

HEALTH POLICY REPORTS

## Privatization and Its Discontents — The Evolving Chinese Health Care System

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For the first-time visitor, China is breathtaking — a land of extraordinary vitality, unimaginable size, and outlandish contrasts. Its cities hum with energy, purpose, and impenetrable traffic jams choking inadequate roadways. It is home to one quarter of the world's population, and more and more of its 1.3 billion people have flocked into megalopolises (such as Shanghai, with more than 16 million people, and Beijing, with more than 13 million) that dwarf anything in the Western world. And while those cities sprout soaring, glass-shelled skyscrapers and business centers that make even London and Paris look modest, much of the rural population, which numbers 900 million, lives in poverty and desperation that are reminiscent of the world's most forgotten regions.

This complex reality reflects the enormous economic and political changes that are transforming China. Its gross domestic product (GDP) has grown at the extraordinary annual rate of 8 percent during the past 25 years, and its economy is now among the world's largest and most rapidly expanding.<sup>1</sup> Analysts routinely speculate that China will become the dominant world power in the 21st century,<sup>2,3</sup> fulfilling the aspiration of its legendary and controversial revolutionary leader, Mao Tse-tung. However, the means of China's ascendancy probably would have infuriated Mao. Instead of adopting a socialist and collectivist strategy that relies on central governmental control and emphasizes social equality, the Chinese have privatized their economy and decentralized much governmental control to provincial and local authorities. And instead of putting the interests of China's rural peasants first, as Mao advocated (his was a peasant revolution, starting in China's vast countryside), China's current leaders have poured money into its cities and let rural areas languish. The results have been huge and growing disparities in the well-being of populations in urban and rural areas and increasing social strife.<sup>4</sup>

China's transformation into a major world pow-

er makes its domestic affairs — and particularly, its internal political stability — potentially important for people around the globe. In that context, one of the most fascinating and important aspects of China's recent history has been the evolution of its health care system. As its economy boomed, in part by emulating Western economic methods, its health care system nearly imploded, partly because China adopted (wittingly or not) the strategies of some U.S. proponents of radical health care privatization. Ironically, the citizens of the United States, a bastion of capitalism, now enjoy far more protection against the cost of illness than the citizens of China, a nominally socialist nation. As a result, China faces huge health care problems that make those of the United States seem almost trivial by comparison and that constitute a major potential threat to China's domestic tranquility. At the same time, with governmental coffers swollen by tax revenues from its booming economy, the Chinese have opportunities for health care improvement that Western policymakers can only envy. This combination of massive challenges and huge opportunities makes the Chinese health care system a unique laboratory that Western health care planners cannot afford to ignore. The choices that Chinese officials make now could profoundly affect their future ability to manage epidemics, such as epidemics of the severe acute respiratory syndrome (SARS) and the feared avian influenza, that could affect the welfare of humans everywhere.

This report reviews the history and current status of the Chinese health care system. It traces the health care changes that resulted from the privatization of the Chinese economy, the significant differences in health care problems that emerged in China's resurgent urban and neglected rural areas, and the strategies that China's leaders are implementing to remedy those difficulties. The report concludes with reflections on the implications of these developments for U.S. and Western health care systems.

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 THE RECENT HISTORY OF CHINA'S  
 HEALTH CARE SYSTEM — 1950 TO 2002
 

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After Mao Tse-tung and the Chinese Communist Party took control of China in 1949, they created a health care system that was typical of 20th-century communist societies that are now largely extinct. However, China added some unique features to meet the needs of its huge peasant population and to take advantage of ancient, indigenous medical practices.

The government owned, funded, and ran all hospitals, from large, specialized facilities (often serving communist cadres) in urban areas to small township clinics in the countryside. The private practice of medicine and private ownership of health facilities disappeared. Physicians were employees of the state. In rural areas, the cornerstone of the health care system was the commune, which was the critical institution in rural life. Communes owned the land, organized its cultivation, distributed its harvest, and supplied social services, including health care, which was provided through the Cooperative Medical System. The Cooperative Medical System operated village and township health centers that were staffed mostly by practitioners who had only basic health care training — the so-called barefoot doctors, who received much publicity in the West for their supposed effectiveness in meeting the needs of rural populations.<sup>5</sup> Barefoot doctors provided both Western and traditional Chinese medical care and also many public health services.

