Economic Transition and Urban Health Care in China: Impacts and Prospects

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Abstract

This paper has three primary objectives. First, it illustrates how economic transition from a centrally planned to market-oriented economy inevitably transforms the foundation of social protection policies. Economic reform affects China’s urban health care through two primary channels. 1) A large proportional decline in government revenue constrained state capacity to finance health care. This, together with the subsequent perverse incentives that providers were subject to, has led to rapid cost escalation and unaffordable health care. 2) In the absence of any new health care financing policies, the transformation of state-owned enterprises and growth of the non-state sector threatened access to health care coverage for retirees, employees and their dependents. China’s experience also shows that the need for transformation of the social sector is not obviated by gradual economic reform or rapid economic growth. Second, it critically examines the potentials of current urban health reform initiatives in alleviating existing problems in China’s urban health care. The announced policy attempts to move China from a supply-side system, driven by perverse incentives and outdated central planning measures, to a demand-side system with a unified social insurance scheme as a powerful purchaser of health services. Our preliminary analysis suggests that these policies primarily target at the insured population and create a multi-tiered system under which the patients and the uninsured population would most likely bear the biggest burden of health care costs and risk. Finally, we raised additional challenges that China need to confront in order to restore a function-able urban health sector to provide affordable and equitable health care for its urban population.
I. Introduction

The transition of a socialistic central planning economy to a capitalistic market-based economy represents a paradigm shift reflecting fundamental changes in underlying social values. Socialistic economies emphasize equity and assuring basic human needs such as food, healthcare, housing, and education for all through central planning. In contrast, market-based economies emphasize individual responsibility and choice, market incentives and economic growth. Economic transition from plan to market therefore inevitably transforms the foundation on which social protection policies were based in the pre-reform era.

Many scholars have emphasized how China differs from other transitional economies in terms of initial conditions and gradual transition (e.g., Sachs and Woo 1994). The most distinctive feature of China’s experience has been its unprecedentedly rapid economic growth, in contrast to the dramatic economic contractions during initial transition in most other transitional economies. Over the past 20 years, real output has increased nine percent annually and economic output has more than quadrupled. However, China’s experience shows that the need for transformation of the social sector is not obviated by gradual economic reform or rapid economic growth.

In the early 1980’s, the Chinese government initiated major economic reforms that brought about significant disruption to the traditional channels of health care financing. However, the government did not develop a coherent health policy to harmonize the health sector with the new economic environment. In the urban areas, many inefficient state enterprises subject to market forces suffered deficits. The enterprises could not adequately fund the health insurance for their workers and retirees, jeopardizing their access to health care. Transition from state- to private-ownership further reduced workers’ access to insurance coverage. At the same
time, shrinkage in government budgets forced public hospitals to engage in revenue-generating activities to cover their expenses. However, under the administered and irrational price structure, hospitals had incentives to over-prescribe drugs and high technology procedures, leading to inefficient use of resources and rapid cost escalation through the late 1980s and 1990s, rendering health care unaffordable for most people.

The paper is organized as follows. The next section gives a brief overview of China’s urban health care system before economic reform. The subsequent section analyzes the impact of economic reform on health sector performance, focusing on two primary pathways. First, the large proportional decline in government revenue constrained state capacity to finance health care. Second, the transformation of state-owned enterprises threatened access to health care coverage for retirees, employees and their dependents. Section IV describes the current urban health reform initiatives. Section V provides a tentative assessment of the potential for current reform initiatives to address existing problems in urban health care in China. The last section raises additional challenges that China has to confront in order to restore a function-able health care system to assure affordable access to reasonable health care for its urban residents.

II. Urban Health Care Before Economic Reform

Established in the 1950s, China’s health protection system for urban residents were built upon three pillars: enterprise-based financing; public delivery system with substantial government subsidies; and price control for medical services and inputs.

A. Health Care Financing
There were two financing schemes: the Government Insurance Scheme (GIS) and the Labor Insurance Scheme (LIS). The GIS covered government employees, retirees, disabled veterans, university teachers and students. The LIS covered employees, their dependents, and retirees of state enterprises. GIS was financed by government budgets and LIS coverage was financed by each enterprise’ welfare funds which equaled approximately 11-14 percent of the total wage bill.

Despite the name “insurance”, GIS and LIS were both self-insurance systems with no risk pooling across work units. This implied that workers’ medical benefits were tied to the profitability of the organizations responsible for their health coverage. Although both GIS and LIS were nationally mandated, the insurance benefits varied, depending on the funds available at each enterprise under LIS and at each provincial government under GIS. Consequently, economic reforms that affect the financial capacity of provincial government and enterprise have important implications for these health insurance schemes.

