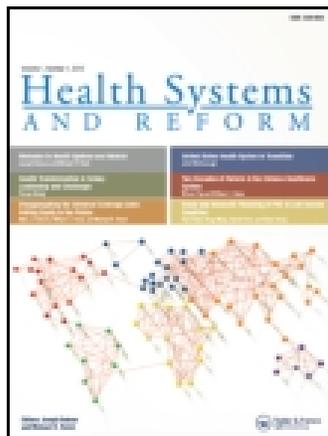


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Research Article

What Drove the Cycles of Chinese Health System Reforms?

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Abstract—Since 1978 when China liberalized its economy and moved from a central planning to a socialistic market economy, its health care system has gone through two major cycles of reform—oscillating from relying on the market to fund and deliver health care, to one in which the government plays a central role in financing health care, prioritizes prevention and primary care, and redistributes resources to poorer and rural regions. Consequently, performance of the Chinese health system improved and China was finally able to extend a basic health safety net to more than 95% of its 1.3 billion people over the last decade. Then, in 2013, China launched its new cycle of reform, and vigorously pushed privatization and marketization as a core strategy to reform its public hospitals. What explains China’s oscillating health policies and performances? This paper examines the thesis that ideologies of the government and the market are the main drivers for the reforms. The social value that undergirds the government actions, especially how much priority it gives to equity vis-à-vis economic growth has exerted a major influence on whether China chooses a pro-government or pro-market approach.

INTRODUCTION

Since 1978 when China liberalized its economy and moved from a central planning to a socialistic market economy, its health care system has gone through two major cycles of reform and is now embarking on the third one. The first cycle was marked by the government adopting a benign neglect position toward health and defaulting to the laissez-faire market forces for funding and delivering health care. The power of the profit motive in a laissez-faire market yielded vibrant growth in high technology hospital services. However, this came at the expense of neglecting prevention and primary care. Health care costs escalated, quality of care was low, most people could not afford health care, many were impoverished by medical expenses when seriously ill, and significant inequalities in health care and health outcome existed between the urban and rural/higher and lower income populations.^{1–6}

Keywords: China, health care delivery, health care financing, health care reform, privatization, role of government, role of market

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After relying on the market to fund and deliver health care for nearly a quarter of a century, the Chinese government finally concluded that it had a faulty health care system and began serious reforms in 2003. Top leaders of a new regime who held higher values for equity and balancing economic growth with social development promoted a “socialist harmonious society” policy and shifted the ideology for health system from the market to the government. The government introduced social health insurance to cover the then uninsured (representing 75% of the population), which consisted primarily of rural residents and urban workers in the informal sector, and injected significant public financing to fund and deliver public health and primary health care, while leaving how to reform its public hospitals unresolved. By 2012 more than 95% of the 1.3 billion Chinese people had a basic health safety net and gaps in utilization between the urban and rural populations and across different income groups were measurably reduced.^{7,8}

A decade later, China changed course again in 2013 and returned to greater reliance on the market.

What would explain China’s oscillating health care policies and performance? The central thesis of this paper is that ideology and social values are the main drivers for China’s health policy design. In this paper, we define ideology as a systematic body of theory for socioeconomic programs. Specifically, we refer to the theories and concepts of government versus market for organizing and financing socioeconomic programs. However, governments and markets are only vehicles to achieve social ends. It is therefore imperative to examine the social values that undergird the Chinese policies, in particular, how much priority the Chinese government gave to equity.

Section II provides a brief explication of the two ideologies—government and market. Section III describes China’s three cycles of reform since 1978 and for each, analyzes the ideologies and social values that drove the reforms and their effects on health system performance. The last section concludes with some major lessons for the world.

THE IDEOLOGICAL DEBATE IN CHINA

Since the mid-1970s, China had an intense debate about the relative role of the government and the market in producing faster economic growth and reducing poverty. China was poor then; endemic poverty, under-employment and hunger were prevalent. Evidence has already shown that market economies can produce more rapid economic growth than strictly centrally-planned economies.⁹ However, there were concerns as to which approach would result in greater inequities in the distribution of income and wealth.

