

Health governance and healthcare reforms in China

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This article examines the role of health governance in shaping the outcomes of healthcare reforms in China. The analysis shows that the failure of reforms during the 1980s and 1990s was in part due to inadequate attention to key aspects in health governance, such as strategic interactions among government, providers and users, as well as incentive structures shaping their preferences and behaviour. Although more recent reforms seek to correct these flaws, they are insufficiently targeted at the fundamental governance problems that beset the sector. The article suggests that the Chinese government needs to heighten its efforts to enhance health governance and change the ways providers are paid if it is to succeed in achieving its goal of providing health care to all at affordable cost.

Keywords Governance, healthcare reforms, China

KEY MESSAGES

- The Chinese healthcare system's malaise is rooted not only in the misaligned incentives, as traditionally portrayed, but also in the peculiar governance arrangements that have emerged.
- Healthcare reforms during the 1980s and 1990s enhanced the position of providers vis-à-vis other actors, which allowed them to exploit users and evade accountability to the government.
- Recent reforms are unlikely to succeed unless accompanied by efforts to strengthen the position of the government and users relative to providers.

Introduction

China's fall from being a star healthcare performer to a laggard during the 1990s was swift and dramatic, as is the spate of publications describing and explaining it (e.g. [Blumenthal and Hsiao 2005](#); [Ma et al. 2008](#); [Tam 2008](#); [Bloom 2011](#)). Although recent scholarship sheds valuable light on the factors that led to the sorry state of affairs, the contributing role of health governance—defined as 'the rules that distribute roles and responsibilities among societal actors and that shape interactions among them' ([Brinkerhoff and Bossert 2008](#))—remains poorly understood. Healthcare reforms continue to be framed in terms of debate between market- and government-led health systems ([Cao and Fu 2005](#); [Yip and Hsiao 2008](#)), without sufficient appreciation of the governance relationships that

shape their capacity to live up to the potential. It is the contention of this article that governance arrangements in China have played a key role in shaping the outcomes of healthcare reforms and warrant further scrutiny. The success of the ambitious reforms launched in 2009 to offset the dysfunctional aspects of the earlier reforms hinge on strengthening governance arrangements.

A health governance perspective on reforms includes, first of all, balanced attention not only to various key actors in the sector but also to multiple sets of relationships among policy makers, users, providers and insurers. Much of the recent healthcare reforms have focused on realigning and re-orienting the relationships between government and service providers at the expense of other equally important relationships. Second,

the perspective highlights the potential for innovation by exploiting the linkages among the key actors. For example, the success in realigning the interests of the government and providers depends on reconfiguring the relationship between providers and users through payment mechanisms.

This article examines health reforms from a governance perspective, with particular attention to how governance shapes reform outcomes. Our analysis shows that the failure of healthcare reforms during the 1980s and 1990s was in part due to inadequate attention to key aspects of health governance, such as strategic interactions among government, providers and users, as well as incentive structures shaping their preferences and behaviour. The more recent reforms are ambitious, but pay insufficient attention to the fundamental governance problems that afflict the sector. This article concludes by suggesting that the Chinese government needs to heighten its efforts to improve governance arrangements if it is to succeed in achieving its goal of providing healthcare to all at affordable cost.

Health reforms in China

When China embarked on the road to a market economy in the late 1970s, it had a stagnant economy but a functioning healthcare system that was the envy of the developing world. In 1982, the infant mortality rate (IMR) was an impressive 34 per thousand live births, while life expectancy stood at 68 years (Blumenthal and Hsiao 2005). More remarkably, these achievements were attained at a relatively low cost: total expenditure on health (TEH) accounted for only 3% of GDP.

The health system that produced these outcomes was largely public. Hospitals and other health facilities were owned by the government and/or state-owned enterprises or rural co-operatives. Providers were paid on a fee-for-service (FFS) basis for most services, though the amounts were small and tightly controlled by the government. The three social insurance financing schemes covered almost the entire population: the Government Insurance Scheme, Labour Insurance Scheme for the urban population and Co-operative Medical System (CMS) for the rural population. The government-financed preventive care, which was usually provided free of charge.

Health reform efforts began in the mid-1980s and have gone through three phases. The first-stage reforms (from the mid-1980s to the end of 1990s) focused primarily on introducing market incentives. Adopting the strategy used to reform state-owned enterprises, the government reduced subsidies for hospitals and at the same time allowed them autonomy to earn income from sales of services and drugs (Wang and Wang 2007). Soon, hospitals began to tie compensation for their physicians to the revenues they generated, thus tacitly encouraging them to earn income by prescribing expensive and often unnecessary drugs and diagnostics (Liu and Hsiao 1995; Xu *et al.* 2010). In rural areas, 'barefoot doctors', who had formed the backbone of the rural healthcare system, became independent entrepreneurs who earned their livelihood by selling drugs.

At the same time as public provision was reduced, consumers' ability to pay for health care was undermined by weakening of social insurance. The healthcare insurance system began to

collapse when many state-owned enterprises closed down and many more lost the capacity to pay insurance premiums. Similarly, the dismantling of collective farms during the 1980s led to the demise of the CMS, leaving much of the rural population without any form of health insurance. As a result, coverage under all insurance schemes fell from 70% of the population in 1981 to 20% in 1993 (World Bank 2003).

Although the share of government expenditure in TEH declined from 40% to <20% following the early reforms, the TEH itself increased as a result of yet larger increase in private expenditures. Thus, TEH's share of GDP rose from ~3% in 1980 to 4.5% in 1998 (367.9 billion Yuan), at a time when the economy grew at a dizzying pace, while out-of-pocket's (OOP's) share of TEH rose from around 20 to 60%, as Figure 1 shows. Access to health care in poorer regions was particularly undermined, because fiscal decentralization devolved responsibility for healthcare without transfer of adequate funds. Because of the heavy burden of OOP on households and uneven access across regions, the healthcare system was ranked 188th out of 191 for fairness of financial contribution even though it came out 61st overall (WHO 2000).

