

**Title:** Building institutions for an effective health system: lessons from China's experience with rural health reform

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**Building institutions for an effective health system:  
Lessons from China's experience with rural health reform**

**Gerald Bloom**

**Abstract**

This paper is concerned with the management of health system changes aimed at substantially increasing access to safe and effective health services. It argues that an effective health sector relies on trust-based relationships between users, providers and funders of health services, and that one of the major challenges governments face is to construct institutional arrangements within which these relationships can be embedded. It presents the case of China, which is implementing an ambitious health reform, drawing on a series of visits to rural counties by the author over a ten year period. It illustrates how the development of reform strategies has been both a response to the challenges arising from the transition to a market economy and the result of actions by different actors, which have led to the gradual creation of increasingly complex institutions. The overall direction of change has been strongly influenced by the efforts by the political leadership to manage a transition to a modern economy which provides at least some basic benefits to all. The paper concludes that the key lessons for other countries from China's experience with health system reform are less about the detailed design of specific interventions than about its approach to the management of institution-building in a context of complexity and rapid change.

**Introduction**

The Chinese government is implementing an ambitious health system reform aimed at achieving rapid increases in access to safe and effective health services (CCCPC 2009). This experience is attracting a lot of international attention because of China's size, its very rapid economic growth and the speed of the developments in the health sector

(Wagstaff et al 2009a&b). There is a growing interest amongst policy analysts in learning from China's experience.

Much discussion of China's health reforms focuses on particular interventions, such as rural health insurance or the role of village doctors. In exploring the applicability of these approaches to other countries, it is useful to keep in mind the findings of a recent review of the factors that have contributed to successful national efforts to improve health service delivery in low and middle-income countries (Peters et al 2009). It concluded that the specific design of an intervention was much less important than the way the change process was managed. This paper explores China's health reforms from this perspective, situating them in the context of the transition to a market economy with increasingly complex institutional arrangements. It uses a case study approach to both provide a deeper understanding of China's health reform process and generate lessons for countries wishing to learn from this experience (Bennett and Elman 2006).

The case study draws on the author's observations during twice yearly visits to rural counties in ten provinces between 1996 and 2006, while a member of the supervision team of a large rural health development project financed by the Chinese Government, a World Bank Credit and a grant from the UK Department for International Development. This project was used by the government to build its understanding of the situation in poor rural counties and test strategies for potential inclusion in its health development strategy (MoH 2007). These visits provided an opportunity to observe aspects of the iteration between national policy and local implementation. In preparing this analysis the author took into account the possible influence on his perceptions of his role in the project and triangulated his analysis with that of others (Bloom, Liu and Qiao 2009). He supplemented these observations through research visits to several rural counties to review documents and interview key informants.

## **Focus of analysis**

This section outlines an approach for analysing the creation of institutional arrangements for health in the context of rapid change.

### *Institutions*

Studies of the development experience of different countries and of attempts to transfer organisational arrangements between countries have led to an acknowledgement of the influence of institutions on the performance of organisations. Recent books by North (2005) and Fukuyama (2004) emphasise the role of formal and informal rules, behavioural norms and shared expectations about ethical behaviour for the functioning of complex market economies. North argues that the degree to which a country can support sophisticated sectors, in which actors rely on agreements between each other and over time, depends on the development of these institutions. Without appropriate institutions, he argues, societies may fail to make economic progress. He argues, for example, that China has created appropriate incentives for key actors in its emerging market economy, but that it will need to strengthen its rules-based institutions for tasks requiring high levels of trust between organisations and between organisations and the population.

Health systems are organised to make the benefits of powerful and potentially dangerous technologies widely available and protect people against the high cost of illness and death. Their capacity to achieve this is strongly influenced by the institutional arrangements within which they are embedded (Bloom et al 2008). Tibandebage and Mackintosh (2005) argue that rules and sanctions are usually complemented by implicit agreements between stakeholders, and emphasise the influence on performance of shared understandings, such as the service ethic of health workers. Bloom et al (2008) characterise the combination of formal and informal rules and understandings as an implicit contract, which underpins the effective functioning of a health system. These arrangements make possible the agreements necessary for translating expert knowledge into trusted and trustworthy services and managing social arrangements for health finance. In their absence, health sector actors rely predominantly on market relationships and informal institutions. This can lead to a low efficiency, low trust trap, in which individuals invest a lot of effort to find competent and ethical providers of health-related goods and services, risk paying for inappropriate treatment and drugs and rely

on their own resources to finance medical care. In this circumstance many people benefit very little from health-related technologies, although they may spend a lot of money on medical care.

