China Economic Review 20 (2009) 613–619

Contents lists available at ScienceDirect

China Economic Review

China's health care reform: A tentative assessment

Winnie YIP [a,*], William HSIAO [b,1]

[a] University of Oxford, Department of Public Health, Health Economics Research Center, Old Road Campus, Headington, OX3 7LF, United Kingdom
[b] Department of Health Policy and Management, Department of Global Health and Population, Harvard University, 124 Mt. Auburn, Cambridge MA 02138, United States

ARTICLE INFO

Article history:
Received 5 August 2009
Accepted 7 August 2009

JEL Classification:
I11
I18
I38

Keywords:
Health Care
Health insurance
Income distribution
Asymmetric information
Incentive compatibility

ABSTRACT

China has recently unveiled an ambitious new health-care reform plan, entailing a doubling of government health spending as well as a number of concrete reforms. While the details of the plan have not yet been completely announced, we offer a preliminary assessment of how well the reform is likely to achieve its stated goal of assuring every citizen equal access to affordable basic health care. The reform is based on three fundamental tenets: strong role of government in health, commitment to equity, and willingness to experiment with regulated market approaches. Within this framework, the reform offers a number of laudable changes to the health system, including an increase in public health financing, an expansion of primary health facilities and an increase in subsidies to achieve universal insurance coverage. However, it fails to address the root causes of the wastes and inefficiencies plaguing China's health care system, such as a fragmented delivery system and provider incentives to over-provide expensive tests and services. We conclude that China should consider changing the provider payment method from fee-for-service to a prospective payment method such as DRG or capitation with pay-for-performance, and to develop purchasing agencies that represent the interests of the population so as to enhance competition.

1. Introduction

After years of intense discussion, deliberation and debate, in April, 2009 China finally unveiled its health-care reform plan (Anonymous, 2009a; Chen, 2009). President Hu clearly stated that the goal of the reform is to assure that every citizen has equal access to affordable basic health care by 2012. The announced policy explicitly states the government's role of ensuring equity and providing public goods, while at the same time also encouraging the exploration of market mechanisms such as purchasing and competition to improve quality and efficiency. Implicitly, China is searching for the right mix of government and market, a fundamental question that countries around the world are still struggling to answer.

The Chinese government announced that it will spend an additional 850 billion RMB (USD 125 billion) over the next three years to invest in five specific areas: (1) expand insurance coverage with a target of achieving universal coverage by 2011, with significant demand subsidies for the rural population to enroll in the New Cooperative Medical Scheme (NCMS) and for the urban uninsured to enroll in the Urban Resident Basic Medical Insurance Scheme (URBMI); (2) increase government spending on public health services, especially in lower-income regions, with the goal of equalizing public health spending across regions; (3) establish primary-care facilities—community health centers in urban areas and township health centers in rural areas—which will serve as gate-keepers in the long run; (4) reform the pharmaceutical market; and (5) pilot test public hospital reforms (Anonymous, 2009a).

Can China's health care reform achieve its intended goals? Drawing on economic theories and existing empirical evidence from China and elsewhere, the primary objective of this paper is to provide a preliminary answer to this question. An assessment of

* Corresponding author. Tel.: +44 1865 289429.
E-mail addresses: Winnie.Yip@dphpc.ox.ac.uk (W. Yip), hsiao@hsph.harvard.edu (W. Hsiao).
[1] Tel.: +1 617 496 8856.

1043-951X/$ – see front matter © 2009 Elsevier Inc. All rights reserved.
doi:10.1016/j.chieco.2009.08.003

China's health care reform at this time is necessarily tentative and preliminary. As with any reform, the devil lies in the details. The details of China's health reform have yet to be announced, although a set of over twenty companion policies are expected to be published soon. This assessment therefore focuses on the fundamental principles underlying the reform. We first provide an overview of the root causes of the problems confronting China's health care system, then analyze the extent to which China's reform initiatives address these problems. We argue that while China's current reform provides some necessary changes to the heath care system, these changes are not sufficient if China is to achieve its stated goal to provide affordable universal basic health care for its population of 1.3 billion.