The ideological debate pertains to the fundamental functions of the government and the market and how well they perform their functions under a particular political structure. Government is a system by which a state is governed with laws, regulations and institutions. It is the means by which public policies are established and enforced.^{10,11} Government also often establishes public institutions to deliver social goods, such as health care, education and social protection. Theoretically, under ideal conditions, government could produce the greatest social benefits efficiently for a nation and also distribute them equitably.

The market, on the other hand, is marked by allocation of resources based on the exchange of goods and services determined by the free choices of individual consumers and producers. Prices determined in a free market, which measure the values of the goods that the buyers are willing to pay for and that the sellers are willing to sell at, serve as signals for the exchange of goods and services. Such a market mechanism would also require private property rights.^{12,13} Theoretically, under strong assumptions, the market can produce an equilibrium—Pareto Efficiency, in which goods are produced in the most efficient way and are allocated to satisfy consumers’ demand, and societies achieve the most optimal level of utility (or well-being in layman’s terms).¹⁴ However, the market does not address issues of equity or fairness. It assumes that the income/wealth of a society is already equitably distributed.

For a national health system, the major ideological issues are which vehicle—the government or the market—is better in financing and delivering health care in the most equitable and efficient manner. The answer lies in: (1) the ethical value that a nation places on equity, which may require a greater role of the government in redistribution, and (2) the relative magnitude of the government and the market’s failures in that nation.

For health and health care, Roberts et al discussed four ethical theories that guide government action, irrespective of the form of government—utilitarianism, libertarianism, egalitarianism and communitarianism.¹⁵ According to the Communist Manifesto, a communist state would be guided by the egalitarian principles of equity and also pursue the most efficient way to produce social benefits.

Both the government and the market, however, have serious failures. There is a large body of theories on how any form of government fails to pursue their declared goals such as public interest and equity. The notable ones include the Public Choice theory—political leaders pursuing their own interest over public interest; Capture theory—special interest groups capture the government;^{16,17} Bureaucracy theory—bureaucrats pursue bureaucratic or self-interest over public interest;

agency problems between the people (the principals) and their representative government (the agents); imperfect information that governments suffer from; misaligned incentives in government operations; bureaucratic structures operating under rigid rules and procedures that inhibit efficiency.¹⁸ These theories of government failure are supported by a large body of empirical evidence in both communist and democratic states.^{19,20}

As for the market, first, as noted earlier, the market mechanism is to achieve efficiency, innovation and growth. It does not address equity or fairness. Pro-market advocates often assume that the income/wealth of a society is already equitably distributed. Needless to say, seldom is this condition satisfied in reality. Second, economic theory of the market makes many strong assumptions about the buyer and producer/seller, including that consumers are sovereign and make rational choices, have full information of the prices and quality of the goods/services to choose from, and on the supply side, there exists free entry and exit into the market and monopolistic power is absent.²¹

Market failures in health care are particularly severe, especially with asymmetry of information between the patients and providers (physicians and hospitals), which creates imperfect agency. Life threatening or emergency conditions of some diseases often make rational decision making or information gathering impossible. The condition of free market entry and exit is also rarely satisfied and monopolistic power often prevails. These market failures give health providers significant power to induce demand and charge high prices that have been amply documented in China and elsewhere.²²

With extensive theories and evidence of both government and market failures, the ideological debate in China often rests on what the advocates believe in, especially whether the government or the market fails more in efficient allocation of resources and the importance of equity that they place in health care. Chinese leaders and economic planners often pay little attention to the health sector nor do they understand the unique features of health economics. Consequently, the ideology for the economic sectors often is simply carried over to health.

Since the 1990s, China has had two groups of intellectuals who advocate different ideology for health, corresponding to the same two groups for the economic sectors. The pro-market group, called the neoliberals, advocates market liberalism, adhering to the doctrines of Hayek.¹³ They believe in the positive effects of the invisible hand with minimum government regulation and that China should rely on the market in both health care financing and provision. The pro-government group, called the social democrats (New Left), advocates

reducing social inequities and the need for a large government role in production and distribution of health services. They also argue for fighting corruption in the government.²³

A HISTORY OF CHINESE HEALTH SYSTEM REFORMS—1978–2014

At the Beginning—1950s to 1978

After the Chinese Communist Party came to power in 1949, they created a health system that was typical of the communist states. The communist ideology accorded high priority to equity and called for the government to play the central role in financing and providing social services, including health. Private practice of medicine and ownership of health facilities disappeared through a massive nationalization movement in the 1950s. The government (national and local) owned, funded, and operated all health facilities from small township health centers in the countryside and clinics in the cities to large tertiary hospitals in urban areas. Physicians became employees of the state.