Several recent books about China's development argue that the government is paying increasing attention to the creation of institutions to support complex economic and social arrangements as its priority has shifted from encouraging a rapid expansion of production based on low cost and largely unskilled labour to the creation of a modern society capable of meeting a wide variety of the population's needs (Yang 2004; Tsai 2002&2007; Huang 2008). These authors focus on China's creation of a regulatory framework to support a safe and efficient financial sector. Tam and Yang (2005) extend this analysis to that of food safety and this paper extends it to the health sector.

### *History*

A number of analysts argue that health systems are highly path dependent, being built through an accretion of institutional arrangements that support complex relationships between different actors (Wilsford 1994; Altenstetter and Busse 2005). Thelen (2003) identifies several factors that influence institutional development, including learning by leaders in government and key organisations to play their roles effectively, the outcomes of interest group contestation and cultural norms and ethical beliefs that underpin the functioning of institutions. This history has made health systems resistant to radical change. A big modification to institutional arrangements can have substantial short-term costs, with major political consequences, as actors learn their new roles and internalise new rules of the game, including changes in the balance of benefits between interest groups.

Although it is widely accepted that low and middle-income countries do not need to retrace the development paths of the advanced market economies, there is little systematic understanding of how to create "modern" institutions in countries with different social and economic contexts. Many post-colonial and post-revolutionary regimes adopted a state-led strategy for overcoming shortages and establishing a modern health sector. Some succeeded, but many others failed and their investments and efforts resulted in the creation of pluralistic health systems with widespread and largely unregulated markets (Bloom & Standing 2001). There is little systematic theory to

explain this unintended outcome, understand the performance of these markets and identify strategies for improving their performance. Studies that link health policy to broader development strategies can contribute to this understanding. Two examples are the analyses of the emergence of national health insurance in East Asia (Kwon 2005) and Ghana (Agyepong and Adejei 2008). This paper employs a similar approach to explore the inter-relationship between the evolution of the institutional arrangements for a market economy and the strategies for health system reform in China.

### *Narratives*

The way policy questions are posed influences the options from which policy makers choose. There has been a tendency to frame health policy debates in terms of choices between idealised modes of finance and payment mechanisms. The focus on formal arrangements has diverted attention from many influences on behaviour. This, in turn, has distracted attention from alternative ways of solving problems and from the factors that influence the path of institutional development.

The need to implement large interventions in contexts of complexity and rapid change is not the preserve of health. A recent book by Leach, Scoones & Stirling (2010) explores similar challenges for global efforts to support sustainable development. They argue that it is impossible fully to understand and model the complex interactions between the environment, people, organisations and social institutions that constitute dynamic systems. They suggest that large organisations and powerful experts tend to “frame” a challenge in ways that reduce the need to recognise complexity and uncertainty and enable them, thereby, to define and manage large scale responses. They use the concept of “*narratives*” to explore the alternative understandings that actors in policy processes construct to enable them to work together coherently in implementing rapid change. This paper explores alternative narratives that have emerged to explain China’s health reform

### **Narratives of health system change**

#### *Insurance, tax and universal access*

There is a large body of evidence that health services funded from taxes or compulsory insurance provide more equitable access to care and protect households more

effectively against deleterious livelihood impacts of major illness (O'Donnell et al 2008). Despite this evidence, many health systems rely heavily on user charges and informal arrangements for social protection. One explanation is that policy makers do not have an adequate understanding of this evidence. Another relates to the impact on the possibilities for health finance when the government's capacity for managing public resources and its willingness to do so in the public good are limited (Agyepong and Adjei 2008).

The dominant narrative about China's rural health finance reforms is that during the early years of the transition to a market economy policy-makers mistakenly believed that unregulated markets could provide equitable access to effective health services but they were eventually convinced by the weight of evidence that an alternative approach was needed. There is little doubt that the collection of evidence about the problems was important (Zhang et al 2009; Wang 2008; Wagstaff et al 2009a), but there is another narrative deriving from an understanding of China's management of a transition to a market economy and an acknowledgement of the complex issues policy-makers face in reconciling conflicting interests, sequencing reforms and avoiding unintended outcomes (Meessen and Bloom 2007). Duckett (2011), for example, explores the political factors that led the government to play a diminishing role in health finance from the beginning of the transition to a market economy until the early 2000s.