The second phase of health reform began with the launch of the Urban Employees Basic Medical Insurance (UEBMI) in 1998. Participation is mandatory for all urban workers—public and private, formal and informal, current and retired—and contribution is set at 2% of the wages by the employee and 6% by the employer. However, there are varying levels of dilutions and exclusions, in addition to lax enforcement, for workers in ailing state enterprises and small private firms (see World Bank 2010a, pp. 7–11). UEBMI offers a comprehensive range of outpatient and inpatient benefits, but they vary across cities and occupational groups. Populations in poorer regions, weaker firms, or in informal employment receive considerably fewer benefits. In 2008, UEBMI covered 67% of the target population in some form (Barber and Yao 2010).

The launch of New Rural Co-operative Medical Insurance Scheme (NRCMS) for the rural population in 2003 and Urban Residents Basic Medical Insurance (URBMI) for the urban migrant workers as well as non-employed (children, students, elderly and disabled) in 2007 further expanded insurance coverage. Participation in both schemes is voluntary, but over 97% of the rural population has joined NRCMS and over 60% of the target population has joined URBMI. The premiums and benefits vary greatly across localities for both schemes, depending on local fiscal capacity and local leaders' policy preferences.

In addition to expanding insurance coverage, the government tried to control pharmaceutical costs, which accounted for one-half of TEH (Zhang *et al.* 2002). The problem lay in the government's efforts to maintain affordability through artificially low prices for essential drugs, which had the perverse effect of encouraging providers to prescribe and sell expensive and unnecessary drugs (Dong *et al.* 1999). In 2000, regulations allowing fixed markups at each stage of the production and distribution process were adopted. These were later replaced with fixed retail prices for essential drugs, though this change was found to make no difference in controlling spending on pharmaceuticals because it did not address the root cause of the problem (Meng, *et al.* 2005; Yu *et al.* 2010).

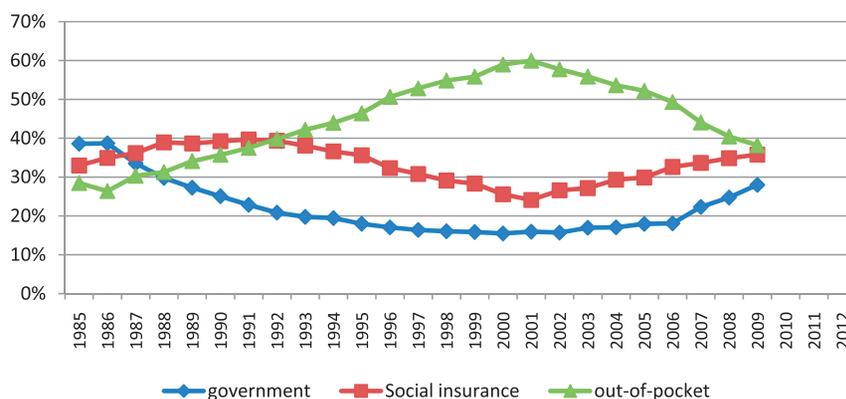


Figure 1 Share of total health expenditures. *Source:* 2010 China Health Statistic Yearbook, Beijing: China Union Medical University Press, p. 81

The second-stage reforms did little to alleviate the problem of healthcare affordability. The average bill for a single hospital admission in 2006 was almost equivalent to annual per capita income, and more than twice the average annual income of the lowest 20% of the population (Hu *et al.* 2008). In 2006, more than 35% of urban households and 43% of rural households said they had difficulty in affording health care (Hu *et al.* 2008).

Faced with deteriorating access and rising expenditures, in 2005 the government acknowledged that the earlier reforms had been a failure (Development Research Center 2005), and launched a third reform wave. In a 2009 policy document, 'Opinions on Deepening Pharmaceutical and Healthcare System Reform', the government asserted that access to health care is a basic right of citizens and that the responsibility for its provision rests ultimately with the state. The government committed \$125 billion over 3 years to the sector, with 46% for medical insurance initiatives, 47% for healthcare provision, and 7% for promoting public health. As a part of the larger economic stimulus in the face of global financial crisis, the government increased its health care spending from RMB 127 billion in 2009 to RMB 149 billion in 2010 and to RMB 173 billion in 2011 (http://www.gov.cn/english/official/2011-03/17/content_1826516_11.htm).

Although it is too early to assess the performance of this third-wave reform, contradictory trends are evident that should be a matter of concern. Insurance coverage has expanded tremendously, but so have expenditures (Ministry of Health 2010). Health insurance coverage increased from 15% of the population in 2003 to 90% in 2010, but the share of TEH contributed by insurance grew only marginally (http://www.chinadaily.com.cn/china/2011npc/2011-03/09/content_12144029.htm). Health insurance accounts for only 20% of TEH due to the various caps, deductibles and exclusions, in addition to many extra-legal and illegal payments (Blomqvist and Qian 2008; Dong 2008). Households on average spent 9% of their total spending on health care in 2009, which was a sharp rise from only 2% in 1990 (Ministry of Health 2010). Total expenditures on health continue to grow as well, as shown in Figure 2.

Health governance in China

A vast and rapidly growing literature, much of it inspired by welfare economics, explains the undesirable trends in the

performance of the Chinese health system in terms of misaligned incentives. An alternative vantage point for analysis is a health governance perspective, which concentrates on the institutionalized relationships primarily among government, providers and users/citizens (WHO 2007; Brinkerhoff and Bossert 2008; Balabanova *et al.* 2009; Savedoff 2011). These relationships distribute power, authority, and responsibility among the three sets of actors. Understanding the nexus of relationships, and the incentives they create, requires unpacking these three sets. Notably, the government is not a homogeneous unit and the relationships among different levels of government are important determinants of the governance structure. Similarly, the role of insurers is vital for health financing and service delivery. In the following discussion, we examine the relationships among different levels of government, the changing role of social insurance, and the power of providers to shape the outcomes of health reforms. We concentrate on the government's relationship with providers and users, and the providers' relationship with users.

