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The Role of the Public and Private Sectors in China's Health Care System

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Abstract In 1949, China established a government-run health system with an emphasis on primary care and prevention. The economic reforms of the 1970s led to a dramatic reduction in public expenditures and undermined the public health and health care systems of the country. In 2009, the government reversed course yet again and established several social health insurance schemes. The country has expanded social health insurance to the vast majority of its 1.3 billion citizens, but public spending remains low. The continued reliance on private financing generates inequalities in access to health care. The delivery system is "mixed" with a dominant role for public sector institutions, but the reliance on private financing means that public hospitals and clinics are insufficiently attentive to public goods and addressing the needs of vulnerable patients.

Keywords Government-run health care · Regional health care · "mixed" system · Marketization and inequality

Since the establishment of the People's Republic of China in 1949, China's health care system has undergone several transformations. After the revolution, Mao Zedong and the Chinese Communist Party (CCP) established a government-run health system with an emphasis on primary care and prevention. The economic reforms of the 1970s led to a dramatic reduction in public expenditures and undermined the public health and health care systems of the country. After the outbreak of severe acute respiratory syndrome (SARS) in 2003 and an embarrassing assessment of the lack of equity within the Chinese health system by the World Health Organization (WHO), the Chinese government reversed course yet again and established several social health insurance schemes. Although this latest health reform has led to nearly universal health insurance country, the coverage is often described as "shallow" because it offers limited financial protection and varies significantly across the country. Furthermore, despite investments in public health and primary care, many health care organizations still rely on revenue from pharmaceutical companies and medical device manufacturers. This raises questions about the efficiency and quality of health care in China.

Today, the finance and delivery of health care in China is mixed. Government spending has grown, but represents less than one third of total health expenditures. Private health insurance is also limited in China, but out-of-pocket payments are large. In terms of health care delivery, the system is still dominated by public institutions for both inpatient and outpatient care. Yet, despite negative experiences with market-based solutions in health care during the 1980s and 1990s, the Chinese government has relaxed restrictions on foreign investment in health care and the private system is growing.

In this paper, I review the evolution and structure of China's mixed health care system and provide a brief assessment of its performance. In the first section, I outline the current financing and delivery systems. In the next four sections, I describe the evolution of the system from 1949 to the present day. Finally, I discuss the limitations of the 2009 health reforms and summarize evidence about health care inequalities in China.

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Overview of the Chinese Health Care System

Health care spending in China increased rapidly during the past two decades. Between 1995 and 2010, total health spending increased by more than 19 times (Table 1) and increased from 3.54 to 4.58 % of gross domestic product (GDP). As the latter figure suggests, the growth in spending largely reflects the extraordinary growth of the Chinese economy during this time period. But it is has also increased in response to changing demographics and policy in the country. Even with this increase, health spending in China lags far behind the OECD average of 9.5 % of GDP (Eggleston 2012).

The 2009 health reform, discussed below, created four social health insurance schemes: Urban Employee Insurance (UEI), Urban Basic Residents Insurance (UBRI), New Rural Medical Cooperative Scheme (NCMS), and the Medical Assistance Program. The UEI is jointly funded by employers and employees, and the URI is financed by the central and local governments in addition to premiums. The majority of the UBRI and NCMS benefit packages only cover inpatient care (Li et al. 2012). In 2012, these insurance plans had already enrolled 95 % of the population, offering "modest but comprehensive health coverage" (Blumenthal and Hsiao 2015). The use of private health insurance is modest and only about 30 % of the urban population has some form of coverage, but the figure is about 50 % among those with the highest income levels (Ng et al. 2012). Out-of-pocket payments continue to be a major source of health care financing, particularly in rural areas and among internal migrants living outside the province in which they are registered, but the percentage of health care spending from out-of-pocket payments has fallen from about 60 % in 2001 to just over 35 % in 2010 (Table 1).