During the 1980s and 1990s China's development strategy relied on radical decentralisation of financial management to local governments and individual enterprises. This created strong incentives for local economic growth (Oi 1999, Huang 2008). The tax system mirrored this arrangement, with each level of government responsible for collecting taxes and with higher levels of government providing only modest fiscal transfers between rich and poor localities (World Bank 2000). This encouraged self-reliance and limited the incentives for excessive expansion of public sector employment. However, it also led to a growing disparity between localities in the levels of per capita expenditure and service delivery (Hussain and Stern 2008).

One consequence of decentralisation was that higher levels of government had little direct control over the behaviour of local governments. During the 1990s there were a number of local protests against high taxes and informal levies, which were widely

believed to be used mainly in the interest of government officials (Wedeman 2000; Bernstein and Lu 2000). During the mid-1990s the central government set a ceiling on local taxes and early the next decade it abolished agricultural tax. This response to growing popular resistance to unfair taxes was a sign of the limited capacity of central government to make local governments accountable for their use of public funds.

Meanwhile, health facilities were experiencing financial problems (Wagstaff et al 2009b). By the early 1980s most of the cooperative medical schemes (CMS), which had played an important role in financing health systems during the period of the command economy, had collapsed. Rises in local government health budgets lagged behind the expectations of health workers for more pay. Rural health facilities found it particularly difficult to meet the expectations of qualified doctors, because a significant proportion of their employees had found jobs during the Cultural Revolution, when training schools were closed. This aging workforce had little formal training, nevertheless, the government faced strong political constraints against making them redundant. Rural health facilities had to pay their salaries out of their limited budgets and, therefore, could not pay competitive salaries to skilled personnel.

The Ministry of Health lobbied for more government funding and for the introduction of compulsory health insurance. The Central Government resisted the former since it was not confident that funds would be used well, and the latter, because it did not want to impose what might be seen as another unfair tax. The Ministry of Agriculture, which tended to see its role as protecting the interests of farmers, was opposed to compulsory health insurance (Du 2000). This was understandable, given the pressure on health facilities to pay the salaries of many unqualified practitioners, who provided little benefit to the population. The Ministry of Health protected the interests of its facilities and their employees by enabling them to generate revenue by selling drugs and charging for services (Duckett 2011).

The organisations responsible for public health services also experienced financial problems, despite a government commitment to fund them fully. They had to meet the rising expectations of their employees. They expanded revenue generating activities, such as charging for certain public health services and providing additional services. In



some localities this compromised their provision of core public health functions (Shu and Yao 1997).

The Central Government convened a national meeting on health reform in 1996 and issued a policy document early the next year (CCCPC 1997). The policy encouraged local governments to experiment with the re-establishment of CMS and outlined measures to improve the performance of grassroots health facilities and slow the rise in the cost of care. During the next few years, the central government financed significant investments in health facilities, but did not substantially increase recurrent funding of health services.

During the 1990s the government attempted to make local administrations more accountable through routine reviews by the Communist Party of the performance of local government leaders (Huang 1995), a series of anti-corruption drives and the organisation of village elections. It also introduced reforms to human resource management, including competitive appointment of health facility managers (MoH 2007). By the early 2000s the cohort of health workers hired during the Cultural Revolution were reaching retirement age and the output of training colleges had increased. Health facilities had to support fewer untrained personnel and tended to be more successful in recruiting trained health workers. These measures made it more likely that increases in government health budgets would provide commensurate benefits to the population.

In 2002 a new government came to power, which substantially changed the objectives of development to give greater priority to spreading the benefits of economic growth and establishing effective social services. One important policy change was the acceptance of the need substantially to increase the size of fiscal transfers to subsidise social services in poor localities. The government announced it would provide direct budgetary support for new CMS (NCMS), if local governments and households would each match its contribution (CCCPC 2002). Over the next few years the schemes spread to almost every county and the government increased its contribution substantially (Wagstaff et al 2009a). The government established NCMS management and supervision committees. These committees tended to focus on ensuring that funds were used for the agreed purpose and that benefits were distributed according to the rules, reflecting the overriding concern with accountability for public funds. They have given less attention to the

cost-effectiveness of the benefits or to equity concerns. This may change as problems arise and receive publicity in the media and as the Ministry of Finance takes a greater interest in the impact on health and access to health services of greatly increased public expenditure on health.