Government

In China, there are five levels of government with significant healthcare responsibilities which greatly undermines the central government's capacity to fulfil its steering and stewardship functions. Urban and rural local governments are responsible for healthcare facilities under their jurisdiction, and receive little direction and even less funding from higher levels (Hsiao 1995; Bloom 1998; Huang 1999). The amount and quality of healthcare residents receive depends on their local governments' fiscal and administrative capacities, which vary vastly across the country (Targa *et al.* 2011). There is no mechanism for vertical co-ordination of hospitals at different levels, the patient referral system notwithstanding. In practice, patients visit any level they wish, and hospitals are only too happy to serve them for the revenues they bring.

Healthcare administration is fragmented not only vertically but also horizontally, and this is a significant reason for the many difficulties afflicting the sector (Gu and Zhang 2006; Huang 2009). At every level of government, the responsibility for health care is split across several agencies, each looking after its own and its constituency's interests rather than that of the sector or the society as a whole. At least 16 government agencies have significant healthcare responsibilities. Of these,

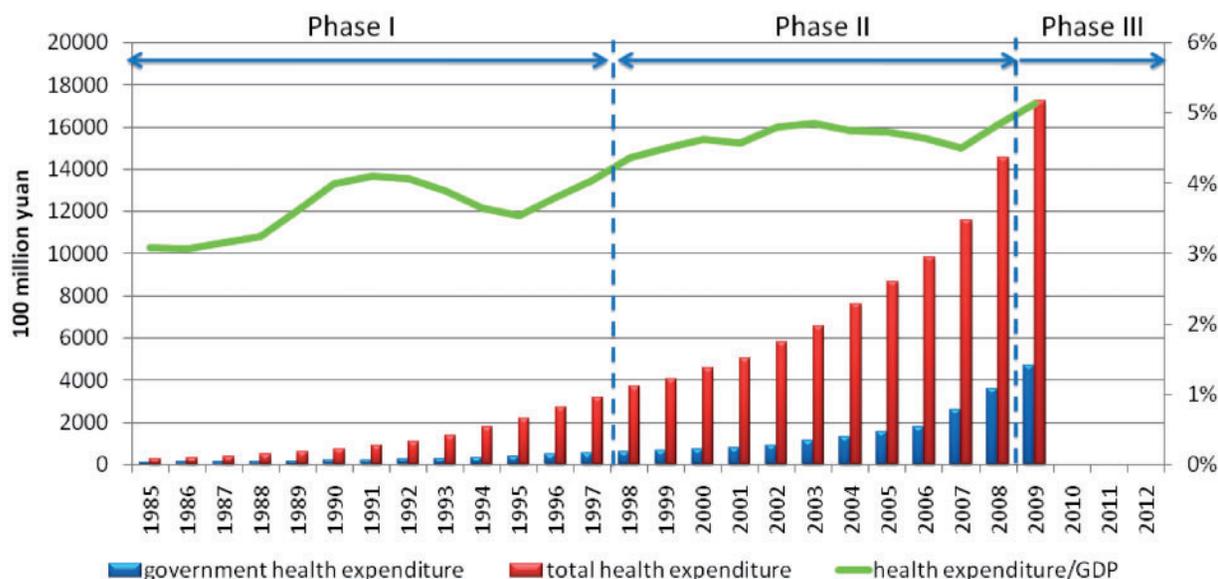


Figure 2 Healthcare expenditures in China. Source: 2010 China Health Statistic Yearbook, Beijing: China Union Medical University Press, p. 81

the most important are the Ministry of Finance, the Ministry of Human Resource and Social Security (MOHRSS), and the Ministry of Health (MOH). MOHRSS' role in health care expanded dramatically when the government awarded it (rather than MOH) the responsibility for managing UEBMI and URBMI with the explicit purpose of separating insurance from provision. MOH is responsible for making health policy, co-ordinating the provision of public health services, and overseeing state health facilities. It has had difficulty fulfilling its responsibility because of inadequate funding and low status within the government, coupled with widespread perceptions that it is too close to public hospitals to be able to serve users (Lieberthal and Lampton 1992; Hsiao *et al.* 1997; L Aitchison, unpublished data).

Administrative fragmentation is yet more pronounced at the provincial and local levels, with the provincial Bureau of Finance, Commission of Development and Reform, Bureau of Health, Bureau of Civil Affairs, Food and Drug Administration and Bureau of Labour and Social Security (BOLSS) playing significant roles in the healthcare sector. MOHRSS and its provincial and municipal counterparts run the two urban schemes while MOH and its subsidiaries manage the rural insurance schemes. The MOHRSS schemes themselves operate separately at provincial and municipal levels, each with their own insurance pools and benefit levels.

The vertical and horizontal fragmentations weaken the government's political control over the health bureaucracy which in turn allows the latter to cozy up to providers (Duckett 2001; Hsiao 2007). MOH is widely perceived as being overly sympathetic to public hospitals, its main client, and irresolute in enforcing government policies not to their liking. Indeed, Hsiao (2007) has argued that the MOH, hospital managers, and physicians form a 'medical axis-of-power' devoted to serving their own rather than the public interest.

The government's capacity to shape the sector is further undermined by the role of the Communist Party. Hospital managers are often prominent party officials, or are closely

connected to those who are prominent, which affords them opportunities to shape government priorities. When the government adopts measures controlling hospitals' behaviour in response to popular angst, the managers' party affiliations help to dilute their content and implementation (Chen 2011).

Government agencies' weak analytical capacity also hampers their ability to make sound policies and implement them effectively (World Bank 1994). For instance, the adverse effects of FFS and OOP have been known among health policy analysts since the 1960s, yet they were adopted by the Chinese government in the 1980s and broadened in the 1990s. Similarly, the futility of improving affordability through price controls has been known since the 1950s, yet these were applied to basic drugs and services in the 1980s. The misguided nature of these and other measures could have been anticipated if health officials had been familiar with the workings of healthcare markets. The analytical capacity of the health bureaucracy is particularly weak in provincial and local governments, the levels at which the details of health programmes are worked out and implemented.