In terms of health care delivery, China continues to rely heavily on inpatient hospital care. In 2010, more than 60 % of health care spending was for inpatient care. The 2009 health reforms have been trying to build on the country's ambulatory care capacity, but the change has been limited and the majority of patients seek primary care at large tertiary hospitals (Eggleston 2012). Most of the health care facilities in China are public, but many of these institutions continue to behave like for-profit organizations, focusing on increasing hospital revenues and often working against recent efforts to shift the system toward outpatient primary care (Brink 2015).

The Health System under Mao

Between 1949 when the People's Republic of China (PRC) was established under the rule of the Chinese Communist Party (CCP) and the early 1980s, the Chinese health care system was, like other communist nations, entirely public

Table 1 Health expenditures in China: 1995–2010

Year	Total health expenditure (100 million Yuan)	Total health expenditure per capita (Yuan)	Total health expenditure as a % of GDP	Government health expenditure (100 million Yuan)	Government health expenditure as % of total health expenditure	Out-of-pocket health expenditure (100 million Yuan)	Out-of-pocket health expenditure as % of total health expenditure
1995	2155.13	177.90	3.54	387.34	17.97	999.98	46.4
1996	2709.42	221.40	3.81	461.61	17.04	1372.15	50.64
1997	3196.71	258.60	4.05	523.56	16.38	1689.09	52.84
1998	3678.71	294.90	4.36	590.06	16.04	2017.63	54.85
1999	4047.5	321.80	4.51	640.96	15.84	2260.55	55.85
2000	4586.63	361.90	4.62	709.52	15.47	2705.17	58.98
2001	5025.93	393.80	4.58	800.61	15.93	3013.89	59.97
2002	5790.03	450.70	4.81	908.51	15.69	3342.14	57.72
2003	6584.1	509.50	4.85	1116.94	16.96	3678.66	55.87
2004	7590.29	583.90	4.75	1293.58	17.04	4071.35	53.64
2005	8659.91	662.30	4.68	1552.53	17.93	4520.98	52.21
2006	9843.34	748.80	4.55	1778.86	18.07	4853.56	49.31
2007	11,573.97	875.96	4.35	2581.58	22.31	5098.66	44.05
2008	14,535.4	1094.52	4.63	3593.94	24.73	5875.86	40.42
2009	17,541.92	1314.26	5.15	4816.26	27.46	6571.16	37.46
2010	19,980.39	1490.06	4.98	5732.49	28.69	7051.29	35.29

National Bureau of Statistics of China 2014

(Blumenthal and Hsiao 2015). The health care system in urban areas was organized around a network of "first-level" hospitals. These organizations offered access to basic primary care services and engage in public health interventions, including vaccination and health education. First-level hospitals were the initial point of contact with the health care system for most people living in cities. They offered relatively equitable access to both western and traditional Chinese medicine (TCM).

In rural areas, healthcare was provided by communes, which provided housing, education and other social services, as well as basic medical care. An important feature of the communes' Cooperative Medical System was the staff of paraprofessionals known as "barefoot doctors" (Rosenthal and Greiner 1982). Most of the barefoot doctors were young peasants who received a few months of training in anatomy, bacteriology, diagnosing disease, and prescribing western and Chinese herbal medicine and could offer basic primary and preventive care, including health education. (Hesketh 1997; Valentine 2005). If the needs of patients were more complex, they would refer them to physicians at the commune health centers or, if necessary, the closest hospital (Valentine 2005).

The available data suggest that the system during this initial 30-year period of the PRC was effective and, by the mid-1970s, the World Health Organization recognized this program as a less expensive alternative to traditional western health care (Valentine 2005). The health status of the Chinese people improved during this time period. For example, life expectancy increased from 35 to 68 years between 1949 and 1978, although much of this can be attributed to the end of military conflict and investments in basic infrastructure, including sanitation (Hesketh 1997). In addition, the health system helped to eliminate or reduce a number of specific diseases during this 30-year period. Plague, cholera, and smallpox were successfully eliminated and mortality associated with others like diphtheria was greatly reduced (Ge and Gong 2007). Even though measurement of the health care system's success was limited, it did provide access to care and barefoot doctors served as patient advocates (Valentine 2005).