From 1952 to 1982, the Chinese health care system achieved enormous improvements in health and health care.<sup>5</sup> Infant mortality fell from 200 to 34 per 1000 live births, and life expectancy increased from about 35 to 68 years. These improvements also reflected major investments in public health through a highly centralized governmental agency modeled on the Soviet Union's system of the early 1950s.<sup>6</sup> This public health apparatus achieved major gains in controlling infectious diseases through immunization and other classic public health measures, such as improved sanitation and the control of disease vectors, including mosquitoes for malaria and snails for schistosomiasis.<sup>5,7</sup> By the beginning of the 1980s, China was undergoing the epidemiologic transition seen in Western countries: infectious diseases were giving way to chronic diseases (e.g., heart disease, cancer, and stroke) as leading causes of illness and death.<sup>8</sup>

Then, in the early 1980s, China virtually disman-

led its apparently successful health care and public health system overnight, putting nothing in its place. In retrospect, this startling and almost inexplicable event seems to have been collateral damage from a much more carefully planned and successful policy strike: the privatization of China's economy and a general effort to reduce the role of Beijing's central government in China's regional and local affairs. Only recently have Chinese authorities recognized the pain and the massive disruption in health care that they have caused.

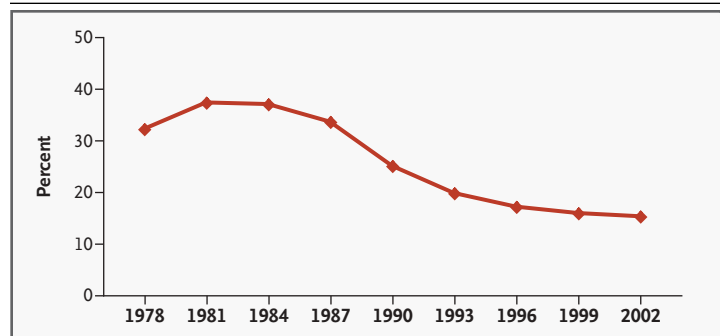
Several specific decisions in the early 1980s created China's current health care turmoil. First, China dramatically changed the way it financed health care. It reduced the central government's investment in health care services, as well as in many other public services. From 1978 to 1999, the central government's share of national health care spending fell from 32 percent to 15 percent<sup>9</sup> (Fig. 1). At the same time, the central government transferred much of the responsibility for funding health care services to provincial and local authorities and required them to provide that support through local taxation.<sup>10</sup> That had the immediate effect of favoring 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. In effect, the central government drastically reduced its ability and commitment to redistribute health care resources from wealthy areas to poor areas of a huge and diverse country in which the overwhelming majority of the population lived in the poor regions. Reduction in governmental support for the health care system also had the effect of largely privatizing most Chinese health care facilities, forcing them to rely more on the sale of services in private markets to cover their expenses after allocations from public sources declined. Public hospitals came to function much like for-profit entities, focusing heavily on the bottom line. The Chinese government informally sanctioned this privatization of hospitals and clinics by ignoring it.<sup>11</sup>

Second, the government imposed a system of price regulation that had dramatic, unintended effects. To ensure access to basic care, the government continued tight controls over the amount that publicly owned hospitals and clinics could charge for routine visits and services such as surgeries, standard diagnostic tests, and routine pharmaceuticals. But it permitted facilities to earn profits from new drugs, new tests, and technology, with profit mar-

gins of 15 percent or more.<sup>10</sup> Furthermore, the government modified its salary-based system of compensating hospital physicians to include bonuses determined according to the revenue the physicians generate for their hospitals. Those revenues depend heavily on sales of profitable new drugs and technologies. The result was an explosion in sales of expensive pharmaceuticals and high-tech services, such as imaging, and rapid overall increases in health care prices and spending.<sup>10</sup> While health services became unaffordable for most Chinese citizens, a growing class of newly rich Chinese sought and received Western style, high-tech care.