B. Health Care Organization

China has developed a three-tiered organization for the delivery of health care, consisting of employee clinics operated by enterprises, community health centers, and city hospitals in the urban areas. For several decades this system provided a structure for efficient patient-referral for treatment of health problems.

Hospitals, like other enterprises, were publicly owned. Government subsidized about 50-60 percent of their recurrent costs, calculated to pay for the salaries of health personnel. The remaining revenue came from fee-for-service activities under a government controlled price schedule. The government also paid for capital investments. When running deficits, public
hospitals could ask for subsidies from the government.

C. Price Control

Similar to other products in the pre-reform period, prices for medical services were set by the Central Price Administration. Beginning during the Cultural Revolution in the 1960s, prices were set below cost in order to make services affordable and accessible even for the poor and uninsured. Similarly, input prices, such as drug prices, were controlled. Health care workers, like other employees in state-owned-enterprises, were paid on a salaried basis, with low cash remuneration.

In this context, providers’ decision making about the input or output mix was not based on financial incentives or prices. Prices did not function as signals for resource allocation, nor did they play a significant role in generating additional resources for health care providers. Providers were instead subsidized by the government in exchange for performing the social function of delivering medical services. The quantity and quality of output were determined by the government-specified inputs.

Under this system, there was relatively equal access to basic health care for the majority of China’s urban residents, who were either covered by LIS or GIS. For those not covered, medical prices were set low and subsidized by the government to assure affordable access. Despite an extensive provider network and subsidized universal coverage, the centrally suppressed prices and salaries of health workers resulted in a relatively low level of overall health care spending. In 1981, health care expenditures were still just over three percent of GDP.

However, except for high-ranking officials, access to advanced medication and
technology was limited. As a result of central planning of inputs and outputs, there were also mismatches of resource allocation that result in over- and under-supply of inputs. For example, under central planning, while there was over-supply of certain antibiotics (White 2000), others were in shortages (Liu and Li 1997).

III. Economic Reform and Its Impact on Urban Health Care

Economic reform in the urban areas began in 1984 when the Communist Party of China adopted the “Decision on Reform of Economic Structures.” There have been two primary channels through which economic reform impact on urban health care. First, a large proportional decline in government revenue constrained state capacity to finance health care. This, together with the subsequent perverse incentives that providers were subject to, has led to rapid cost escalation and unaffordable health care. Second, in the absence of any new health care financing policies, the transformation of state-owned enterprises and growth of the non-state sector threatened access to health care coverage for retirees, employees and their dependents.

A. Reduction in Government Revenues

Almost all the governments of transitional economies have faced serious fiscal difficulties. Despite sustained economic growth, China’s experience followed a similar pattern. Mismatch of the original tax collection system with the rapidly changing economy (including a shrinking public sector and the burden of financing losses of state owned enterprises (SOEs) combined with the decentralization of the tax collection system, resulted in a relative decline in tax revenues for all levels of government.
The rapid growth of the non-state sector as compared to SOEs further reduced government revenue in proportion to the rest of the economy. Although a formal income tax system was introduced for non-state enterprises, tax exemptions to start-up companies were often granted by local governments to encourage growth of the sector. As a result, tax revenues for all levels of government declined from 34 percent of GDP in 1978 to 14 percent in 1994\(^1\) (World Bank 1997). Under such circumstances, the government faced a dual pressure: a severe drop in revenues while fiscal demands on government increased. Moreover, the central government share in overall government revenues declined with reforms, in part due to new revenue sharing arrangements between the central and local governments, such as the system of “provincial contracting” (Grogan 1995). The share of government revenue going through the central government dropped from 40.5 percent in 1984 to 22 percent in 1992 (Chinese Statistical Yearbook, 1997).

One critical effect of the relative decline in government revenues was a drastic reduction in government subsidies to public hospitals. Government subsidies as a share of total hospital revenues gradually decreased from more than 50 percent in the pre-reform era to approximately 10 percent in the 1990s\(^2\). National health accounts indicate that less than 10 percent of hospital revenue came from government subsidies since the 1990’s. Government expenditures as a share of total health expenditures dropped from 28 percent in 1978 to 14 percent in 1993 (World Bank 1997).

At the same time, a fixed budget was introduced in replacement of the old “soft” budget. The hospitals had to sustain themselves by competing for patients and generating profits from their operations. Similar to other state enterprises, hospitals were transformed into autonomous financial entity responsible for their losses and profits, except that they had no decision right
over prices and hiring and firing of staff.