Critics point out that the health system under Mao had serious flaws that should not be ignored. For example, rather than act on evidence about the health consequences of tobacco, China nationalized the tobacco industry and encouraged its use in order to profit from the sales (Leow 2014). Beyond policies related directly to public health and health care, Mao's Great Leap Forward created China's Great Famine (1958–1962), which led to millions of premature deaths due to starvation, torture, and execution (the exact figure is in dispute, but estimate range from 30 to 45 million) in the late 1950s and early 1960s (Branigan 2013; Lim 2012). Despite this, aggregate health and health care improved dramatically under Mao and the government made health improvements a priority.

Economic Reforms and the Chinese Health Care System

The period dominated by public financing of health care and public investments in public health infrastructure came to a dramatic halt in the late 1970s after Deng Xiaoping assumed power. He implemented sweeping for economic reforms, believing that the use of markets were the key to economic growth (Naughton 1993). The economic reforms that began in 1978 resulted in major changes in the Chinese health care system. Most countries with market-based economies, recognizing that markets are not effective social mechanisms for producing public health and health care (Arrow 1963), have limited the role of the market in public health and health care. China, however, did not exempt these domains from its overall economic strategy. Following the adoption of market reforms, the central government decided to minimize its role in financing health care and other public services. In 1978, the central government's share of national health care spending was 32 % (Blumenthal and Hsiao 2005). By the late 1990s, public expenditures on health fell to just under 16 % (Table 1).

The government slashed subsidies to public hospitals and introduced market mechanisms into the health care system resulting in rapid growth of out-of-pocket payments. These changes and subsequent reforms during the 1980s shifted greater responsibility for public health financing from the central to local governments. A 2003 survey of patients in Heilongjiang Province, located in Northeast China along the Amur River, found that more than 60 % claimed that they had not received needed outpatient care within the past year (Chen 2009). The same survey found that nearly half of whom needed inpatient hospital care did not use these services because of the cost (Chen 2009).

When the Chinese government reduced its subsidies for health care, health care organizations and providers often turned to pharmaceutical companies to make up for these lost revenues. Rather than focus on providing primary and preventive care, for example, many first-level hospitals focused on selling drugs to patients (Wang et al. 2010). In addition to marking up the price of drugs to generate revenue, pharmaceuticals offer "financial incentives" (sometimes in the form of bribes) to hospitals and physicians to increase the sale of their products (Minter 2014). Even in wealthier cities, e.g., Beijing and Shanghai, first-level hospitals reduced their provision of public health services, e.g., immunization because they did not generate sufficient revenue from patients (Wang et al. 2010). Since the 1980s, these institutions have developed a reputation for poor quality care with inadequate staff and many patients stopped using them. As a substitute, patients started using large "third-level" hospitals for primary care and the management of chronic illness. Although these are inappropriate settings for primary care, patients often assume that the quality of care in these facilities is superior. Between 1997

and 2001, the number of first-level hospitals declined from 51,535 to 48,643, while the number of second- and third-level hospitals increased from 10,789 to 11,194 (Wang et al. 2010).

In addition to undermining quality, the reduction in national government subsidies led to dramatic geographic inequalities in health care. A much greater share of health care services had to be financed from local government taxes and out-of-pocket payments from patients. "That had the immediate effect of favouring wealthy coastal provinces over less wealthy rural provinces and laid the basis for major and growing disparities between investments in urban and rural health care" (Blumenthal and Hsiao 2005). The challenge in rural China was even greater. Rural Chinese citizens often have to travel to the nearest large city to receive specialty or surgical care. Few rural residents had health insurance, so they often have to deplete their savings to pay for their care. In 2003, 13.8 % of urban and 15.8 % of rural households incurred catastrophic medical spending—and 15.1 % of urban residents and 21.6 % of rural residents went without medical treatment because they could not afford it (Liu 2009).