In rural areas, the economic unit of agricultural production—the commune—formed the cornerstone of the health care system and provided health care to its members through the Cooperative Medical System (CMS). The CMS operated a network of primary health care providers, including township health centers and village health posts staffed by the “barefoot doctors” (equivalent to community health workers) at the foundation.²⁴ In urban areas, the state-owned enterprises (SOE) organized and financed clinics and hospitals that provided health care for workers and their family members. Anyone unaffiliated with an SOE relied on public neighborhood health clinics and hospitals financed largely by local governments. Prevention was funded and delivered by the government as well. Most hospitals lacked high technology equipment and the latest medicines because of inadequate funding. China also had few qualified specialists because of medical education policies training specialists.

From the 1950s to early 1980s, the Chinese health system achieved enormous improvements in health and health care. It gave priority to prevention and primary care, relying on modestly-trained health workers (i.e., barefoot doctors). Although the latest health care technology was not available, almost everybody enjoyed equal access to very basic health care. The Chinese public health apparatus achieved major gains in controlling infectious diseases through immunization, improved sanitation, and the control of disease vectors, such as mosquitoes for malaria and snails for schistosomiasis.²⁵ Infant mortality fell from 200 to 57 per 1,000 live births, and life expectancy increased from about 45 to

68 years.²⁶ However, this extraordinary trajectory did not continue after China embarked on its economic reform in 1978.²⁷

The First Period of Reform—1978–2002

Since the mid-1970s, China has had a heated ideological debate on the relative role of the government and the market for economic growth. Having experienced the failures of the government-run centrally planned economy, which had resulted in low productivity, under-employment, poverty and famine, China sought a new theory and strategy for its economic sector that could produce rapid economic growth. Neo-classical economic theory of the market gained favor, but there were worries about the negative equity implications in relying on the market. Deng Xiaoping, the paramount leader of China at that time, resolved the ideological debate by declaring that China should “let some people get rich first,” implying that equity was a secondary consideration (at least for the foreseeable future.) China’s initial move to the market economy was guarded, until after Deng Xiaoping’s 1992 southern tour, when Chinese authorities officially legitimized the market economy and used economic theories as the guiding ideology for economic reform.²⁸

The government, however, did not explicitly apply the market ideology to the health sector in its early days of economic reform. The political leaders and economic planners were totally focused on the economic sectors and gave little attention to the health sector. Instead, it took a benign neglect position that defaulted health care to individual self-reliance and market forces.¹

Like all transitional economies, China experienced a fiscal crisis when it liberalized its economy in 1978. The government’s revenue dropped sharply. Government revenue as a percentage of GDP fell from 30% to 10% between 1978 and 1993.²⁹ Consequently, subsidies for public health facilities fell from 50–60% to merely 10% of the facilities’ total revenues by the early 1990s.⁴ Public health facilities had to rely on charging patients directly for revenue. Meanwhile, the government had completely dismantled the communes to privatize the agricultural economy, which also destroyed the commune-based health care safety net for rural residents and 900 million peasants became uninsured overnight and had to pay for health care directly out-of-pocket. In the urban areas, reforms of the SOEs produced massive downsizing of the SOEs. The laid-off workers lost their social safety nets. The government piloted the Urban Employee Basic Medical Insurance (UEBMI) scheme in 1994 and scaled it up nationwide in 1998. UEBMI, however, only covered formal sector employees, leaving the majority of urban residents (i.e.,

dependents, workers in the informal sectors, retirees, and the unemployed) uninsured.³⁰

While the public health clinics and hospitals had to rely on selling medicines and ordering imaging and laboratory tests and other charges to generate 90% of their income, the government virtually did not regulate their behavior. Government compounded the problem by setting prices for personal services such as physician visits or hospital daily beds below cost, but for new and high-tech diagnostic services prices were set above cost. A 15% mark-up on drugs was also allowed. These policies created perverse incentives and set in motion significant changes in the organizational culture, motivation, and behavior of hospital directors and practitioners.³¹