It is easy to identify “design flaws” of NCMS schemes, such as their reliance on voluntary contributions. This flaw looks different, when NCMS is regarded as an innovation in the management of public finance - a fiscal transfer to county governments earmarked for health on condition that local governments provide matching funds and beneficiary households also make a modest contribution (now only 20 percent of the total). Household contributions are voluntary, but households are under considerable pressure to join, since local governments have big incentives to achieve high coverage rates. Some people have resisted, despite the large government contribution. One factor may be the low level of trust between farmers and some local governments. In a county, which the author visited in Guangxi Province in 2006, for example, the previous collapse of an agricultural loan scheme had made people wary of putting money into a government scheme. A number of counties have introduced household accounts into which individuals pay their contributions and then draw them down to fund minor purchases. This is not an efficient design for risk-sharing, but if the main aim has been to build trust in a new institution it is understandable that people should begin with this kind of contribution. Two measures of success with institution-building will be the willingness of individuals to shift their contribution to a risk pool and the degree to which the current focus on financial audit is expanded to include the distribution of benefits between different groups (in terms of income, location, age, type of disease and so forth) and the scheme’s impact on social protection and health.

### *Rules, norms and corruption*

The functioning of most organisations relies on the existence of rules of behaviour that enable people to make decisions based on an expectation of how others are likely to behave (Lewis 2006). In some countries, there is an identity between legal rules and popular understanding of what constitutes unacceptably corrupt behaviour and in others there is a big gap between the two. In many countries the regulatory reach of the state is limited and laws may not be enforced (Ensor and Weinzierl 2006). For example, many informal providers of health services and of drugs may practice illegally and government

health workers may request informal payments. These practices are outside the law, but the population does not necessarily believe they are wrong or corrupt and informal rules and norms may exist.

During the early years of China's transition to a market economy the boundaries between appropriate and inappropriate market behaviour were poorly defined (White 1996). Market-like activities, which had previously been labelled "opportunistic", were rewarded. Individuals were encouraged to push boundaries until they reached a political or legal constraint. The government has since invested a lot of effort to define corrupt practices, influence social attitudes and punish transgressors. The Communist Party has established an anti-corruption office to address these issues. Local representative bodies, the People's Congress and the People's Consultative Committee, have been made responsible for monitoring for corruption. These actions have been complemented by media reports and exhortations by political leaders for good behaviour. It is difficult to assess the degree to which these efforts have established clear boundaries between ethical and corrupt behaviour.

One response to the 1997 health policy statement was an effort by the Rectification of Inappropriate Professional Behaviour Office (RIPEO) of the anti-corruption department of the Communist Party to define and discourage corrupt and unprofessional behaviour in the health sector (Fang 2008). The author of this paper found that the RIPEO in two counties focused on procurement for construction projects, the payment of kickbacks by suppliers of pharmaceuticals and requests by health workers for informal payments. It required every health facility to identify a supervisor of professional ethics and submit an annual ethics report. It also ran a complaints hotline and undertook household surveys to uncover unethical behaviour. The People's Congress also made inspection visits and organised a complaint line. The ethical boundaries for health worker behaviour are also being negotiated by individuals and communities. There is an increasing use of malpractice law and also a significant incidence of physical violence in health facilities (Harris and Wu 2005). The director of a county in Guangxi told the author that his most difficult challenges came when someone died in a township hospital and an entire village occupied the facility to demand compensation. There is no systematic evidence of the impact of all of these measures on the behaviour of health service providers.

These experiences underline three aspects of the definition of core health-related rules, without which it is difficult to build institutional arrangements to support a complex health system: they address problems widely seen to be important and identify behaviour widely believed to be corrupt, there is a public process of identifying bad practices and building a common understanding of ethical boundaries and there are serious sanctions against corrupt behaviour.

#### *Health workers, ethics and incentives*

The health sector is labour intensive and the institutions within which health workers are embedded strongly influence their performance. These include the terms and conditions of work, their opportunities for professional development, their social status and the ethical norms to which they are expected to adhere (Yip et al 2010).

During the post-colonial and post-revolutionary periods in many countries, including China, the major strategy for overcoming significant shortages of skilled personnel was rapidly to expand government funded and organised training facilities and increase public sector employment. The implicit contract between health workers and their clients was embedded in public sector employment contracts and the social responsibilities they implied. China complemented this strategy by training many barefoot doctors, who received a share of collective agricultural production (Zhang and Unschuld 2008). China promoted a service ethic and there were strong political sanctions against opportunistic behaviour.