The decentralization of funding for health decimated the country's public health system. Government subsidies for disease control, a public good that markets will not reward were slashed. To help local governments make up for the loss of health subsidies, the central government allowed local public health agencies to charge "for certain public health services, such as inspections of hotels and restaurants for sanitary conditions and of industries for compliance with environmental regulations" (Blumenthal and Hsiao 2005). Just as first-level hospitals shifted from providing primary care to selling pharmaceuticals, local public health agencies also shifted their focus to "revenue-generating activities and neglected health education, maternal and child health, and control of epidemics" (Blumenthal and Hsiao 2005). The impact of these policies varied greatly within the country. Because the economies of coastal cities are much stronger than rural areas in western China, decentralization of responsibility for public health resulted in public health expenditures that were "more than seven times higher in Shanghai than in the poorest rural" (Blumenthal and Hsiao 2005).

SARS and Curtailing Market Dominance

By the late 1990s, Chinese officials recognized that they needed to address growing disparities between rural and urban areas (Jian et al. 2010). As Table 1 suggests, total health spending in China started to increase in the late 1990s, but government health expenditures as a percentage of total health spending continued to decline into the twenty-first century. The efforts to improve the public health and primary care systems in China did not start to accelerate until after the outbreak of SARS.

SARS was first noticed in China late 2002 when a case of atypical pneumonia was reported in Guangdong province. By March 2003, the World Health Organization and US Centers for Disease Control and Prevention (CDC) both issued alerts for the disease (Centers for Disease Control and Prevention 2016). The outbreak lasted approximately 6 months and by the end of 2003, more than 5000 people were infected in China and 349 people died (Smith 2006). SARS exposed the weaknesses of the existing public health and health system (Eckholm 2003). Near the end of 2002, China faced a massive outbreak of SARS. Starting in the Guangdong Province in November 2002, SARS spread to Hong Kong, other provinces in China, and around the world. More than 5000 people were infected in China by the end of 2003 and 349 people died from the disease. Although the government initially denied the problem, its magnitude made it impossible for the government to ignore (Smith 2006). The SARS disaster led to the dismissal of the Health Minister and underscored the weaknesses of the existing public health and health system (Eckholm 2003). The alarm reinvigorated government and public attention to the need, not only for greater investment in public health infrastructure (Wang et al. 2008) but also in basic health care and prevention at community level. Despite this, the initial response of the government was inadequate. China expanded hospital insurance for rural residents, but failed to address the problems with the public health or primary care systems (Blumenthal and Hsiao 2015).

Expansion of Social Insurance and Primary Care

Following closely on the SARS episode, the WHO's 2006 international ranking of health care systems further embarrassed Chinese officials and encouraged them to increase spending on the health system. The WHO ranked the Chinese health care system 188 out of 191 countries with regard to equity. Although efforts to improve the health system following the 2003 SARs episode, coupled with the expanding Chinese economy, contributed to overall improvements in health, health inequalities among provinces in China continued to grow worse throughout the first decade of the twenty-first Century. A study by Chen and colleagues, for example, found that the health of children improved between 1989 and 2009, but provincial-level inequality in child health actually widened (Chen 2009).

Chinese officials and scholars attributed the country's poor ranking to weak primary health care and prevention. In response, China's State Council established a working group with representatives from 16 ministries to develop a policy response. In 2007, the working group solicited health reform plans and conducted a 1-month public

comment period to encourage discussion of these plans. The group published a report with their recommendations in 2009 (Wagstaff et al. 2009).