The government had set prices low so that services were affordable for most patients. Table 1 show the percentage of average cost that could be recovered by charging patients according to officially-set prices. To offset these losses, the Price Bureau set prices for *new services* high enough to cross-subsidize providers for supplying traditional services below cost.

The hospitals also generated surplus through the profit margin allowed in drugs. Distorted relative prices led to inefficiencies in two major areas in particular: (1) high technology medical diagnostics and (2) pharmaceuticals.

### Table 1. Average Cost Recovery Ratio at Various-Level Hospitals

<table>
<thead>
<tr>
<th>Level of Hospital</th>
<th>Average Cost Recovery Ratio (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincial Hospital</td>
<td>48.49</td>
</tr>
<tr>
<td>Municipal Hospital</td>
<td>54.19</td>
</tr>
<tr>
<td>County Hospital</td>
<td>87.82</td>
</tr>
</tbody>
</table>


Cost Recovery Ratio = Price / (Comprehensive Cost - Government Subsidy) * 100%.

1. High technology medical diagnostics

The centrally set price schedule was highly distorted. Prices for fairly routine hospital procedures were well below cost while those for high technology medical diagnostics are well above costs. For example, the average cost of an appendectomy was 118 yuan in 1989, but the allowable fee for insured patients was only 56 yuan (Table 3). On the other hand, prices for newly introduced diagnostic tests have been set high enough to encourage their rapid adoption. A comparison of the cost of a CT scan with allowed fees shows the large profit from this test. For example, in Tianjin in 1988 the estimated total cost of a body CT scan was 113 yuan, but the allowed fee for insured patients was 362 yuan (World Bank 1997). A more recent detailed cost
study, based on a national sample of 30 hospitals, found that the cost recovery rate was 260% and 135% for ECT and CT scan, respectively; whereas those for bed days were only 10% (Bian, et al, 1998)

This distorted pricing policy led urban hospitals to see high technology equipment as their financial salvation. Hospitals’ reputations--and their ability to attract clients and thus revenues--depended on having high technology equipment such as CT scanners, ultrasound, and other diagnostic equipment. Chinese consumers also came to view these high technology services as symbolic of satisfactory health care. By the end of 1993, China had 1300 CT scanners, 200 MRIs, and 1,200 color Dopplers, mostly located in large coastal cities (Hu, 1995), all very high numbers relative to per capita income. Over-utilization of these procedures was rampant.

In addition to the distorted price schedule, the amount of government subsidies had not been sufficient to pay for new capital investments or to compensate hospital personnel compensation at a competitive level since the mid 1980’s. As a result, under-the-table payment became a common practice. Hospitals also routinely organized investor groups to buy high technology equipment. They borrowed from banks and sold shares to staff members to purchase such equipment. Hospitals may also lease equipment from international suppliers with the lease payment set as a percentage of gross revenues generated from use of the equipment. Staff usually received a percent of the gross revenue from these high technology services as bonuses, which further provided incentives for providers to prescribe these procedures. For example, Jurong County Hospital in Jiangsu Province saw government subsidies decline from 17 percent of total revenues in 1985 to 2.2 percent in 1993. In response, in 1993 the hospital raised 600,000 yuan from staff; this sum was combined with other funds to purchase a CT scanner and other
equipment. Although patient volume grew by only 2.1 percent between 1993 and 1994, the number of patients using high technology equipment increased by 50 percent, and income from high technology (mostly the CT) more than doubled (World Bank 1997).

2. Prescription Drugs

The government also controlled the prices of drugs to allow markups of 15 percent at both the wholesale and retail levels, resulting in approximately an eight percent of profit margin. The price structure offered higher profits when hospitals used more expensive drugs despite similar efficacy. Outpatients were frequently treated with intravenous solutions of glucose, vitamins, antibiotics and other drugs. In almost all cases, this treatment did not constitute justified medical practice but was again done to maximize profit.

The distorted incentives embedded in the drug pricing policy yielded profound perverse outcomes. First, there was a leveraging effect. To increase its profit by 1000 yuan, the hospital had to increase its drug prescription by about 13,000 yuan because the profit margin was only 7-8 percent of gross sales. Second, because the profit from drug sales was directly proportional to wholesale prices, hospitals were motivated to purchase the highest-priced drugs. The pharmaceutical industry responded. Although wholesale prices were controlled by the State Price Bureau, pharmaceutical producers modified their old drugs to produce a similar one labeled with a new name and at a reported higher production cost. As the price soars, so did their profits. To increase sales, pharmaceutical companies then offered discounts (otherwise known as “kick-backs”) to hospitals, and to physicians who prescribed their drugs. The drugs were billed to hospitals according to the listed wholesale price, and hospitals added 15 percent of the list price to sell the drug at retail. Unofficially, the pharmaceutical companies paid a “discount” to the hospitals and physicians. It has been reported that this discount can be as high
as 30 percent of the wholesale price. Consequently, drug revenue had become the major source of revenue for hospitals. According to the 1998 national health services survey, China’s outpatient clinics generated about 50 percent of their revenues from drug sales. For inpatient hospital services, drug sales accounted for approximately 62 percent of total revenue. It was also reported that about 30-40 percent of the drug consumption represented inappropriate utilization, and the waste was more than 30 billion Chinese yuan per year (Xinhuashe 1996).