Providers

In the health sector, providers are the masters of the domain due to deep market failures that privilege them vis-à-vis other actors (Bloom *et al.* 2001; Liu and Mills 2003). Neither the government nor the users have access to information sufficient to assess their performance, subject them to controls, or bargain with them. Providers are dominant due not only to their own innate strengths but also due to the governance weaknesses of the other actors.

Prior to the reforms launched in the 1980s, healthcare providers were relatively weak (L. Lampton, unpublished data). Mao Tse Tung held them in low esteem and ridiculed them as 'urban lords'. However, the reforms allowing them to earn directly from users finally turned the tide. What privatization started, decentralization completed; giving providers the

autonomy to pursue their interests relatively unencumbered by political interference.

The weakening of government control over providers has already been described. A similar effect resulted from the gradual demise of health insurance during the 1980s. While previous health insurance programmes were a mechanism for mobilizing resources from the population rather than modern insurance pools with active purchasing functions, they did provide some supervision and control over providers. Once they had disappeared amidst transition to market economy, virtually no mechanisms remained to monitor providers and hold them accountable (Tam 2008, 2010).

Users

In all health systems, users are usually the weakest pillar in the governance structure. Individually, they are powerless not only relative to governments but also providers. Collectively, they have some potential to affect the behaviour of both the government and providers, but find it hard to mobilize due to practical limitations of organizing. In China, the scope for collective action is particularly small due to various restrictions on civic and political activities. As a result, users interact with the health system as individual patients, almost entirely unaided by the government or insurance agencies, and, thus, are highly vulnerable to providers.

Government – provider

On the face of it, the government is in an exceptionally strong position to steer the sector because it owns and operates over 90% of hospitals, and hence has the legal authority to demand total compliance with its directives. Yet, the government finds it difficult to affect their behaviour due to the organizational and analytical limitations mentioned earlier. The health bureaucracy's capacity to demand information and enforce accountability is as weak as the providers' capacity to resist such demands is strong.

The government's capacity to supervise providers and guide their behaviour was seriously dissipated after it reduced subsidies for public hospitals, offered them autonomy to earn revenues from private sources, and, especially, tied managers' earnings to their success in generating revenues (Qian 2002). The arrangement not only exposed users to the demands of providers, it also weakened the government's leverage over the latter. As the government now accounted for <10% of public hospitals' revenues, the threat of further reduction as a penalty for non-compliance ceased to be a credible deterrent.

The government's weak fiscal leverage in the health sector is accompanied by similarly weak regulatory capacity. Organizational fragmentation and limited analytical skills combined with provider autonomy stymie government's ability to devise necessary regulations and enforce them effectively. The result is that providers can operate with minimal government supervision and control.

Government – users

The relationship between government and users is conditioned by the fact that there are no contested elections in which political parties or organized groups can raise controversial

policy issues. Nor is there political space for independent civil society groups to emerge to press demands on the government or hold it accountable. With citizens lacking voice in public affairs, health policies are made and implemented largely without public participation.

Yet, the government is sensitive to public sentiments because the Communist Party is ambitious to retain power and realizes that it must address people's pressing concerns if it is to succeed. Opinion surveys over the years have consistently shown deep and widespread unhappiness with the government's health policies. In a nationwide survey conducted in 2006, nearly 58% of the respondents ranked unaffordability of health care as their most important concern (Chinese Academy of Social Sciences 2007). Senior party leaders are aware that such sentiments weaken the government's legitimacy and undermine authority. At the 2006 Party Congress, Vice Premier Wu Yi offered an open apology for the unaffordability of health care and promised to do better. Many policy measures were subsequently adopted to improve access and affordability.

Providers – users

Providers are in a yet stronger position vis-à-vis users. The provider–user relationship is built on the providers' authority to prescribe treatment and receive FFS payments directly from patients. With active encouragement from the government, providers have used their position to maximize revenue from users.

Individual users are almost entirely powerless when dealing with providers, who have virtual monopoly over their purchase decisions. Users have no way to assess the value, or indeed even the need, for what they are purchasing, much less compare the supplied services with alternatives. While users may have alternatives in certain instances, such as when the service in question is standard and there are multiple suppliers—Lasik eye surgery, for example—in most instances they do not. In the vast rural hinterlands, there is usually only one supplier. Even when alternative suppliers exist, as in densely populated urban areas, users lack the capacity to compare price, quality and value. Without the information necessary to make rational purchase decisions, users have no choice but to leave it to providers to make decisions for them. Providers, for their part, use the position to advance their own interests.

Transformation of health governance and healthcare outcomes

Health reforms during the first phase of reforms in the 1980s and 1990s fundamentally altered governance arrangements in the sector that deeply affected performance and outcomes. The effects of the transformation were most evident in the deterioration of access and rising expenditures. Reform measures introduced in recent years in conjunction with broader social and political changes suggest potential for improvement. However, to succeed, reformers need first to understand and then address governance issues head on.

Figure 3 below offers graphic illustrations of health governance before and after reforms in the 1980s. The figure shows that the pre-reform governance arrangement consisted of

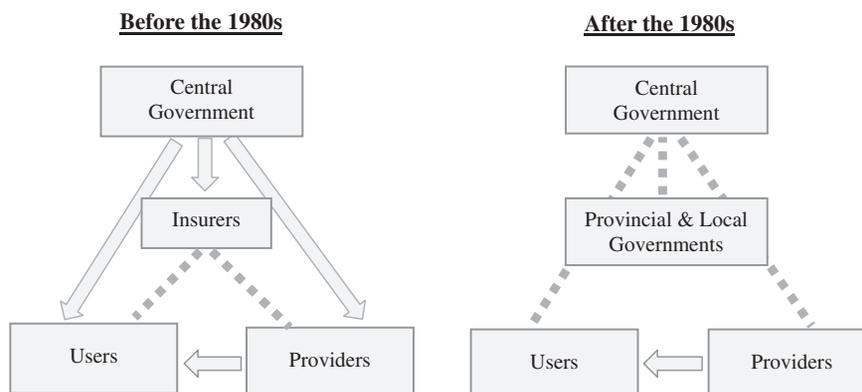


Figure 3 Transformation of health governance in China. Arrows indicate line of control. Dashed lines indicate weak relationship

providers, insurers and users tightly controlled and coordinated by the central government. The government had a direct line of control over insurers and providers, who in turn determined what services users received. This simple system, with all the limitations inherent to monopoly and centralization, ensured that most users received necessary services at affordable cost, as evident in the IMR and TEH data. There was little danger of price escalation or refusal of service because the government simply would not allow it, an objective it was able to fully achieve due to its complete dominance of the governance structure.