Third, the government suddenly and completely dismantled communes to privatize the agricultural economy. A side effect was to rip apart the health care safety net for most of rural China. Without the Cooperative Medical System, Chinese peasants had no way to pool risks for health care expenses, and 900 million rural, mostly poor citizens became, in effect, uninsured overnight. In the meantime, the vaunted barefoot doctors became unemployed and were forced to become private health care practitioners. Virtually unregulated, they abandoned their previous emphasis on public health services, which were no longer funded and for which they were no longer compensated, and switched to providing more lucrative technical services for which they were untrained. As a result, their quality as clinicians is highly questionable.<sup>12</sup> The former barefoot doctors quickly found that selling drugs was one of the best ways to stay afloat economically, and drug prices and sales exploded in rural areas as well.<sup>13</sup>

Fourth, China decentralized its public health system, as it had its health care financing and delivery system, and reduced central governmental funding for local public health efforts.<sup>9</sup> Aside from adding to the disparities between rural and urban health care, this move resulted in reduced funding for public health programs in many locales. To compensate, the central government granted local public health agencies the authority to make up for lost revenues by delivering personal medical services and charging for certain public health services, such as inspections of hotels and restaurants for sanitary conditions and of industries for compliance with environmental regulations. Predictably, local public health authorities concentrated on revenue-generating activities and neglected health education, maternal and child health, and control of epidemics. Between 1990 and 2002, public funding as a pro-

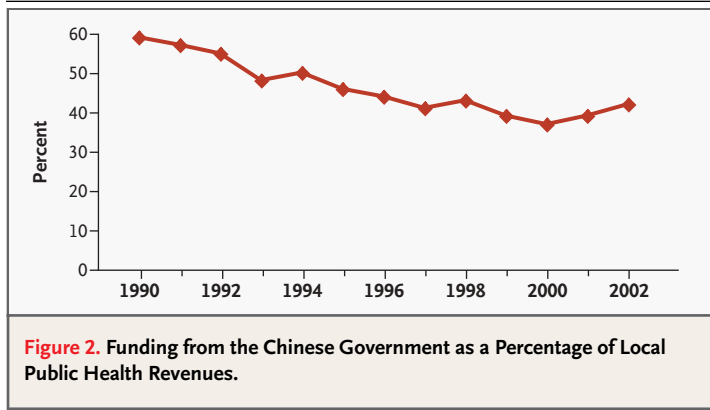


**Figure 1.** The Chinese Government's Share of National Health Care Spending, as a Percentage of Total Health Care Expenditures.

portion of local public health revenues fell from nearly 60 percent to 42 percent (Fig. 2), completing the partial privatization of China's public health system.<sup>9</sup> It did not help that barefoot doctors, once the shock troops of public health in rural areas, had also stopped providing public health services for which they were not compensated.

The unfortunate consequences of this cascade of events are best understood from the following three perspectives: the overall functioning of China's health care delivery system, disparities between its rural and urban areas, and the effectiveness of its apparatus for the control of epidemics. China's newly privatized health care delivery system suffers from all the problems of its distant U.S. cousin, but more so. Only 29 percent of Chinese people have health insurance, which they now need in order to cover the costs of care. Out-of-pocket expenses accounted for 58 percent of health care spending in China in 2002, as compared with 20 percent in 1978.<sup>14</sup> In a 2001 survey of residents in three representative Chinese provinces, half of the respondents said that they had foregone health care in the previous 12 months because of its cost.<sup>12</sup>

Yet, health care expenses are burgeoning, albeit from a lower base than in the United States. From 1978 to 2002, annual per capita spending on personal health services in China increased by a factor of 40, from 11 to 442 yuan (or from roughly \$1.35 to \$55). Overall, national spending on health care of all types (including public health) rose from 3.0 percent to nearly 5.5 percent of the GDP. Because of the profitability of selling pharmaceuticals and high-tech services, these items are widely overused. Half of Chinese health care spending is devoted to drugs (as compared with 10 percent in the United



States).<sup>10,15</sup> Backed by Western capital, a new for-profit medical sector has emerged to provide Western-style medicine in beautiful new facilities to China's rich urban elite.

In the meantime, the efficiency of the Chinese health care system has declined precipitously. With the growth of the private health care sector, the number of Chinese health care facilities and personnel have increased dramatically since 1980, but because of barriers to access, the use and thus productivity of the health care sector have declined.<sup>16</sup> To many in the United States, this portrait of pockets of medical affluence in the midst of declining financial access and exploding costs and inefficiency will sound depressingly familiar.