The incentives to over-provide high technology diagnostic procedures and expensive medications was further exacerbated by the excess supply of health facilities and personnel inherited from the central planning economy. Limited by their power to hire and fire excess staff or close excess beds, hospital managers had to generate further revenue to finance their operations through providing more services with high profit margins.

The major consequence of the drastic change in hospital financing brought about by reduced government subsidy was rapid cost escalation. Between 1978 and 1986, LIS expenditures grew at an annual rate of 11 percent in real terms, and accelerated to 13 percent between 1986 and 1993. GIS expenditures grew even faster. Between 1978 and 1986, the annual real rate of growth was 14 percent, which further increased to 16 percent between 1986 and 1993 (Table 2). The rapid escalation of health care costs in urban China has been a major factor in the developing fiscal crisis of both GIS and LIS. Such rapid cost escalation has also made medical services and drugs unaffordable for most of the population. Studies show that, on average, 20 percent of the urban populations forego inpatient hospital services recommended by health professionals because they cannot afford them.

<table>
<thead>
<tr>
<th>Table 2 Annual Real Rate of Growth of Health Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978-86</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>11</td>
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</tbody>
</table>

11
<table>
<thead>
<tr>
<th></th>
<th>1978</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>9.5%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Total Health Expenditure</td>
<td>9.8%</td>
<td>13.4%</td>
</tr>
<tr>
<td>GIS</td>
<td>14%</td>
<td>16%</td>
</tr>
<tr>
<td>LIS</td>
<td>11%</td>
<td>13%</td>
</tr>
</tbody>
</table>


Note: GDP per capita grew 7.7 percent and total health expenditures grew 9.5 percent between 1978 and 1993. Comparable data for the LIS and GIS populations for the same years are unavailable.

Compounding the problem further was the lack of risk pooling across enterprises or local governments. Each organization under GIS/LIS was self-insured. Many SOEs were running deficits and were not able to reimburse the health care bills of their employees, rendering their workers in effect "uninsured".

B. Reform of State Owned Enterprises and Its Impact on Access to Health Care

While most of the literature examining the relationship between economic transition and the social sector focuses on the need to reform the social sector as a pre-condition for enterprise reform (Selden and You 1997, Hu 1998, Smyth 1999, Li 2000, ), reform of the state enterprises in the initial period has also brought significant consequences on access to health care for the urban population.

Health insurance coverage had been dramatically reduced in the reform era. Three groups in particular were increasingly left without effective health insurance coverage: (i) retirees and employees of deficit-running SOEs, (ii) employees in the non-state sector, and (iii) migrant workers.

Increasingly subject to market forces, SOEs had to operate under a new system of individual decision-making and management responsibility. The increased enterprise autonomy had been beneficial for firms that could make a profit. Reform had been particularly good for
the few very profitable enterprises that formerly had been forced to hand over profits to the central government. In contrast, many large SOEs were handicapped by excess number of workers and old, faulty equipment. These SOEs could not just close and lay off employees who were entitled to benefits. Conservative estimates in Beijing and Shanghai placed the number of SOEs running deficits--that is, those that were essentially bankrupt--at 30 percent. In older cities in the industrial northeast, the proportion was much higher (Aitchison 1997). Furthermore, many young workers had left these moribund SOEs for the private sector, increasing the relative age and sickness burden of deficit-running enterprises.

These bankrupt SOEs were not capable of reimbursing their employees for health expenses, since the labor insurance system (LIS) is for all practical purposes self-insured by the enterprise. Table 3 shows the changes in insurance coverage.