During the 1980s, economic privatization, increased provider autonomy, and government decentralization emasculated insurance, weakened supervision and fragmented responsibility for health, creating an unco-ordinated system dominated by providers. In the governance arrangement that emerged, little co-ordination occurred among the different levels of government on the one hand, and between the governments and providers on the other. Without effective government supervision or control, as depicted in Figure 3, providers completely dominated health governance. Their position allowed them to pursue their material self-interest at users' expense.

The autonomy to earn income from FFS payments played an especially critical role in reinforcing providers' position vis-à-vis users. FFS eminently serves the interests of providers because it offers them the means to concentrate on activities with the highest profit margins. Unlike capped and prospective payment systems (such as capitation, diagnosis-related group reimbursement and global budgets), FFS permits vast scope for increasing the volume and intensity of treatment, regardless of clinical needs because of purchasers' inability to determine their needs. The arrangement to pay providers based on the volume of services provided may work well in other sectors but has perverse effects in health care where providers enjoy massive advantages over consumers.

The dysfunctional effects of OOP and FFS are aggravated by a staff bonus system that encourages physicians to place their employing hospitals' and their own interests above those of users (Zheng and Hillier 1995). The practice of rewarding staff who generate revenues is a powerful determinant of their behaviour because on average it accounts for more than half of their income (Pei *et al.* 2000; Liu and Mills 2003). Given the

incentives, Chinese health care providers constantly search for new and innovative ways to maximize revenues from users. In the health care context characterized by extreme information asymmetries, they succeed spectacularly in their efforts while the users and the society at large lose out.

As in other countries, decentralization opened new opportunities for Chinese providers to pursue their interests (Bossert 2000; Mitchell and Bossert 2005). Over time, successive reforms expanded health providers' autonomy in most critical areas of operation, including purchasing, staffing, allocating resources, and paying staff bonuses (Blumenthal and Hsiao 2005; Gu and Zhang 2006). However, the form of decentralization that was adopted did not provide a mechanism for holding local governments accountable for delivering adequate health care on an equitable basis. Management autonomy also made the government dependent on hospitals for vital information necessary for regulating the sector, allowing providers to evade the already weak controls in place.

A new health governance emerging?

The innate dynamics of health markets favour providers in the absence of effective oversight and regulation. International experience shows that providers are more likely to serve the public interest rather than just their own when the government (in its capacity as owner, regulator and/or purchaser, as in Singapore and Thailand) or the insurer (in its capacity as bulk purchaser, as in Japan) make determined effort to shape their incentives to serve the public interest (Ramesh 2008b). In principle, users can check providers' behaviour through collective action, as disease/condition-specific social movements in OECD countries have had some success in influencing both health policy and provider practices. In developing countries, the track record is thinner, with the notable exception of HIV/AIDS groups.

The Chinese government's 2009 policy paper on healthcare reforms and the measures announced subsequently indicate significant departure from the past and offer reasons for guarded optimism. Notably, the document unequivocally acknowledges the *public* character of health care. The reconceptualization of health as a public rather than a private good will in future, if put in practice, constrain the behaviour of providers

who have in recent decades treated it as a private service to be offered on a commercial basis. No less significantly, the document recognizes access to health care as a basic right of citizens. By recognizing health care as a right, the government has implicitly accepted a heavy responsibility and is hence likely to pay greater attention to issues of costs because in future it, and not users alone, will have to pay for inefficiencies in the sector.

Another significant change is the rapid expansion of health insurance coverage under the UEBM, URBM and NRCMS. While the depth of coverage is still shallow, the government has set the objective of deepening it considerably in the near future. The expansion and deepening of insurance coverage will not only improve users' capacity to pay for health care, it will also strengthen the government's position in governance. Insurance funds are large repositories of information that the government can access, which will reduce its reliance on providers. More importantly, insurance funds will have enhanced opportunities for using their expanded purchasing power to negotiate better terms of service for their members, something users themselves are unable to do individually.

Other reforms at various stages of planning or adoption have the potential to make a significant difference in the long run. The most important among them are attempts to adopt capped or prospective payment systems. The government began promoting a 'case-based payment' system (a variant of DRG that fixes rates for each disease) in 2004 and within 3 years, it was in use at nearly one-quarter of all hospitals (World Bank 2010b). However, they cover only a small number of diseases and the set prices are based on historical record rather than actual costs. Many provincial and municipal governments are trying some sort of 'Separating Revenue and Expenditure Accounting System' which de-links providers' income from the revenues they generate. Preliminary evaluation of the payment reforms shows positive results, even though overall expenditures have declined as a result (World Bank 2010b).

High and rising drug prescription at inflated prices is a major problem that the government is struggling to address. To prevent collusion between hospitals and manufacturers in rigging prices and overcharging consumers, the government has recently introduced a centralized drug procurement scheme involving competitive bidding at the municipal level. It is expected to lower prices through increased leverage in price negotiation and reduction in intermediary distributor costs (World Bank 2010a).

Social and technological changes may also be strengthening users' position in health governance. The spread of internet usage has allowed the Chinese population to voice its concerns despite government efforts to muzzle them. Public protests against gross injustices, such as land grabs by developers and police brutality, have provided a platform for the population to raise other concerns. Citizens' anxiety about health care has not gone unnoticed by the government and is behind its renewed attempts at reform.