In some countries, this strategy created a well organised workforce, which provides a good quality service, and continues to be motivated largely as civil servants. Elsewhere, there has been a growing gap between the formal terms of employment and actual livelihood strategies. In many countries health workers supplement government pay by requesting informal charges, seeing patients privately, selling drugs and participating in other market activities (Berman & Cuizon 2004; Ferrinho et al 2004). In some, the boundary between public sector employment and the market has become blurred. One frequent response to the spread of market-like behaviour has been for government leaders to exhort their employees to end corrupt practices. Sometimes this has been complemented by action by community organisations to discourage behaviour believed to be corrupt. These actions can help establish and enforce the kind of basic ethical

standards discussed in the previous section, but they cannot compensate for an excessively wide gap between what might be considered as “reasonable expectations” of health workers and the formal terms and conditions of employment (Blam and Kovalev 2005). During the initial phases of the transition to a market economy, China dealt with this issue by enabling health facilities to pay bonuses based on their financial performance. In doing so, it reduced the gap between formal rules and informal arrangements.

A number of countries are developing contracts with health facilities and their employees that link payment to performance (Eichler and Levine 2009). Some analysts have voiced concern that this might encourage health workers to be more responsive to financial incentives than to ethical considerations and professional standards. However, the meaning of the introduction of performance-related pay depends on the pre-existing functioning of the labour market. Where people are full-time government employees and have incorporated an ethic of public service, a performance-related contract may shift the balance in favour of financial considerations. But, where existing incentives are greatly out of line with employment contracts, realigning incentives can reduce contempt for formal norms and help re-establish ethical standards.

The Chinese government has faced major challenges in transforming an egalitarian, centrally managed work force into a labour market with substantial differences in pay. It has managed this cautiously, giving priority to the maintenance of social stability (Tomba 2001). It has avoided organised pay bargaining, relying on markets to determine relative levels of pay between regions and between categories of worker. Its strategy for managing the transition to a labour market in the health sector has been to retain a basic national salary, while permitting facilities to pay bonuses or pay less than the national salary, depending on their financial capacity. This led to the emergence of differences in pay which reflected the broader differences in levels of earning between geographical areas and between levels of skill. It also encouraged a costly style of care based on high levels of use of diagnostic tests and pharmaceuticals as health workers responded to incentives (Eggleston et al 2008).

The government is exploring alternative payment mechanisms. In 2009 it announced that health facilities would no longer earn profits from selling drugs and that they would

be encouraged to link health worker pay to measures of the quality of services they provide (CCCPC 2009). It has encouraged local governments to test alternative ways of paying health facilities to reduce perverse incentives (Yip et al 2010). However, it has not resolved how to establish either the earnings of health workers relative to those working in other sectors, or appropriate inter-regional differences in pay.

The organised professions have an important influence on health worker behaviour and on negotiating their income and social status in the advanced market economies. They are much less important in many low and middle-income countries (Dussault 2008). In China, representative organizations such as the Chinese Medical Association and the Chinese Medical Doctors' Association are strongly influenced by, and work closely with the Ministry of Health (Duckett 2011). China faces important challenges in creating appropriate institutions to build and maintain the reputation of health workers for both technical skill and ethical standards and it is not clear what role, if any, the organised professions will play.

#### *Markets, reputation and trust*

A large proportion of health-related transactions in many low and middle-income countries involve some sort of market. These markets have expanded more quickly than the creation of institutions to encourage actors to perform well. Bloom et al (2009) identify a number of strategies to build institutions that encourage good performance by health-related organisations, including local arrangements to build a facility's reputation, accreditation of good quality services by a formal body or some kind of professional or business association, the provision of services by a trusted organisation (such as a government body, non-government organisation, or well-known commercial company), and the creation of a franchising arrangement to ensure quality. Most analysts agree that the state plays a key stewardship role in overseeing the performance of health markets (Logomarsino et al 2009)

China's approach to transition management has been to devolve financial control to enterprises and reduce the capacity of government and Communist Party officials to micro-manage. This encouraged the rapid development of enterprises that produce a variety of products and of the institutions within which they are embedded (Oi 1999). It is now giving more emphasis to the establishment of institutional arrangements to support

more complex relationships. Tsai (2002) describes how local financial institutions and governments have evolved informal arrangements to support an increasingly complex financial sector. She suggests that the Central Government has gradually created a legal framework that codifies many of these informal arrangements. This process is still underway and there are major debates about the most appropriate institutions to support both large scale and local financial institutions (Yang 2004; Huang 2008). In addition to building these partnerships between enterprises and local government, China has experienced a rapid development of branded products, including pharmaceuticals, and the spread of franchises in a number of service sectors. The parallel spread of counterfeiting attests to the value that people ascribe to these brands. This could become an important strategy for maintaining quality in some aspects of health services.