<table>
<thead>
<tr>
<th>Table 3. Health Insurance Coverage in China</th>
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<tbody>
<tr>
<td>Insurance schemes &amp; populations covered</td>
</tr>
<tr>
<td>Urban population</td>
</tr>
<tr>
<td>GIS (percent)</td>
</tr>
<tr>
<td>LIS (percent)</td>
</tr>
<tr>
<td>Private insurance (percent)</td>
</tr>
</tbody>
</table>

Source: National Health Service Survey of 1993 and 1998. MOH, China

These numbers, however, masked the number of people who actually received health insurance benefits. Surveys in 1992 and 1993 showed that one-third of SOE employees covered in principle were receiving no insurance-paid care (Hu et al 1995, Henderson 1995). Surveys in the city of Zhenjiang also showed that in 1994, approximately 14 percent of employees had been unable to receive reimbursement for medical expenses, leaving them effectively uninsured. Among public school teachers, the percentage unable to receive reimbursement was even higher (16 percent). Even for those employers that were able to reimburse their employees, the share paid by the employee was higher in less profitable enterprises.
A second important group of uninsured consists of employees in the non-state sector. This sector of China’s economy--which includes collective-owned enterprises, private firms, and joint ventures--has expanded rapidly in the reform era. While SOEs accounted for almost all output in the pre-reform period, by 1990 non-state industry employed almost 100 million people and produced 45 percent of industrial output (Harrold, 1992). A 1992 survey (Hu et al. 1995) found that, controlling for other socio-demographic characteristics of workers, employees of state enterprises were almost three times more likely to have full health insurance coverage than employees of non-state enterprises.

The third group of urban residents increasingly left without health coverage is the large population of migrant workers, commonly known as the “floating” population. Rapid economic growth along the coastal cities created a huge demand for labor, mostly in urban areas. Such high urban demand for labor, combined with uneven economic growth in rural areas and ‘surplus’ rural supply of labor, created strong incentives for internal migration. These migrants often endure dense living conditions with poor hygiene, an environment conducive to the spread of infection. “Floating” workers usually remain unregistered and therefore are not entitled to resident subsidies for food and medical care or official state sector employment.

This lack of health insurance coverage is an important issue in light of the financial burden that catastrophic medical expenditures can represent. In rich and poor countries alike, approximately 25-30 percent of a nation’s total health expenditure is spent on one percent of the population, and approximately 60 percent of total health expenditure is spent on five percent of the population (Hsiao 1999). This skewed distribution of health expenditures implies that individuals can be subject to substantial financial burdens when they contract a serious illness, rendering health insurance necessary (Arrow 1963).
Not only was the number of insured reduced, there was a drastic increase in the inequitable access to health insurance coverage across regions, as a result of differential economic growth and the drastic reduction in the central government’s ability to redistribute resources across regions. For example, in Baoji, Shaanxi, a middle income, medium-sized city in a north-central province, the majority of government workers must pay 40 percent of outpatient costs, and 10 percent or more for inpatient costs. On the other hand, government employees in Shanghai only pay 10 percent of their outpatient expenditures, and no co-payments for inpatient care, despite their higher level of wages (Grogan 1995).
IV. Current Urban Health Reform Initiatives

On January 15, 1997, the government announced the “Decision on Health Reform and Development by the Central Party Committee and State Council.” The policy directions articulated in this document have guided a series of detailed reform initiatives since then, including the 1998 State Council decision on establishing a basic health insurance system for the urban population, and the 2000 State Council guidelines for reforming China's medical and pharmaceutical sectors.

The major objective of the current reform initiatives was to provide affordable access to reasonable health care for China’s urban population, through: establishing a basic social insurance system; controlling medical costs escalation; and improving efficiency and quality. The following section summarizes the major reform initiatives.

A. Health Care Financing

In December of 1998 the Chinese government announced a major decision to establish a social insurance program for urban workers, in replacement of the existing LIS and GIS. The program aims to provide a basic benefit package to all urban workers, including government employees and employees of both state and non-state sectors. Workers’ dependents are not covered.

The social insurance program is financed by premium contributions from employers (6 percent of the employee’s wage) and by employees (2 percent of their wage). Retired workers are exempt from premium contributions; the cost of their contribution is to be borne by their last employers.

Similar to the pension system, the health insurance scheme finances beneficiaries' health
care services through three tiers: individual Medical Savings Accounts (MSAs); out-of-pocket spending by beneficiaries in the form of deductibles and co-insurance; and social risk pooling at the city level. Funds in the MSAs can only be used to pay for medical services and unspent funds at the end of a person's life become a part of his estate. The social risk pool funds limits its annual payment for each enrollee to four times the average wage of the workers in that city. Expenses exceeding this ceiling can be covered by supplementary insurance schemes, or must be paid by the patient out-of-pocket. The government provides supplementary insurance coverage for government employees. Other employers may purchase supplementary insurance for their employees. The premium contributions by the employer are tax exempt up to 4% of their total wage bill. The employees can also purchase private supplementary insurance. Local governments are responsible for making up any social risk pool fund deficits.