Improvements in information technology are also making it possible to package and present information on health care prices and outcomes that could empower users to compare services and choose those that best meet their needs. Moreover, technology makes it possible for the government to audit

irregularities in hospitals' billing practices and hold them accountable. The accumulation of patient- and practice-level data as a result of expansion of insurance coverage will make it easier for the government to audit providers' performance and, as a corollary, supervise and control them.

The health governance arrangement that appears to be emerging is depicted in Figure 4. The lines of control and accountability are still in flux and it is as yet not clear what the various actors' final standing will be in the emerging governance structure. What is known is that the new governance structure will be more complex. Notably, it will include health insurers as important actors with the potential to exercise significant influence and power over both providers and users, evident in the nascent efforts to expand capped payment for providers. Similarly, but to a considerably lesser extent, users may have stronger voice in influencing government policies. The central government too is flexing its regulatory authority and has imposed or is contemplating stronger controls over providers, evident in the recent drug price reforms. The weak link in the emerging governance structure is provincial and local governments, many of whom remain singularly devoted to pursuing economic growth and are yet to take their health care responsibilities seriously. However, some provinces have begun to pay close attention to health care, knowing that they are being watched by central authorities and their overall performance will be judged partly on the basis of their record in managing the healthcare sector.

However, it is far from certain that the latest reforms will succeed. Indeed, many features that lay at the root of the ills of the previous system continue to exist and they are likely to continue to thwart achievement of the reform objectives. First, OOP payments are large and will remain substantial even for those covered by insurance. The problem of access will not be alleviated until the burden of OOP payment is lightened. Second, FFS continues to be the dominant payment mechanism. The partial adoption of prospective and capped payment methods allows hospitals to misclassify cases under categories paid on a FFS basis (World Bank 2010b). Third, the health bureaucracy lacks organizational and analytical capacity to assert authority over providers, as evident in the repeated failed efforts to control drug prices. Fourth, health insurers' performance to date does not inspire confidence that they have the capacity to protect and promote users' interest against providers. The fragmentation of insurance schemes and the different contribution and benefit levels reinforce their weakness, which are likely to persist into the future without efforts to strengthen their capacity. Fifth, there is no evidence suggesting that the government is committed to employing information technology to empower users or strengthen its own regulatory capacity. Sixth, most provincial and municipal governments, which are key actors in health governance, continue to concentrate on economic growth and have shown only perfunctory interest in health reforms. Finally, a massive imbalance remains between the power, resources, and responsibilities of users and providers, which allows the latter to evade accountability. The population's limited capacity to pressure the government only aggravates their weakness vis-à-vis providers.

Preliminary evidence on the effects of the most recent reforms is disheartening and suggests that the intended improvements

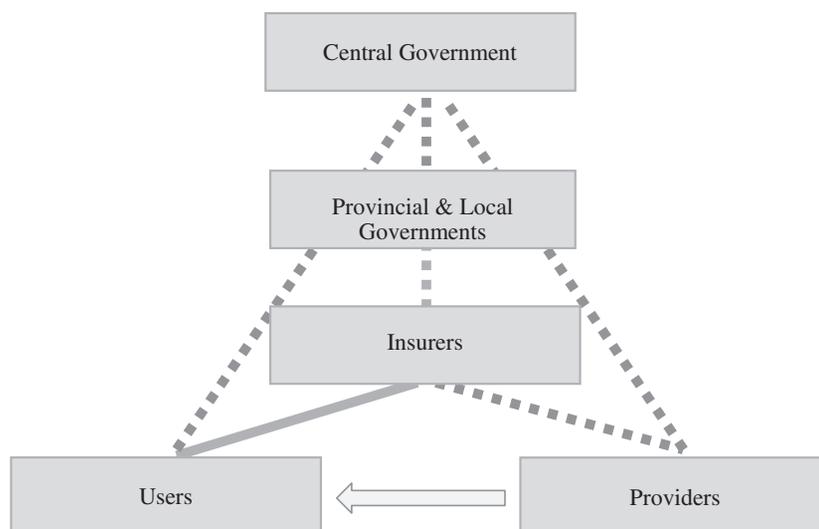


Figure 4 *Emerging health governance in China.* Arrows indicate line of control. Solid line indicates strong relationship. Dashed lines indicate weak relationship

may not materialize. A recent survey by Gao (2011) found that insurance coverage has done little to improve access. Disturbingly, the survey found that 30% of NCMS enrollees did not seek health care due to fear of the costs involved. Similarly, Jung and Liu (2011) found that the incidence of catastrophic health expenditures is actually higher for the insured compared to the non-insured, possibly because the latter avoid hospitalization altogether. The government's recent efforts to reform abuse of price control on drugs have also come to naught (Sun *et al.* 2008; Xiao and Zheng 2008). A government-sponsored survey found widespread gaming of the policy whereby hospitals falsely declare many drugs as being 'out of stock', which allows their substitution with expensive imported or 'new' drugs (World Bank 2010b). The practice shows both corruption on the part of hospital managers as well as low government capacity to enforce rules. There is also no evidence of reduction in kickbacks physicians receive from pharmaceutical firms for prescribing their products (Yip and Hsiao 2008).

More significantly, there is little evidence that health insurance funds are using their newly expanded roles as purchasers and third-party payers to improve the sector's performance. UEBM, URBM and NRCMS schemes do not typically bargain with providers for lower prices and conduct limited monitoring of service quality and provider behaviours (Li *et al.* 2011). The low administrative capacity of MOHRSS is believed to strongly constrain its capacity to discharge its statutory obligations (Chen and Shi 2010). Its main concern has been to build up the insurance pool and avoid deficit rather than to improve access to health care (Hsiao 2007). This may change in the future as the insurance funds gain more experience and accumulate more information, but this is still only a hope at present.