The institutional arrangements in China's rural health sector reflect the history of transition to a market economy. Most health facilities, with the exception of village clinics, are owned by government (Wagstaff et al 2009b). Despite the formalities of ownership, it is difficult to characterise health facilities as either public or private. The money that many publicly owned health facilities receive from government covers only a small proportion of their total expenditure. They compete for clients in a competitive market. The government provides funding for investment in publicly owned facilities. However, these facilities are often asked to provide matching funds and they also finance additional investments, themselves. They use surpluses to pay salary bonuses and invest in equipment, facilities and training. They are subject to regulation of prices, human resource management and so forth and they are expected to meet some defined service delivery targets. But, they have a lot of scope for entrepreneurship.

There are formal arrangements for county health bureaux to monitor and supervise the performance of health facilities. They sign a management agreement with the director of each facility, which establishes performance targets. They monitor the achievement of targets through regular monitoring visits. The director's reputation is influenced by his or her facility's performance. This system has worked well in achieving government targets for increasing the proportion of pregnant women delivering in hospital and reducing maternal mortality (MoH 2007). That is because it was possible to set clear targets and monitor the performance of health facilities. These arrangements have been less successful in encouraging the provision of good quality and cost-effective health

services. This is partly due to the limited skills of many health workers in rural facilities. It is also due to the strong financial incentives for certain kinds of medical practice. The government has begun to address this by establishing a form of accreditation which assigns a health facility into a category depending on a number of defined characteristics. It is also trying to link payment to good performance, including adherence to treatment guidelines. However, the implementation of all these initiatives is tempered by the need to ensure that facilities and their employees can achieve reasonable incomes.

The author has found that health system managers are becoming increasingly sophisticated in building their facility's reputation. This is partly in response to the need to attract patients in an increasingly competitive environment. It also reflects the influence of the reputation of a facility in the annual assessment of the performance of its manager. The author has visited a number of counties where health centres undertake preventive work and/or provide free medical consultations as a way to build links with the community. Large hospitals also use commercial advertising. To date, there has been little development of branded hospital chains or franchised providers of pharmaceuticals or health care services.

NCMS could eventually become an important institution for building and maintaining reputations for good performance. They are establishing electronic billing systems that will provide detailed information on the treatment of each patient. It will be possible to monitor for unprofessional behaviour. These schemes could use their power as purchasers of health services to influence their performance. However, there is little evidence they have achieved this during the initial phase of policy implementation.

#### *Information, knowledge and influence*

The emergence of health-related markets in many low and middle income countries occurred in parallel with the spread of access to information and communications media. These include newspapers, radio and television as well as mobile telephones and the internet. There has also been a growth in the number of organisations that produce content for these media, including providers of goods and services, commercial advertising agencies, government health information departments and a wide variety of



advocacy and stakeholder groups. They produce a lot of information with varying accuracy and intention to influence behaviour.

These developments significantly challenge the role of professional health workers as gatekeepers to expert knowledge and specialised goods, such as pharmaceuticals. There is little systematic data on the kinds of information now made available and how they influence health system performance. This raises questions about the degree to which access to information should be regulated and how issues of information asymmetry can be addressed in the context of the spread of markets for the provision of expert knowledge and advice. It also raises important opportunities for the development of new types of organisation to organise access to low cost diagnosis and treatment of many health problems.

#### *Regulation, partnerships and stewardship*

It is widely agreed that the state has a key role to play in building institutions to order health-related markets. However, the creation of the capacity to enforce regulations is a major undertaking (Ensor and Weinzierl 2006). There has been an increasing reliance on a variety of regulatory partnerships (Peters and Muraleedharan 2008). One of the most notable areas concerns pharmaceuticals. A couple of decades ago the priority of the state, in many low income countries and command economies, was to overcome absolute shortages of drugs by purchasing them in international markets or producing them locally. These products were distributed to health facilities and consumers through a state monopoly. The situation has changed radically. Most countries have dynamic drug markets, which provide access to almost every product to those who can afford to pay. China and India have experienced a dramatic growth in drug production. However, their systems to organise and regulate production and distribution of drugs have developed more slowly, leading to problems with ineffective and dangerous products and inappropriate use (Dong et al 1999).