A second way of understanding the effects of China's post-1980 health care reforms is through the lens of urban-rural comparisons. In China's market-based health care system, the wealth of consumers is a critical predictor of their access to services and the quality of services, and with urban incomes triple the incomes in rural areas, urban residents have fared far better than rural citizens. In 1999, 49 percent of urban Chinese had health insurance, as compared with 7 percent of rural residents overall and 3 percent in China's poorest rural Western provinces.<sup>17</sup> Furthermore, the quality of care in rural communities is inferior to that in urban communities for reasons that are familiar worldwide: the numbers and quality of health care facilities and personnel in rural areas are inadequate. In particular, rural communities depend on care from former barefoot doctors, who were never well trained and who now earn their keep mostly by selling drugs and providing intravenous infusions, a popular form of therapy for all kinds of problems

in China.<sup>10</sup> It has been estimated that one third of drugs dispensed in rural areas are counterfeit, enabling their vendors to earn huge markups.<sup>18</sup>

Aware that their health care is poorer in quality, rural residents with serious illnesses frequently bypass local practitioners and facilities to seek care in the outpatient units of urban hospitals, leading to underuse of the former, overuse of the latter, and increased fiscal burdens on peasants who seek out more expensive, hospital-based services. Health expenses are a leading cause of poverty in rural areas and a major reason that peasants migrate to cities seeking proximity to better health care facilities and higher wages to pay for care.<sup>19</sup> Differences in wealth also profoundly affect public health expenditures, which are more than seven times higher in Shanghai than in the poorest rural areas (Claeson M, et al.: unpublished data).

These gaps in wealth, financial and physical access to care, and public health expenditures between urban and rural areas are reflected in health statistics. In 1999, infant mortality was 37 per 1000 live births in rural areas, as compared with 11 per 1000 in urban areas. In 2002, the mortality rate among children under five years of age was 39 per 1000 in rural areas and 14 per 1000 in urban locales. Urban and rural maternal mortality rates in 2002 were 72 and 54, respectively, per 100,000. Perhaps most shocking, in some poor rural areas infant mortality has increased recently, although it has continued to fall in urban centers, and there has been a resurgence of some infectious diseases, such as schistosomiasis, which was nearly controlled in the past.<sup>7</sup>

Gaps in health care are an important reason for growing anger in some rural districts toward the Chinese government, the Chinese Communist Party, and China's new, wealthy elite and are contributing to increasingly frequent local riots and disturbances in rural China.<sup>4</sup> In a country where threats to established political authority (such as the communist revolution itself) have sprung up for millennia from the grievances of an impoverished peasantry, the consequences of differentials between rural and urban health care carry profound political significance for the current Chinese leadership.

Finally, decentralization and underfinancing of public health services have significantly undermined China's ability to mount an effective, coordinated response to potentially pandemic infectious illnesses. The Chinese government's slow response to the

SARS epidemic almost certainly was a reflection of these developments, which raise concerns about whether China's public health infrastructure will be up to the task of detecting and responding to the emergence of an incipient avian influenza epidemic. The same concerns arise with respect to China's ability to contain its growing epidemic of human immunodeficiency virus (HIV) infection and associated outbreaks of multidrug-resistant tuberculosis, especially in rural areas.

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#### THE GOVERNMENT RESPONDS

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To its credit, the Chinese government has recognized and begun to address the huge health care problems that it created. It has done so with remarkable pragmatism, uninhibited by ideology and often importing (after careful examination) solutions pioneered in other countries. China also benefits at this time from a rare financial opportunity. Because of the rapid growth in its economy, national and local governments have sufficient tax revenues to make substantial health care investments without reducing spending for competing social services, such as housing and education, or for defense, which is now a priority for Chinese leaders.<sup>20</sup>

Since China now seems to consist of two societies, urban and rural, the government has launched different strategies for ameliorating problems in these two locales. It has tried to recreate an urban health care safety net through a system that knits together a variety of devices that will be familiar to U.S. health care policymakers. The first is mandated employer insurance. In 1998, the central government required all private and state-owned enterprises to offer their workers medical savings accounts combined with catastrophic insurance. Imported from Singapore, the medical savings accounts require people to save their own money to pay for a portion of their personal medical expenses. The hope is that because medical savings accounts contain the patients' own money, patients will be sensitive to the costs of care but will still have protection against those expenses. Medical savings accounts cover initial health care expenses totaling up to 10 percent of a worker's annual wages, after which the catastrophic plan covers costs totaling between 10 and 400 percent of wages. Finally, employers may offer workers the option of purchasing additional insurance to cover health care costs exceeding 400 percent of their wages.