De facto, public facilities became for-profit entities and their profit-making behaviors were formally legitimized in September 1992 when the State Council issued a document titled “Instructions on Health Reform.”³² Besides allowing charges to patients, the policy encouraged public hospitals to operate income-earning sideline services and businesses besides regular medical services. Hospitals began to charge high user fees for “special attendance” and “special wards.” Second, it granted local public health agencies the authority to charge fees for certain services, such as inspections of hotels and restaurants for sanitary conditions and industries for environmental compliance. Public health agencies could also establish fee-for-service health centers and hospitals for delivering curative services and selling medicines. Predictably, these agencies concentrated their activities on these revenue-generating activities and neglected preventive programs such as epidemic control, health education, and maternal and child health.

Over time, the profit motive became dominant, at the expense of patient care. Hospitals, clinics, and village doctors gradually became profit-seeking entities. The government’s pricing policy created a leveraging effect whereby a provider had to sell seven dollars’ worth of drugs to earn one dollar of profit. Subsequently, providers overprescribed drugs and tests, and hospitals raced to introduce high-tech services and expensive imported drugs that gave them higher profit margins. These medical practices not only caused rapid health expenditure inflation, but also harmed patients with adverse reactions from the over-use of drugs, microbial resistance from the use of multiple drugs, and false-positives from poorly executed tests.^{4,5,33–37}

The unfortunate consequences of this combination of policies are best understood from three perspectives: disparities between rural and urban residents, deficient quality of health care, and burgeoning health expenditure inflation. For instance, in 2003, under-five mortality was 33 per 1000

in rural areas, compared to only 15 in urban locales. Maternal mortality was 65 and 28 per 100,000 in rural and urban areas in 2002, respectively.³⁸ On quality of care, one indicator is the inappropriate use of prescription drugs. Data show 75% of patients suffering from the common cold are prescribed antibiotics, more than twice the international average of 30%.⁸ Another major consequence of China's health policies is the country's health expenditure inflation rate, which reflects the poor efficiency of health care production. From 1978 to 2011, personal health spending per capita increased by a multiple of 164, from 11 RMB to 1,801 RMB (or from roughly 6 to 280 USD) while the Consumer Price Index increased by 5.65 times during this period.^{34,39} A huge portion of this expenditure was for high-tech tests and unnecessary drugs; about half of Chinese health care spending is devoted to drugs, as compared to only 10% in the United States and an OECD average of 16%.⁴⁰

The Second Period of Reform: 2002–2008 and 2009–2012

The second reform cycle can be divided into two phases. From 2002–2008, China introduced shallow social insurance to finance health care, but the national debates on the ideological divide paralyzed a major health reform effort. It was not until late 2008 that the issue was resolved. The pro-government ideology fundamentally shaped the reform plan in 2009–2012 and provided detailed actions for basic health care. The ideological divide, however, remained on the role of government and market for hospital services.

2002–2008: Shallow Social Health Insurance and Debate

As a result of rising health service charges and lack of insurance coverage, Chinese people increasingly experienced difficulty in accessing or affording reasonable quality health care.^{2–4,41,42} Reports of these problems began to appear in local media and academic studies.^{43,44} This situation was summarized in the widespread and popular lament: “*kanbingnan, kanbinggui*,” or “insurmountable access barriers to health care, insurmountable high health costs.” Both the saying itself and the sentiment behind it gained wide recognition by the late 1990s as evidenced by the coverage on national television, print press, and internet social networks. The lament reflected a nationwide social discontent, which attracted the attention of the Chinese leaders. By 2002, the social protests and public outcry of “*kanbingnan, kanbinggui*” gained serious political attention. The government decided to establish a shallow social health insurance

called the New Cooperative Medical Scheme (NCMS) for the 900 million rural residents with a partial government subsidy to cover large hospital expenses. A few years later, the government established a similar program, the Urban Resident Basic Medical Insurance (URBMI) to cover urban residents not already covered by the UEBMI.