The Chinese Government has created a Food and Drug Regulatory Agency (FDRA) to reduce the risk from ineffective or dangerous pharmaceuticals. Since 2002 it has required wholesalers to document the origin of pharmaceuticals from a certified producer. It is addressing potential problems with regulatory capture by ensuring that county-level regulators are employed by a higher level of government. One constraint to

enforcement of regulations is the limited reach of regulatory agencies. China is beginning to construct regulatory partnerships to address this problem. In two counties the author visited, the local FDRA had supported the creation of an association of drug retailers, to identify cases of evasion of the regulations. The associations had independent legal status and were registered with the Department of Civil Affairs. Their Director was the Deputy Director of the County FDRA. The decision to create these associations suggests that government believes it needs the active support of public and private facilities and pharmacies to regulate drugs effectively. It is difficult to predict the degree to which the associations will eventually act as independent stakeholders in the county health system.

The emergence of regulatory partnerships demonstrates the need to build institutional arrangements to support new kinds of relationship between health sector actors. However, it raises important questions concerning the management of conflicting interests and the protection of the interests of the poor and powerless.

#### *Politics, legitimacy and narratives of health reform*

The success of health system development depends on the degree to which it is perceived to be important by the public and to which it is tied up with the legitimacy of the state and other important actors. In many countries, the decay of the post-colonial and/or post revolutionary settlement has created big challenges for the construction of a new narrative to support an effective health sector. In China, for example, the government remains committed to the promise to provide access to effective health services. This has given legitimacy to many local protests against perceived failings of the system and to many media reports. Several large scale crises, such as the delayed response to the SARS outbreak, were perceived as challenges to government's capacity to deliver on this promise (Saich 2006). Since then, the government has made highly visible policy commitments to improve the performance of the health system. It has invested a lot of political capital in achieving these improvements. In two counties in Henan Province, for example, the government has distributed leaflets specifying the entitlements of the population to access to core public health services. The translation of these entitlements into a shared understanding of the roles and responsibilities of all health system actors is just beginning.

The long process through which general policy statements in 1997 were translated into a series of anti-corruption measures, tests of alternative approaches for implementing reforms and increasing government commitments to allocate public funds and use its regulatory powers has built a common understanding of the problems in the health system. Zhang et al. (2009) document a growing involvement in policy debates of researchers and government supported think tanks. They also document the increasing importance of the media in highlighting problems in the health sector. This has contributed to a situation in which public opinion polls identify problems in the health system as one of the population's top concerns. The Ministry of Health organised public consultations before it announced its major new policies in 2009. These activities suggest the emergence of a national discussion about the health system and the construction of narratives to understand the problems and define roles and responsibilities. The government has invested a lot of its political capital in the implementation of its policy. Its legitimacy and the legitimacy of its narrative of harmonious development will be influenced by its capacity to deliver on its promises of substantial increases in access to health services.

## **Conclusions**

China's experience does not provide easy to apply lessons for other countries about the design of specific health interventions. Rather, it confirms the findings of Kwon (2005), Agyepong and Adejei (2008) and others about the close inter-relationship between broad development strategies and the challenges and opportunities that health systems face. Health systems, whose performance relies heavily on relationships of trust, are strongly influenced by the institutional arrangements within which they are embedded. The Chinese case illustrates the need to sequence reforms to avoid the emergence of big gaps between formal rules and the informal arrangements and between aspirations for the future and strategies for achieving them. It demonstrates the role of local adaptations in building new institutions and the importance of political leadership in building a common narrative with widely understood rules of behaviour and ethical norms. These rules and entitlements, in turn, influence the pathways of health system development. In Brazil, for example, Cornwall and Shankland (2008) show how the achievement of a national consensus on the right to health care changed national health policy debates. The publicity the Chinese Government is giving to its promise to provide

access to basic health services for everyone may have a similar effect. The big lesson from China's experience is the degree to which all actors play a part in the co-construction of an effective health system. The performance of a health system reflects both the common understandings of the roles and responsibilities of these actors and the outcome of political debates and struggles regarding the interests and perceptions of different stakeholders.

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