In the final report, the State Council announced that the government would ensure national comprehensive community health services with a focus on community health and primary care. The China State Council (2011) created a standard definition of community health centers or community health stations and, in a July 2011 report titled, "Directions on the Establishment of a General Practitioner System," concluded that there should be 2–3 GPs for every 10,000 persons. The report also called on all levels of government to restructure first-level hospitals to serve as community health centers and it allocated limited funds toward the building of community health services in cities in west China which were relatively economically worse off (Wang et al. 2010). Along with this new government investment, they encouraged community health pilot programs funded by private business and charity organizations (Lv and He 2007).

In 2009, the Chinese government enacted a major health reform plan with objectives of accelerating basic health insurance system, increasing public health financing, providing essential drugs, and expanding primary health facilities (Wang et al. 2010). In 2009, the central government spent more than CNY¥20 billion (US$3 billion) to expand and upgrade primary health care institutions. In 2010, the State Council called for the construction of 830 county hospitals, 1900 village hospitals, 1256 urban community health service centers, and more than 8000 village healthcare clinics (China Business Review 2011). The expansion of social health insurance coverage has been rapid. Between 2001 and 2011, the percentage of the population with health insurance grew from 15 to 95 % (Zhang et al. 2015). China plans to achieve universal coverage by 2020 through the four existing insurance schemes previously mentioned.

Limitations of the 2009 Health Reforms

The expansion of public health insurance in China represents a significant new phase in the country's health system, but the official numbers describing the extent of coverage is misleading. Critics argue that high out-of-pocket spending, limited benefit levels, and uneven access to quality care make China's system "universal" in name only (Bhunia 2014). Employer contributions to the UEI scheme are fixed at 8 %, but provincial contributions to the other schemes, which cover most of the population, vary considerably, leading to variations in coverage (Hsu 2014). This variation reflects the fact that social health insurance funds are jointly financed and jointly administered by the national and local governments (Meng et al. 2015). Because the social health insurance schemes are pooled at the local level, China actually has 2852 NCMS schemes, 333 UEI schemes, and 333 UBRI schemes, each of which has a different benefit package and different rules regarding out-of-pocket payments (Meng et al. 2015).

A particularly striking problem is the lack of coverage for internal migrants. Residents of rural areas qualify for public health insurance, but this coverage is not portable and offers no practical value to the more than 250 million rural-to-urban migrants living in China's cities (Bhunia 2014). In Shanghai, for example, 41 % of the city's population (9.6 million) is migrants and with no permanent residency status and most are ineligible for benefits (Gusmano et al. 2015). In addition to higher out-of-pocket spending for health care than other urban residents, migrants from rural areas are less likely to receive sick pay and have less spare time to attend to their health care needs (Zeng et al. 2015).

The health care financing system in China is dominated by fee-for-service payments. The expansion of health insurance is changing the nature of provider payment but by the end of 2013, about 50 % of the payments to health care providers came from fee-for-service payments directly from patients (Wang et al. 2010). The government regulates prices in an effort to make health care affordable and, during the past decade, provincial and local governments, with encouragement from the central government, have "changed from fee for service to payment methods that are aggregated and prospective, but include companion incentives, such as pay for performance and treatment protocols to assure that quality is improved, or at least not compromised" (Yip et al. 2010). Although the government hopes that the expansion of health insurance will limit hospital reliance on bribes and other financial incentives from medical device and pharmaceutical companies, these continue to be an important source of revenue for Chinese health care providers (Minter 2014; Wang et al. 2010; Wharton 2013). For example, in 2014, China's Ministry of Public Security accused GlaxoSmithKline (GSK) of paying out bribes to doctors worth US$494 million (ANH-USA 2014; Minter 2014). The company was convicted in a Chinese court and forced to pay US$500 million in fines and five GSK executives received suspended sentences (Plumridge and Burkitt 2014).

The 2009 reforms also helped to improve the country's public health infrastructure, but government funding is still limited. Government subsidies for disease control organizations increased to almost 58 % by 2010 from a low of only 36 % of total funding in 2000. This, however, means that 40 % of the funding for this public health function comes from private sources.

Private Investment in the Delivery System?