Conclusion

After two decades of market-oriented reforms, China's poor performance in health care fuelled intense debate over the

appropriate roles of government and market during the late 1990s. Proponents of a government-led health system pointed to mounting evidence of pervasive market failures in the sector and called on the government to play a central role in the financing and provision of health care. Proponents of market-led health system countered that the root cause of the problem lay in excessive political interference in the healthcare market and called for further privatization. Such abstract debates have served little practical purpose. Worldwide experience demonstrates that there is place for both market competition and government control in health care and that policy efforts should concentrate on aligning their functions to correspond with their innate capabilities and co-ordinating the interactions among them.

Our analysis shows that the failure of health reforms was in part due to inadequate attention to strategic interactions among government, providers, and users and the limited understanding of incentives shaping their preferences and behaviour. First, Chinese policy-makers were caught off-guard by the deep transformation in health governance brought about by the first phase of reforms. The rapid emergence of profit-oriented services unchecked by government controls fostered conditions for providers to exploit market failures to advance their pecuniary interests at the expense of users, thus undermining the entire health system.

Second, reform efforts have focused narrowly on realigning the relationship between government and providers and neglected other important relationships, such as between providers and users and between providers and insurers. Although providers are in a strong position vis-à-vis users in all countries, the latter are in a particularly weak position in China due to lack of opportunities for collective action. OOP payments by users account for three-fifths of total health expenditures, yet they have no opportunity to affect providers' behaviour due to vast information asymmetries in the latter's favour. Users' weakness vis-à-vis providers is aggravated by the population's limited ability to pressure the government to protect them, and by the government's weak regulatory capacity.

Third, discussion on healthcare reforms have paid insufficient attention to the close link between market power and payment and financing mechanisms. FSS and OOP financing persist despite their known adverse effects because they serve the interests of the dominant party in the governance triumvirate, the providers. The payment system is unlikely to be reformed until the relative position of the government and/or users in the governance arrangement is strengthened.

If the most recent wave of health reforms is to succeed, the central government needs to enhance its own governance capacity and play a larger role in steering provincial and municipal governments. No less importantly, the position of insurers and users in health governance needs to be strengthened if the hitherto unchecked dominance of providers is to be curbed.

References

- Balabanova D, Oliveira-Cruz V, Hanson K. 2009. *Health Sector Governance and Implications for the Private Sector*. Washington DC: Results for Development Institute.
- Barber SL, Yao L. 2010. Health Insurance Systems in China: A Briefing Note. World Health Report (2010) Background Paper 37. Available at http://www.who.int/healthsystems/topics/financing/healthreport/37ChinaB_YFINAL.pdf, accessed 5 August 2010.
- Blomqvist A, Qian J. 2008. Health system reform in China: an assessment of recent trends. *Singapore Economic Review* **53**: 15–26.
- Bloom G. 1998. Primary health care meets the market in China and Vietnam. *Health Policy* **44**: 233–52.
- Bloom G. 2011. Building institutions for an effective health system: lessons from China's experience with rural health reform. *Social Science and Medicine* **72**: 1302–9.
- Blumenthal D, Hsiao WC. 2005. Privatization and its discontents—the evolving Chinese health care system. *New England Journal of Medicine* **353**: 1165–70.
- Bossert T. 2000. *Guidelines for Promoting Decentralization in Latin America*. Cambridge: Harvard School of Public Health. <http://www.hsph.harvard.edu/ihsig/publications/pdf/lac/DecentralizationGuide-final4.PDF>. Accessed 5 August 2011.
- Brinkerhoff DW, Bossert TJ. 2008. *Health Governance: Concepts, Experience, and Programming Options*. Health Systems 20/20. Washington, DC: USAID. <http://www.healthsystems2020.org>. Accessed 5 August 2011.
- Cao H, Fu J. 2005. Twenty years' Health Care Reform in China. South Weekend, 4 August 2005 (in Chinese). Available at <http://big5.southcn.com/gate/big5/www.southcn.com/weekend/commend/200508040002.htm>.
- Chen M. 2011. A study on corporate governance of public hospitals in China. *Chinese Journal of Hospital Administration* **27**: 37–44 (in Chinese).
- Chen X, Shi X. 2010. Building competition of health insurance agencies. *Chinese Health Economics* **29**: 15–7 (in Chinese).
- Chinese Academy of Social Sciences. 2007. *Chinese Society in 2007: Analysis and Forecast*. Beijing: Social Sciences Academy Press (in Chinese).
- Development Research Center. 2005. An assessment of health care reforms in China. *China Development Review*, **7**(Suppl) (in Chinese).
- Dong H, Bogg L, Rehnberg C, Diwan V. 1999. Drug policy in China: pharmaceutical distribution in rural areas. *Social Science and Medicine* **48**: 777–86.
- Dong W. 2008. Cost containment and access to care: the Shanghai Health Care Financing Model. *Singapore Economic Review* **53**: 27–41.
- Duckett J. 2001. Political interests and the implementation of China's urban health insurance reform. *Social Policy and Administration* **35**: 290–306.
- Gao J. 2011. Accessibility to care under three major health insurance schemes. *Chinese Health Economics* **30**: 19–21 (in Chinese).
- Gu E, Zhang J. 2006. Health care regime change in urban China: unmanaged marketization and reluctant privatization. *Pacific Affairs* **79**: 49–72.
- Hsiao WC. 1995. The Chinese Health Care System: lessons for other nations. *Social Science and Medicine* **41**: 1047–55.
- Hsiao WC. 2007. The political economy of Chinese health reform. *Health Economics, Policy and Law* **2**: 241–9.
- Hsiao WC. 2008. When incentives and professionalism collide. *Health Affairs* **27**: 949–51.
- Hsiao WC, Jamison DT, McGreevey WP, Yip W. 1997. *Financing Health Care: Issues and Options for China*. Washington, DC: World Bank.
- Hu S, Tang S, Liu Y, Zhao Y, Escobar M, de Ferranti D. 2008. Reform of how health care is paid in China: challenges and opportunities. *The Lancet* **372**: 1846–53.
- Huang Y. 2009. An institutional analysis of China's failed healthcare reform. In: Wu G, Lansdowne H (eds). *Socialist China, Capitalist China: Social Tension and Political Adaptation under Economic Globalization*. New York: Routledge.
- Jung J, Liu J. 2011. Does health insurance decrease health expenditure risk in developing countries? The case of China. <http://www.towson.edu/econ/workingpapers/2011-04.pdf>, accessed 5 August 2011.
- Li C, Yu X, Butler J, Yiengprugsawan V. 2011. Moving towards Universal Health Insurance in China: performance, issues, and lessons from Thailand. *Social Science and Medicine* **73**: 359–66.
- Liberthal K, Lampton D. 1992. *Bureaucracy, Politics and Decision Making in Post-Mao China*. Berkeley, CA: University of California Press.
- Liu X, Hsiao W. 1995. The cost of escalation of social health insurance plans in China: its implications for public policy. *Social Science and Medicine* **41**: 1095–101.
- Liu X, Mills A. 2003. The influence of bonus payments to doctors on hospital revenue: results of a quasi-experimental study. *Applied Health Economics and Health Policy* **22**: 91–8.
- Ma J, Lu M, Quan H. 2008. From a national, centrally planned health system to a system based on the market: lessons from China. *Health Affairs* **27**: 937–48.
- Meng Q, Cheng G, Silver L, Sun X, Rehnberg C, Tomson G. 2005. The impact of China's retail drug price control policy on hospital expenditures: a case study in two Shandong hospitals. *Health Policy and Planning* **20**: 185–96.
- Ministry of Health. 2010. *China Health Statistic Yearbook*. Beijing: China Union Medical University Press.
- Mitchell A, Bossert T. 2005. International experiences in hospital autonomy and revenue generation: lessons for the Philippines. <http://www.hsph.harvard.edu/ihsig/publications/pdf/LEAD-HospitalAutonomization2-AMtjb.pdf>, DRAFT 15 August 2005.
- Pei L, Legge D, Stanton P. 2000. Policy contradictions limiting hospital performance in China. *Policy Studies* **21**: 99–113.
- Qian Y. 2002. *How Reform Worked in China*. Discussion Paper No. 3447. London: Center for Economic Policy Research.
- Ramesh M. 2008a. Reasserting the role of the state in the healthcare sector: lessons from Asia. *Policy and Society* **27**: 129–36.
- Ramesh M. 2008b. Autonomy and control in public hospital reforms in Singapore. *American Review of Public Administration* **38**: 62–79.
- Savedoff W. 2011. *Governance in the Health Sector: A Strategy for Measuring Determinants and Performance*. Policy Research Working Paper No. 5655. Washington, DC: World Bank.