Besides public discontent, two other events during 2002–2003 elevated health to a high priority on China's policy agenda—a change in political regime and SARS. They prompted China to make a holistic re-examination of its health system that eventually resulted in the 2009 reform. The new President Hu and Premier Wen (Hu-Wen) regime came to power and they had a different set of social values. They gave higher priority to equity in people's wellbeing between the rich and poor, and rural and urban residents. A health safety net was considered an essential necessity for people's wellbeing.^{45,46}

In 2005, Hu-Wen initiated a national ideological campaign to establish a “socialist harmonious society,” which argued that China had to balance economic and social development. The government had a responsibility to provide its citizens with a social safety net, including health care, education and pensions. In October 2006, the Politburo held a collective study session, with health reform as the theme. Soon after, President Hu declared the goal of the health reform to be “*everyone has affordable access to basic health care.*” But the relative roles of government and market were left unresolved.⁴⁷

The SARS outbreak in 2003 awakened political leaders and economic planners to the importance of public health and health care. The crisis served as a catalyst for a wide range of reflections and debate on the ideology of a market-driven health system. Many public health officials and academic experts argued that the SARS epidemic had its root cause in a faulty health system that had resulted from decades of policies of marketization and privatization.^{45,48}

At the same time, the Development Research Center (DRC), a semi-independent think tank of the State Council that was free from the strong vested bureaucratic interests of each ministry, conducted a thorough review of China's health care system. The DRC report concluded that China's health policies since the 1980s were a failure. Besides highlighting problems of access and quality, inequities between rural and urban areas, and inefficiencies in the system, the report concluded that reliance on private financing and a delivery system driven by market forces were the root causes of these problems. It also placed blame on the irrational pricing and incentives in the health system. This report formed the cornerstone of the 2009 reform plan.⁴⁹

In the years leading to the announcement of the 2009 reform, the ideological debate among intellectuals about the relative roles of market and government in the health sector became public and heated. The pro-government camp argued for direct public funding and provision of health services and looked to the United Kingdom's National Health Services as an ideal model. The pro-market camp argued for channeling increased government financing through social health insurance agencies, which would then purchase health care from competing providers in the market, as do Medicare and Medicaid in the United States. The two camps were unable to reach any consensus.^{44,47}

Under China's authoritarian form of government, individual citizens and small business firms have limited political voice. Governmental ministries represent various strong interest groups. Key ministries involved with health debated intensely about health policy. Policy formulation requires the consensus of these key ministries. The Ministry of Health (MOH), which represents the interests of public hospitals and clinics and physicians, allied with the pro-government camp intellectuals. The Ministry of Human Resource and Social Security (MOHRSS), which represents the interests of workers, supported the pro-market camp and lobbied for social health insurance to be administered by them. The National Development and Reform Commission (NDRC) and the Ministry of Finance, who are responsible for setting policy and funding priorities and allocating resources, are the two most powerful ministries. Their primary interests were to assure that additional government funding would be used efficiently and effectively. Both had some concerns with channeling new government funding directly to government facilities. In addition, the Ministry of Commerce, which represents the interests of state enterprises and businesses, supported pro-market policies that would promote growth of the healthcare industries.

With the goal to reach consensus, the Chinese government established an Inter-ministry Task Force in June 2006, chaired by the powerful Minister of NDRC and the Minister of Health, and charged it to develop a health reform plan under the guiding principle of a "socialist harmonious society." Members included all major stakeholders—ministers from 20 ministries and agencies. To break the ideological debate deadlock, the Task Force commissioned three top Chinese universities, the DRC, the World Bank, the World Health Organization (WHO) and McKinsey & Co. to each develop a reform proposal, which were presented and discussed at a two-day High Level Conference held in September 2008.⁵⁰

On the second day of the conference, no agreement was reached between the two ideological camps. The co-chair invited William Hsiao of Harvard University to organize the

international experts attending the conference, but not affiliated with any of the proposals, to offer a set of broad policy guidelines that they could agree upon. Guided by the principles of harmonious society and drawing on economic theories and global evidence, the international experts recommended the following fundamental guidelines: the government has to finance prevention as a public good; the government must take the primary responsibility to finance health care if equity is a priority; serious market failures exist in health service delivery; investment in primary care is most cost-effective to enhance health and China has to shift its high spending for hospital services to primary care; the government has to regulate brand name pharmaceuticals and medical devices because of their monopoly. The Task Force then drafted a policy proposal that were guided by these recommendations, which was subsequently transmitted to the State Council.