2. Problems confronting China's health care system and their underlying causes

On the eve of China's health care reform, the greatest discontents voiced by the public are unaffordable access to health care, impoverishment due to heavy medical expenses (commonly known in Chinese as "*kan bing nan, kan bing gui*"), and huge inequalities across regions and between urban and rural areas (Hsiao, 2004). What are the underlying causes of these dismal conditions?

One commonly cited reason for unaffordable access and household impoverishment is the lack of insurance coverage. As recently as 2002, close to 90% of the rural population had no insurance coverage. In the urban areas, only around half of the population is covered, nearly all of whom are formal sector employees. Workers' dependents and migrant workers are not covered.

A more fundamental root cause of unaffordable access and high risk of medical impoverishment is often neglected in the literature, and is certainly less emphasized in the reform document. This is the rapidly rising cost of health care, which stems primarily from waste and inefficiency within the health care system itself, caused mainly by the providers' profit seeking behavior. This behavior, in turn, is the result of a combination of interrelated policies, including the under-funding of public facilities, distorted price schedules, and high drug mark-ups.

Although the majority of Chinese health facilities are publicly owned, they rely heavily on revenue-generating activities for financial survival. Consequently, while most health facilities are "public" in terms of ownership, they are really "private, for-profit" in terms of behavior. As of the early 1990s, government subsidies for public health facilities have represented a mere 10% of the facilities' total revenues. To keep health care affordable, the government sets prices for basic health care below cost. At the same time, the government wants facilities to survive financially, so it sets prices for new and high-tech diagnostic services above cost and allows a 15% profit margin on drugs. This price schedule has created perverse incentives for providers, who have to generate 90% of their budget from revenue-generating activities, and has turned hospitals, township health centers and village doctors all alike into profit seeking entities. Equally important, this price setting approach has created a leveraging effect whereby a provider has to dispense seven dollars' worth of drugs to earn just one dollar of profit.

Compounding the problem further is the collusion between providers and the pharmaceutical sector. Hospitals receive kickbacks from drug companies for prescribing their products, and doctors' bonuses are often tied to these kickbacks. In rural areas, village doctors buy expired and counterfeit drugs at low cost and sell them as valid products at higher prices.

These systemic distortions have created a health care system in which providers over-prescribe drugs and tests and hospitals race to introduce high-tech services and expensive imported drugs that give them higher profit margins. For example, 75% of patients suffering from a common cold are prescribed antibiotics, as are 79% of hospital patients—over twice the international average of 30% (Zhou, undated). Consequently, China's health care expenditure has been growing at 16% per year—7% faster than the growth of GDP—for the past two decades (Blumenthal & Hsiao, 2005). Empirical evidence around the world has generally found an income elasticity of health expenditure in the range of 0.9 and 1.1 (for a review, see Gerdtham and Jonsson (2000)). China's growth of health expenditure relative to its income growth has thus far exceeded that of international experience. In addition to the unnecessary costs this incurs, the wasteful treatment patterns behind such rapid health expenditure growth can also harm patients.

With limited insurance coverage, rapid health expenditure growth creates an additional force impinging on households' health-expense burdens. Out-of-pocket payments as a share of total health expenditure grew from 20% to almost 60% between 1978 and 2002 (Smith, Wong, & Zhao, 2005), leading China to have one of the highest ratios of out-of-pocket payments to total health expenditure in all of Asia, especially when compared to those countries that provide universal coverage through established national or social health insurance schemes (Yip & Hsiao, 2008). Studies found that over one-third of households have reduced their consumption or been impoverished by health-related expenditures (Hu et al., 2008).

Table 1 shows the financial burden of health care on rural and urban households. Between 1993 and 2003, health expenditure as a share of household income increased, on average, from 8.2% to 10.7% in rural areas and from 6.0% to 7.2% in urban areas. This shows that although income has been growing, health care spending has been growing even faster.

Table 1
Per capita out-of-pocket health expenditure as a percentage of income.
Source: National Health Services Survey, 2003.

	Urban				Rural			
	Income level			Total	Income level			Total
	Lowest quintile	Middle quintile	Highest quintile		Lowest quintile	Middle quintile	Highest quintile	
1993	14.1	6.9	4.0	6.0	19.7	10.1	5.0	8.2
2003	10.8	8.1	5.6	7.2	26.7	11.4	7.7	10.7