B. Organization of Health Care Delivery

1. Hospital organization: non-profit and for-profit split.

Ownership of hospitals are to be transformed into three types: government owned, non-government-owned non-profit and private. Government-owned non-profit hospitals are expected to continue receiving subsidies from the government, non-government-owned non-profit hospitals will not receive any subsidy. The major type of non-government owned non-profit hospitals consist of hospitals currently owned and operated by state enterprises. For-profit hospitals will largely consist of private hospitals, financed by joint venture between Chinese and foreign investors, or by stockholders. Different pricing and tax policies will be developed for each type of hospital (Table 4).
### Table 4. Differential policies towards for-profit and non-profit hospitals

<table>
<thead>
<tr>
<th>Hospital Type</th>
<th>Pricing</th>
<th>Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government-owned non-profit</td>
<td>Regulated price for most services</td>
<td>Yes</td>
</tr>
<tr>
<td>Non-government-owned non-profit</td>
<td>Regulated price, but allow flexibility within range</td>
<td>No</td>
</tr>
<tr>
<td>For-profit</td>
<td>Unregulated price</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Government subsidies</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government-owned non-profit</td>
<td>Yes</td>
<td>Exempt</td>
</tr>
<tr>
<td>Non-government-owned non-profit</td>
<td>No</td>
<td>Exempt</td>
</tr>
<tr>
<td>For-profit</td>
<td>No</td>
<td>Taxed</td>
</tr>
</tbody>
</table>

#### 2. Separating drug prescription from dispensing

In order to eliminate the incentive for health care providers to excessively prescribe and sell drugs, the government plans to de-link providers’ revenue from drug sales by separating drug prescription from dispensing. All hospitals are required to set up a new accounting system that distinguishes between revenue from drug sales and from service provision. Profits generated from drug sales (mark-up over the wholesale price minus other costs) are to be submitted to the health authorities for redistribution. The redistribution will be based on a formula that takes into consideration fulfillment of public health responsibilities and performance in terms of clinical quality and patient satisfaction. It is unclear whether for-profit hospitals will be subject to this policy.

#### C. Price and Payment Reforms

The objectives of the pricing and payment reforms are to control costs while ensuring access to patients and allowing hospitals to sustain themselves financially.
1. **Differential pricing policies by hospital type**

Prices for non-profit hospitals will be set by the Price Bureau of each province according to the guidelines developed by the State Price Bureau. Prices for government-owned non-profit hospitals may be subsidized from two funds: the government and re-distributed drug profits. For-profit hospitals are allowed to set prices for their services based on market conditions.

2. **Price schedule adjustment**

Price control will continue for the majority of services. To reduce providers’ incentives to over-provide “profitable” services such as high-tech diagnostic tests and procedures and drugs, prices for these services will be adjusted downward. Simultaneously, to compensate hospitals for their costs, prices for traditionally under-priced services (such as visit and surgical fees, and operating room charges) will be increased.

3. **Provider payment methods**

The current policy does not specify the type of provider payment method to be adopted. Each city can choose its own provider payment method and fee-for-service remains the dominant type of provider payment method used.
D. Pharmaceutical Prices and Regulation

1. Prices for Pharmaceuticals

As part of the urban health insurance reform, an *Essential Drug List* has been developed. This list specifies the list of drugs that will be reimbursed by the social insurance program. The Price Administration will continue to control prices for drugs on the list. Prices for a subset of products will be regulated using the original “cost-plus” pricing method, where the government controls the manufacturing price and allows a mark up of 15 percent at each level of wholesale and retail. To control the manufacturing price, the policy plans to limit the marketing/advertising component of the manufacturing costs to not exceed 25 percent and 10 percent for non-generic and generic drugs, respectively. For the rest of the other products, prices will be set by manufacturers according to market conditions.

2. Controlling discounts/kickbacks between wholesalers and retailers

Although drug dispensing and prescription are to be separated, hospitals will still have incentives to over-prescribe drugs if they receive kickbacks from wholesalers. To reduce this incentive, the new policy caps the discount rate at 5 percent of the wholesale price. For tax purposes, the actual discounts given have to be documented, so that retail price \[\text{retail price} = \text{wholesale price} \times (1+\text{mark-up})\] can be monitored and controlled.

V. Potentials for Current Reform Initiatives to Alleviate Existing Problems

The announced policy attempts to move China from a supply-side dominated system, driven by perverse incentives and outdated central planning measures, to a demand-side dominated system with a unified social insurance scheme that, in theory, would select and contract providers and decide on the amount to be paid to providers. Can this policy restore a
system to provide affordable access to reasonable health care for all its urban residents equally? Here, we provide a tentative assessment of the potential impacts of China’s latest urban health policies on the performance of its health sector, based on some of the early experiences of the reform and economic reasoning.