The system is far from perfect. Some employers have refused to comply with state mandates, claiming they cannot afford the contributions. Many urban dwellers do not work for organized employers. Companies form and disband rapidly to avoid paying benefits to workers. Dependents of workers may not be covered. An indigenous Chinese private health insurance industry has arisen to sell health insurance to a wealthy minority that can afford it, and China is considering permitting foreign insurance companies to sell health care coverage as well. Whether the Chinese government will be able to cover the 51 percent of urban residents who still lack protection against the cost of illness, and how it would do so, is far from clear at this point.

The central government was slower and more reluctant to address health care problems in rural areas, but it was forced to act because of evidence that health care expenses were undermining other government efforts to alleviate poverty among the peasantry. In 2002, officials launched experiments to create a very rudimentary financial safety net for health care. Under these schemes, the government provides the equivalent of \$2.50 a year to help cover a basic insurance plan for peasants, who must match this with an annual \$1.25 of their own. Because of their modest funding, these plans cover only inpatient care (with a very high deductible) and leave peasants without adequate primary care services and drugs. Faculty at the Harvard School of Public Health are helping the Chinese government to test an alternative model that covers prevention, primary care, and insurance protection.<sup>18</sup>

Traumatized by the SARS episode, the central government has also invested substantial funds in rehabilitating its apparatus for controlling infectious diseases, though not other aspects of its public health system.<sup>21</sup> The government has created an electronic system of disease reporting that is based at the district level. Every district also now has a dedicated infectious diseases hospital. A major persistent flaw is that important gaps in the monitoring mechanism persist below the district level. Since districts in China may include hundreds of thousands of people, an outbreak of influenza or SARS can spread widely within a local population before it comes to the attention of district authorities. Furthermore, China has not yet invested in public education regarding personal hygiene and public health practices that might nip future epidemics in the bud.

## LOOKING BACK AND LOOKING FORWARD

The recent history of the Chinese health care system offers a number of lessons for observers in the United States and elsewhere. It seems clear that the radical privatization of health care systems carries enormous risks for the health of citizens and for the stability of governments. The Chinese example further reveals that government involvement may be essential to ensure an effective health care safety net and that, regardless of their language, history, or culture, providers will confer the services they are rewarded for offering. When Chinese doctors and hospitals were rewarded for providing high-tech services, they did exactly what U.S. doctors and hospitals have been doing for decades, with the same effects on use and costs. In fact, an overriding lesson of the Chinese experience is a warning to the rest of the world: if leaders anywhere care to, they can mimic and even exceed the inequities and inefficiencies that the U.S. health care system has exemplified for so long.

At the same time, optimists can find reason for hope as China struggles with its self-inflicted health care wounds. China's leaders have begun purposefully and soberly to tackle the enormous social engineering challenge of repairing past damage and shaping a new health care system that fits their unique social system and culture. It is hard to say precisely what that system will look like, but it will undoubtedly combine private and public provision of both insurance and services, and it will look very different in rural and urban areas. A major unaddressed challenge for China (and for the United States) is how to reform an inefficient, poorly organized health care delivery system that is bloated in urban areas and threadbare in rural sectors. A further challenge facing China will be instilling in health care professionals, and especially physicians, an ethic of professionalism that is essential to ensure that private health care systems protect the interests of patients and provide care of reasonable quality. For several generations of Chinese physicians, loyalty to the state and communist ideology replaced professionalism as an ethical framework.<sup>12</sup> Another challenge will be China's sheer size and diversity.

Given the importance of China to the political and physical health of people everywhere, Americans have a huge stake in the wisdom and ingenuity with which China's leaders approach their country's health care challenges. In an age of terrorism, SARS, avian influenza, and HIV, no country is a health care island unto itself.

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