After the 2008 conference, the ministries reached a basic consensus between the two camps that the Chinese government has to play a primary role in financing basic health services and in the public provision of preventive and primary care services, primarily delivered through a network of township health centers, village health posts and community health centers. However, no consensus was reached regarding the delivery of hospital services. The pro-government camp argued that the government must rely on a large network of public hospitals directly funded by the government to achieve effective hospital services for everyone, while the pro-market camp called for either a privatized or an autonomized public hospital system in which the government would only play a purchaser role through the publicly-run social health insurance system. The pro-market camp argued that privatized hospitals would produce higher quality and more efficient hospital services than public hospitals at the same cost. As of the end of 2014, debate still remained unsettled.⁴⁷

2009–2012: The Reform

In April 2009, the Chinese government announced its health care reform with the goal to provide safe, efficient and affordable basic health care for all Chinese residents by 2020. The reform affirmed the government's role in financing health care together with priorities for prevention, primary care, and redistribution of finance and human resources to poorer and rural regions. It was anchored in five specific targets, (1) expanding coverage to insure at least 95% of the population; (2) making public health services available and equal for all; (3) improving the primary care delivery system to provide basic health care universally; (4) establishing an essential medicine system to meet everyone's needs of

essential medicines; and (5) piloting public hospital reforms in 17 cities to discover better governance, organization and management models that can produce more efficient and higher quality hospital services.

To achieve the first three targets, the government committed 124 billion USD of additional public spending for the first 3 years of the reform. In reality, the government reported it has actually spent an additional 230 billion USD from 2009 to 2011.⁵¹ About half of this funding was allocated to subsidizing rural and urban residents not already covered by the UEBMI program to enroll in the New Cooperative Medical Scheme (NCMS) or the Urban Resident Basic Medical Insurance program (URBMI), respectively. The rest was split between strengthening the primary care delivery system (especially infrastructure-building and training of personnel at primary healthcare facilities), and funding a defined package of public health services for all, including immunizations, health promotion and education, prenatal and well-child care, safe motherhood, health check-ups for the elderly, and detection and management of a set of priority infectious and non-communicable diseases such as tuberculosis, hypertension and diabetes. There were built-in mechanisms for re-distribution. In particular, the central government targets its funding for the western (poorer) regions and rural areas, and infrastructure building and training of primary health care practitioners also favored the rural regions.⁸

By 2012, significant progress has been achieved for the first four targets. The three social health insurance programs covered over 95% of the population, with the benefit packages gradually expanded to cover 50 and 75% of expenditure for outpatient and hospitalizations, respectively. Gaps in insurance coverage, health services utilization, facility-based birth delivery and antenatal care coverage between higher- and lower-income groups were also significantly reduced.⁷ Targets for delivering the package of basic public health services have reported to be on track although there is no monitoring of the quality of these services. Close to 2200 county hospitals and over 330,000 primary health care posts/centers have been rebuilt or upgraded and targets for personnel training have also been met.⁸ However, patients lack confidence in the quality of care provided by primary care providers and still bypass them to seek care at higher-level hospitals. Key elements of the essential drug system, including establishing a National Essential Drug List, province-based competitive bidding for procurement, and removal of drug mark ups for essential drugs at all primary health care facilities, have all been implemented. Evidence on whether these policies have improved appropriate prescription behavior is, however, not available yet. In addition, the process for selecting drugs for the essential drug list is quite opaque and

serious questions have been raised about its scientific criteria for selection.⁵² The press has also reported corruption in the pharmaceutical bidding process.⁸ The reform is still in its early stages and despite challenges in implementation and slower progress in some areas, it is by and large on the right track.

By contrast, pilots for public hospital reforms in 17 cities have failed to yield useful lessons for guiding policy formulation, due to both cursory design and lack of scientific evaluation. Powerful stakeholders—the hospitals and their physician staff—also blocked any meaningful reform.

The Latest Health System Reform—2013 and Onward

The year 2013 ushered in a new Chinese regime whose priorities imply a different set of social values. The Third Plenum of the 18th Central Committee of the Communist Party, held in November 2013, stipulated that the country would place a higher priority for economic growth by deepening its economic reform with the market playing a *decisive* role in the allocation of resources. This pro-market approach also applies on the latest cycle of health reform.