A. Health Insurance Coverage

The current health insurance reform will only cover less than 50 percent of the urban population. Compared to LIS/GIS, dependents are not officially covered. If the floating population is accounted for, the rate of coverage is even lower. Among the insured, the government aims to solve the problem of risk pooling by mandating risk pooling at the city level and requiring both the state and non-state sectors to join in. However, the actual implementation of the policy has proven to be difficult so far. In particular, well-to-do government agencies often refuse to pay their contributions and opt out of the system. Tax evasion among the firms is also common. Those profitable ones often refuse to pool their risk with those making losses. Those with young and healthy workers also refuse to pool their risk with enterprises with large share of retirees. In many cities, health expenditures as a share of wages were often as high as 11-18 percent in the pre-reform period. Under the current policy, in order to reduce employers’ resistance to join in, the contribution rate has been set to 8 percent of wages. This means that the scope of services covered under the current policy is necessarily less generous than what the workers previously enjoyed. This has caused further reluctance to join, especially among those who were able to finance their employees’ health benefits in the pre-reform period. Driven by the urgency to reform the state enterprises, extending coverage has become a top priority of the government. Every year, the Ministry of Labor and Social Security sets targets on the number of
eligible population to enroll. Unfortunately, officials at the Social Insurance Bureaus in the city lack often express frustration due to lack of effective mechanism and power to achieve the targets. The problem is worse in cities with wide variations in economic performance of enterprises.

B. Cost control and efficiency

The extent to which the current policy can achieve cost control and improve efficiency, and thus assure affordable access, is highly questionable for the following reasons:

1. Provider payment method

The current policy does not specify the type of provider payment methods to be adopted for the social insurance programs, although international experience has shown that provider payment is one of the most powerful policy instruments to achieve cost containment and efficiency through influencing providers’ decision on the type and quantity of service to provide. Except for a few cities that have embarked on urban health insurance reform earlier, most cities so far have continued to pay hospitals on a fee-for-service basis, which international experience has consistently demonstrated to be cost-inflationary. Some cities, such as Jiujiang, have already found that a fee-for-service payment method leads to rapid increase in program expenditure, threatening the financial solvency of the program. Some cities have moved towards prospective and more aggregate type of payment methods, such as global budgets in Shanghai and Haikou, case payment in Zhenjiang and Dalian. While these payment methods may be more effective in managing the financial sustainability of the social insurance program, many cities lack the knowledge and technical capacity to design and implement such payment methods.

Even if social insurance programs can control their program expenditures through
different payment methods, cost control for the whole health sector is questionable. This is because hospitals can shift costs to the uninsured and to services not covered by social insurance, which are reimbursed on a fee-for-service basis.

2. Lack of coherent pricing and payment policies across the different sectors

The current reform policies segment the urban health sector into a number of sub-sectors, but there is no coherent pricing and payment policies across these segmented, but inter-related sectors. The financing reform distinctly creates two separate groups among the urban population: the insured and the uninsured. Among the insured, there are two separate service markets: services covered under the social insurance scheme, and services not covered. Among the uninsured, economic transition further creates two sub-populations: the high- and the low-income. On the supply side, providers are separated into three groups: the government-owned, non-government-owned non-profit and the for-profit. Each of them is subject to different pricing and tax incentives. The current policy narrowly addresses the cost and quality of medical services provided to the insured population by non-profit providers, leaving the uninsured population, the uncovered services and the for profit providers to “the market”. Yet, the “rules of games” of the market have not been laid down.

International experience has shown that behavior in the unregulated sector: the for-profit hospitals, the uninsured population and the non-covered services, can tilt the balance of the regulated sector if the government does not develop comprehensive and coherent policies for the whole sector. The for-profit sector tends to target the rich and the insured, especially by specializing in services that have high willingness to pay. Such services include latest technology and drugs for life and death situations, amenities (private wards with TV, telephone, fridge, etc.), shorter waiting list, choice of doctors, services for children, diet programs, etc.
International experiences and household surveys on patient preferences have shown that people are willing to pay for these services, making their demand for these services relatively price inelastic. In other words, demand places little constraint on the prices that providers can charge for these services.

Without price and payment control, for-profit hospitals can charge higher prices and pay physicians more generous and competitive compensations. This, in addition to being well equipped with the latest technology, will attract the best doctors to the for-profit hospitals. While the for-profit sector may be a small sector to start with, over time, other hospitals will find it advantageous to change into for-profit status and thus release itself from price control. As a result, the for-profit sector could drive up the costs of the other sectors.