The 2009 reforms expanded the role of government, but they have not recreated the public delivery system that existed before the 1978 Economic Reforms. In fact, China is encouraging private investment in the health care system; at the same time, it is expanding the role of government in health care financing and quality regulation. PricewaterhouseCoopers LLC (2011), a multinational professional services firm with a significant presence in China, predicts that opportunities for private investment in China's health care system will continue to grow. In 2011, 12 % of hospital beds in China were private, but more than 1300 new private hospitals were constructed that year. The Chinese Ministry of Health wants to encourage private investment in areas that are currently underserved, but private investors are attracted by the opportunity of catering to the country's large and growing middle class and wealthy. Private investors are particularly interested in building facilities in the country's largest cities. For example, Chindex International, which was founded in 1997, operates a chain of high-end hospitals and clinics in seven cities, including Beijing and Shanghai (Wang 2015).

Public hospitals in urban areas are often overcrowded, so there is a market among wealthier Chinese for facilities that reduce waiting times and deliver efficient, high-quality health care services (PWC 2011). To date, however, the early experience with many private clinics has undermined their growth. Many urban residents, for example, prefer to wait in line at public facilities because they perceive that many private clinics offer low quality (O'Meara 2014). The limited use of private health insurance in China has limited the growth of private health care facilities. The public insurance schemes do not cover care in private facilities, so the further growth of private hospitals and clinics will depend, in part, on the growth of private health insurance (Wu and Jacobson 2015).

Inequalities in Health Care Access and Use

Even after the initial implementation of the 2009 health reform in China, recent studies suggest that most people in China believe that the system is unequal and that wealthy people and people living in cities enjoy much greater access to care than poor and rural residents of the country. A national survey conducted between November 2012 and January 2013 found that 73 % of the population believed that rich people enjoyed better access than poor people and 64 % believed that people living in cities enjoy better access than rural residents (Duckett et al. 2013). The survey suggested that people in China are not just troubled by ability of wealthier people to access care in the private system that is not available to poorer people, they are also worried about inequalities within the public system. Survey respondents claimed that civil servants enjoyed better access to health care than the rest of the population, reflecting concerns about corruption within the public system (Duckett et al. 2013). Despite the expansion of market competition, political elites in China control state-owned enterprises enjoy higher incomes than executives in the private sector and receive a host of perks, including high-quality health care not available to most people in China (Pei 2013). A 2015 study by the Institute of Social Science at Peking University found similar results. The 2009 health insurance reforms have expanded the availability of health insurance and access to health care, but rural residents still pay more out of pocket for their health care and there are fewer doctors and hospitals in rural areas (Buckley 2016).

The perceptions of inequality captured by these surveys are supported by recent studies. Insurance coverage has offered some financial protection against the cost of health care and has made primary care clinics and other organizations less reliant on revenue from pharmaceutical companies, but limited regulation of charges by these institutions continues to limit access for poorer residents. Liu and colleagues found that patients insured by NCMS paid 1921 RMB (about US$300) more in out-of-pocket expenses than the uninsured because health care providers charge them more for the same services. Another study published in 2014 found that the UBRI scheme increased the use of formal health care services, but did not reduce out-of-pocket payments (Hong and Zhong 2014). This may be due to the fact that expanded social health insurance encouraged more people to seek care, but did not provide a sufficient benefit package to cover the cost of the additional services. As a result, high and catastrophic health care spending actually increased, rather than decreased, following health insurance expansion (Eggleston 2012). The consequence of high out-of-pocket payments is to push large segments of the population into poverty. Each year, about 7 % of the Chinese population is pushed into poverty as a result of out-of-pocket health payments, but poor families are significantly more likely to be impoverished. Households in the wealthiest quintile of China are "60% less likely to be impoverished as a result of these payments compared with the poorest households" (Kumar et al. 2015).