Reforming public hospitals takes center stage in the current health reform cycle. As analyzed in earlier sections, Chinese public hospitals are for-profit entities that deliver wasteful, inefficient, and low quality medical services. Yet these public hospitals provide over 90% of the country's inpatient services and more than 50% of outpatient services. The success of Chinese health system reform therefore depends on whether the public hospitals can be restructured.

This time, the pro-market camp won the ideological struggle; China turned to the market as a strategy to reform its public hospitals. This reform promotes private investment in hospitals, including privatizing public hospitals, with the target of private hospitals reaching a 20% market share by 2015, from its current share of 10%.^{53–55} Private hospitals would operate in an unfettered free market and their charges will not be regulated except for services contracted by the three health insurance schemes. The reform policy went one step further, restricting any expansion of public hospitals.⁵⁶ Although not made explicit, the motivation behind privatization can be interpreted partly as a strategic move to use private sector competition to stimulate changes in the otherwise stymied public hospital reform, and partly naively treating the health sector as just another sector to boost economic growth. Furthermore, relying on private investors to fund hospitals would reduce the need for public investment in hospitals.

Besides the hospital sector, the current reform contains some other pro-market measures in the insurance market. It

encourages private health insurance to cover private hospital services and to supplement the basic social health insurance, including long-term care; considering using private insurance firms to serve the purchaser role under China's social health insurance program; similar to the US Medicare program and allowing private insurance companies to set up their own health care facilities.^{57,58} In addition, China designated health services and biomedical as top growth industries that would enjoy favorable government tax and fiscal policies.⁵⁹

Domestic and international private investors have responded enthusiastically to the latest reform. The return on capital is expected to reach 25%. Pharmaceutical and medical device conglomerates are building or purchasing private hospitals. Some cities are selling their public hospitals to investors. The impacts of these changes are yet to unfold. However, if international experience can be a guide, we can predict that the private hospitals will largely serve the affluent households who can either pay high charges out-of-pocket or purchase private insurance to cover the expenses. China's health system will become a two-tiered system. With private hospitals operating in an unfettered free market, health expenditure inflation will accelerate as public and private hospitals engage in a medical high technology arms race.

LESSONS FOR OTHER NATIONS

Many developing nations, including India, South Africa and Malaysia, are in the midst of designing their health reforms and they have to wrestle with the relative role of the government and the market in their health sector. These two ideologies shape health policies, and social values have a critical influence as to which ideology a nation chooses. In practice, no country adopts a pure government or a pure market approach. Most nations are seeking the middle ground by combining the positive aspects of government and market. Nonetheless, the relative priority a nation places on equity versus economic growth steers its health policy direction toward the government or the market. This paper analyzes how China has oscillated between the government and the market over the past 35 years as the social values upheld by the government have changed, and how those values have affected the performance of its health system. China's experience can offer some enlightening evidence on the consequences of a pro-government or pro-market approach.

First, China's experience shows that a *laissez faire* policy which defaults to individual direct out-of-pocket payment as the main source of financing and the use of unregulated market forces as the main strategy to organize health services delivery, even when most providers are publicly owned and managed, result in unaffordable and poor quality health care services, with

serious inequalities in access and health outcomes. China is still wrestling with how to undo its past mistakes with limited success when for-profit motives and behavior have become deeply entrenched in the system. This is a similar situation that the US faces. After years of relying on competing multiple private insurance plans and a general market-approach in financing and delivery of health care, the US finds itself surpassing all advanced economies in health expenditure inflation, variable quality of health care and inequalities in care and health outcomes between different socioeconomic groups.

Second, for equity reasons, the government needs to play a significant role in health care financing and in the provision of public goods, such as population-based prevention and health promotion. Government also has to provide basic health services where few qualified private providers would enter, such as the rural areas.

Third, the Chinese experience shows that financial incentives are powerful forces that drive providers' behavior, even for public hospitals and clinics. A poorly designed pricing and provider payment policy further exacerbates the bad consequences of market failure, leading to high costs and inappropriate treatment that might harm patients' health.

Lastly, China shows that even under an authoritarian regime, powerful stakeholders like the public hospitals can block reform. China has to seek alternative second-best solutions. Once an interest group has a strong ingrained economic interest and becomes established, its political power will shape public policy. Like the US private health insurance and pharmaceutical industries, once they become established and powerful, any planning for reform such as Obamacare has to take that as given and make compromises.

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

No potential conflicts of interest were disclosed.

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