3. “Unofficial” channels of provider payments

The finances of hospitals and physicians in urban China are already operating through two channels: official and unofficial. As a result of inadequate government subsidies to finance salaries of the health workers, and a concomitant growth in wages of the health professionals in the non-state sector and other workers outside the health professionals, “under-the-table” payment has become the norm of practice. In addition, physicians frequently receive “discounts” from pharmaceutical companies. These practices mean that any payment measures enacted by the social insurance scheme can be easily circumvented through “unofficial” charges. Currently, the government has no information or data to ascertain the size and magnitude of health expenditures in the “unofficial” market. Assessment of the effectiveness of any cost containment policy based on official estimates of health expenditures can misguide policy formulations. Interviews with the health professionals in China suggest that, especially for senior physicians in specialties, income from “under-the-table” payment could be more than 50
percent of their total incomes. Anecdotal evidence also suggests that physicians turn away patients who cannot afford to pay “under-the-table” payment. Such practices can have serious implications on equity in access and quality for the population. The government is aware of these practices, but so far, it has not paid any attention to the problem or developed any policy to deal with it.

In summary, while the social insurance scheme may be able to maintain financial solvency, patients pay increasing amounts out-of-pocket and the rate of health cost inflation remains high. Further, the population that will share the biggest burden of the cost are the patients and the uninsured.

VI. Prospects for Restoring an Affordable and Equitable Urban Health Care System

Rapid economic growth has undoubtedly brought about major improvements in the living standards of China’s population. However, the health care sector is also fundamentally disrupted. Today, China’s urban health care sector has benefited from better supplies of more advanced medications and technology, however; it also highly fragmented where the uninsured and the poor are most vulnerable. To restore an affordable and equitable health care system for its urban residents, China has to confront a number of challenges.

1. Excess supply of beds and health professionals

The Chinese government and enterprise-owned hospitals have been operating like state enterprises. As China introduces corporate autonomy and market competition for hospitals and clinics, the government has to face a critical issue: what to do about the excess number of health professionals and surplus of hospital beds in large cities. While surplus labor can be laid off in
reforming the state enterprises, this option is not a wise choice for the health sector. As international and Chinese experience have shown, laid off health practitioners can practice medicine without supervision, their desire to make a living is likely to lead them to induce demand for their services, give unnecessary injections and tests, and dispense harmful drugs. China urgently needs a sound policy to retrain and redirect the “redundant” health professionals to other productive and needed health services.

2. **Local capacity to implement and enforce policies**

The effectiveness policies in establishing a functioning health care system depend critically on the capacity of local governments to implement and enforce the policies. Currently, local government’s capacity in health care management and policy implementation is limited. Thus, many of the policies remain policies on paper. For example, although it is written in all sorts of official documents that the social insurance bureaus will perform the role of purchasers to select and contract with providers in order to improve efficiency and quality, in reality, no city has been able to implement this. Even in cities with the longest history of urban health reform, such as Shanghai, Zhenjiang, Shenzhen, etc, all providers in the cities have contracted by the social insurance bureaus. Similarly, the extent to which separating drug prescribing and dispensing can reduce the problem of over-prescription depends on how well the government can monitor hospitals’ drug revenue accounts.

3. **Co-ordination among the different ministries**

Not only is China’s urban health sector segmented, the administration, supervision and monitoring of the sector are also highly segmented. For example, representing the workers, the Ministry of Labor and Social Security and their local social insurance bureaus’ primary concerns are insurance coverage for the employed and financial solvency of the social insurance scheme.
With urban health insurance taken away from them, the Ministry of Health and its local public health bureaus represent the health providers to negotiate for the best conditions for hospital survival. The ones left unspoken for are the patients and the uninsured. Similarly, in the pharmaceutical sector, pricing policy is under the regime of the Price Bureau, quality control is under the State Drug Administration, while policies concerned with the manufacturing, distribution and trade of the pharmaceutical industry are under the Ministry of Trade and Economics. Until the different administrations coordinate their policies, the urban health sector is doomed to chaos and the ones who will be hurt most are the most vulnerable, namely the uninsured, the poor and the sick.
References


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1 The local resorted to other sources of revenue, such as increased licensing and service fees. Although these extra-budgetary revenues increased, they only amounted to 4 percent of GDP in 1994.
The drop in share of government subsidy is partly due to rapid rising total health expenditures and inflation.

This is also true for county and township hospitals and health centers.

Based on communications with hospital directors in China. After taking into account of breakage, pure profit margin is approximately 8 percent.

In recent years, many hospitals have begun to purchase drugs directly from manufacturers. This effectively doubles the hospital’s gross profits from drug sales, as the hospital is able to capture both wholesale and retail markups.