- State Bureau of Statistics. 2008. *Bulletin of 2007 National Survey on Social Security* (in Chinese). Bureau of Statistics, Beijing.
- Sun Q, Santoro MA, Meng Q, Liu C, Eggleston K. 2008. Pharmaceutical policy in China. *Health Affairs* **27**: 1042–50.
- Tam W. 2008. Failing to treat: why public hospitals in China do not work. *The China Review* **8**: 103–30.
- Tam W. 2010. Privatising health care in China: problems and reforms. *Journal of Contemporary Asia* **40**: 63–81.
- Targa B, Hipgrave D, Brixi H, Mu Y. 2011. *Equity and Public Governance in Health System Reform Challenges and Opportunities for China*. Policy Research Working Paper No. 5530. Washington, DC: World Bank, East Asia and Pacific Region.
- Wagstaff A, Lindelow M. 2008. Health reform in rural China: challenges and options. In: Lou J, Wang S (eds). *Public Finance in China: Reform and Growth for a Harmonious Society*. Washington, DC: World Bank, p. 976.
- Wang Y, Wang W. 2007. Escalation in health expenditure and difficult access to care in China. In: Chen J, Wang Y (eds). *Development of Social Security in China: Health Services and Protection in Transformation*. Beijing: Social Science Academic Press (in Chinese).
- WHO. 2000. *World Health Report 2000*. Geneva, Switzerland: WHO.
- WHO. 2007. *Everybody's Business: Strengthening Health Systems To Improve Health Outcomes. WHO's Framework for Action*. Geneva, Switzerland: WHO.
- World Bank. 1994. *China: Long-Term Problems and Countermeasures in Health Care Transition*. Beijing: China Finance & Economics Press (in Chinese).
- World Bank. 2003. *World Development Report 2004. Making Services Work for Poor People*. Washington, DC: World Bank.
- World Bank. 2010a. *Financing, Pricing and Utilization of Pharmaceuticals in China: the Road to Reform*. China Health Policy Notes No. 1. Washington, DC: World Bank.
- World Bank. 2010b. *Health Provider Payment Reforms in China: What International Experience Tells Us*. Working Paper No. 58414. Washington, DC: World Bank.
- Xiao Y, Zheng D. 2008. Causes and countermeasures on high drug prices. *Chinese Pharmaceutical Affairs* **22**: 751–55 (in Chinese).
- Xu H, He J, Zheng K, Kwan H. 2010. The Chinese healthcare system. In: Johnson J, Stoskopf C (eds). *Comparative Health Systems: Global Perspective*. Boston, MA: Jones & Bartlett.
- Yip W, Hsiao WC. 2008. The Chinese health system at a crossroads. *Health Affairs* **27**: 460–8.
- Yu X, Li C, Shi Y, Yu M. 2010. Pharmaceutical supply chain in China: current issues and implications for health system reform. *Health Policy* **97**: 8–15.
- Zhang R, Hu S, Zhang Y. 2002. A review of drug prices issues. *Chinese Hospital Administration* **18**: 646–8 (in Chinese).
- Zhang X, Chen LW, Mueller K, Yu Q, Liu J, Lin G. 2011. Tracking the effectiveness of health care reform in China: a case study of community health centers in a district of Beijing. *Health Policy* **10**: 181–8.
- Zheng X, Hillier S. 1995. The reforms of the Chinese Health Care system: county level changes: the Jiangxi Study. *Social Science and Medicine* **41**: 1057–64.
- Zheng Y. 2006. *De Facto Federalism in China: Reforms and Dynamics of Central-Local Relations*. Singapore: World Scientific.