It is important to place the continued reliance on out-of-pocket payments to finance health care in the context of significant economic inequalities. The Chinese government claims that the Gini coefficient, a standard measure of economic inequality, has fallen in recent years to 0.47, but a study by a joint Chinese-American research team concluded that China's Gini coefficient is actually 0.61. Another study by researchers in Peking University concluded that the Gini coefficient in 2013 was actually 0.73 and that the top 1 % of Chinese households control one third of the country's assets (Dongxu 2014). These studies indicate that China has one of the highest levels of economic inequality in the world (Pei 2013). High out-of-pocket health payments reinforce not only

result in inequalities in access to care, they exacerbate existing economic inequalities (Pei 2013).

Inequalities in Drug Access Along with the expansion of health insurance, the 2009 health reform was designed to make access to drugs more affordable and encourage more responsible prescription practices. Because so many health care organizations rely on revenue from pharmaceutical companies, not only did they mark up the price of drugs, they often prescribed drugs unnecessarily (Gough 2014). As a result of these forces, coupled with relatively low overall spending on other health care services, spending on pharmaceuticals represents an unusually large portion of spending in China compared with other nations. More than 40 % of inpatient spending and 50 % of outpatient spending in China is for pharmaceuticals (Jiang et al. 2013), compared with about 17 % in countries belonging to the Organization of Economic Cooperation and Development (OECD) (Barber et al. 2013).

The 2009 law required health insurance schemes to cover about 300 drugs on the essential medicines lists (EML) and to reimburse providers for the cost of these drugs at a higher rate than drugs not on the list (Barber et al. 2013). While reimbursement rates for medicine on the EML is higher than other drugs, the law required primary health care organizations to stop the practice of generating revenue by marking up the price of these drugs. This requirement, coupled with the expansion of subsidies for primary care and the expansion of insurance, were designed to reduce the reliance of primary care organizations on pharmaceutical revenue and restoring public confidence in these organizations and improving the quality of care (Wang et al. 2010). By 2012, all primary health care organizations were required to provide essential medicines without a markup (Jiang et al. 2013).

These changes have improved the availability of drugs, but the law still allows for substantial variation in affordability across China. The four health insurance schemes all allow for deductibles and annual caps on spending and vary depending on the fiscal capacity of provincial and local governments. In wealthier provinces, deductibles may be waived entirely, but in poorer provinces, the deductibles may be hundreds of US dollars (Barber et al. 2013).

Discussion

After years of leaving its public health and health care systems to the market, the Chinese government has reinvested in health. Like other so-called BRIC nations (Brazil, Russia, India, and China), China is committed to the goal of universal health coverage. During the past decade, the country has expanded social health insurance to the vast majority of its 1.3 billion citizens. Unfortunately, overall spending on health in China remains low, as is government spending as a percentage of the total. China's heavy reliance on provincial and local financing means that there are enormous geographic disparities in access to care. Its reliance on out-of-pocket payments mean that there are socio-economic disparities in access to health care that aggravate the country's large economic disparities and drive millions of people into poverty each year.

During the coming decades, China's health system will face daunting challenges. Its population is aging rapidly and it faces the dual challenges of infectious disease and the growth of chronic illness. On top of that, the remarkable economic growth that has marked the past two decades has slowed. China's cooling economy may place pressure on government officials to reduce health care spending at a time when health care needs are growing. The continued reliance on private financing, particularly out-of-pocket payments, has generated persistent inequalities in access to health care within China. Even with the expansion of public insurance since 2009, low-income and economically marginal Chinese, including internal migrants living in cities, have much poorer access to care. The Chinese delivery system is "mixed" with a dominant role for public sector institutions, but even the public hospitals and clinics rely on private financing for a large portion of their revenue. As a result, they remain insufficiently attentive to public goods and addressing the needs of their most vulnerable patients. Although the country may benefit from greater efficiencies in the health care system if it is able to develop a larger private sector delivery system, international experience suggests that reducing the large and persistent inequalities in access to and the use of health care services will require an expansion, rather than a contraction, of public financing.

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