agents and its methods for monitoring and management.

**Document 9**: Suggestions on the implementation of patients’ selection of doctors and the promotion of medical facility reform. The initiative proposed in this document aimed to improve the quality of services and the efficiency in service provision.
These new policies for urban health care were based on good intentions, namely to improve equity in the financing of, and access to, basic health care and to increase efficiency in services provided. However, whether or not these policies can be effectively implemented in China remains to be seen. Some policies, such as the separate management of drug income and expenditures, have already been challenged in some cities. Drug profits are a major source of income in an environment with few other opportunities to finance such operations. Policies regarding regional health planning have been promoted for many years, but progress has been limited by political and operational difficulties facing local governments. The development of an urban community health care system, which aims to increase access to basic health care and reduce the cost of health care, cannot be successful unless the community health care system can be integrated into basic health insurance schemes.

Equity in financing of and access to basic health care should not be undermined by the exclusive application of demand-side micro-management strategies (e.g., deductible and coinsurance). There is a need for the central government to develop and implement the policies and regulatory framework necessary to further improve in a more coherent way supply-side macro-management strategies, such as physical and human resources planning, acquisition and use of high technologies, and demand side macro-management strategies, such as prospective payment, price reform and regulation for drugs and other services.
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