Paulson Policy Memorandum

Developing More Equitable and Efficient Health Insurance in China

Shenglan Tang

October 2014

保尔森基金会
PAULSON INSTITUTE

About the Author

Shenglan Tang

Shenglan Tang is Professor of Medicine and Global Health at Duke University. He is Associate Director of the Duke Global Health Institute, USA and Founding Director of the Global Health Research Center of Duke Kunshan University in China. He has undertaken policy-oriented research on health systems development, particularly in China, over the past 25 years, and was senior health policy advisor at the China Office of the World Health Organization (WHO) from 2006 to 2009, supporting the Chinese government as it prepared its new round of reforms to the country's health system. He has published on health systems reform, disease control, and maternal and child health care in developing countries, and provided consulting services to many international organizations and the national governments of many developing countries.[1]

Cover Photo: Reuters/David Gray

保尔森基金会
PAULSON INSTITUTE

Abbreviations

NCD: Non-communicable Disease

GIS: Government Insurance Scheme

LIS: Labor Insurance Scheme

CMS: Cooperative Medical Scheme

UEBHI: Urban Employee Basic Health Insurance

URBHI: Urban Resident Basic Health Insurance

NCMS: New Cooperative Medical Scheme

MFA: Medical Financial Assistance for the Poor

MSA: Medical Savings Account

MOH: Ministry of Health

MOLSS: Ministry of Labor and Social Security

MOF: Ministry of Finance

MCA: Ministry of Civil Affairs

NHFPC: National Health and Family Planning Commission

MOHRSS: Ministry of Human Resources and Social Security

Introduction

China is one of a few developing countries in the world that has managed to expand the coverage of health insurance at a remarkable pace. Just a decade ago, only about one-quarter of the Chinese population had health insurance, but today, over 95 percent has coverage (see Figure 1).[2]

Such an achievement has owed much to a few main factors. A first is strong political commitment. The Chinese government responded to public pressure, particularly throughout the 1990s, to improve the country's healthcare system. A second is rapid economic growth, which has yielded relatively healthy fiscal balance sheets for both national and local governments for most of the past thirty years.[3] Many studies have shown that the expansion of health insurance coverage has improved access to healthcare. It has also increased, to some extent, financial protection for people seeking health services in China.[4]

But despite this success, the development and operation of health insurance schemes are far from efficient. Nor has the current system improved equity in the use and financing of health services.

Improving the performance of health insurance schemes to ensure better equity and efficiency is an urgent need.

Many socioeconomic and institutional factors have contributed to these inadequacies.[5] For one, after the introduction of new health insurance schemes over the past decade, hospital admission rates have increased significantly. Indeed, many hospital admissions might not be essential from a medical point of view. In addition, out-of-pocket payments, as a percentage of household consumption expenditure, have risen in many provinces.[6]

China is also undergoing a profound demographic transition, becoming an aging society faster than anticipated. Non-communicable chronic diseases (NCDs) account for over 85 percent of the total burden of diseases in China.[7] And the demand for quality healthcare, particularly for sophisticated high-tech care, has risen significantly in recent years. This is in large part because of an expanding middle class with higher living standards that now has a different set of expectations when it comes to quality of life and social services such as healthcare.

For these reasons, improving the performance of health insurance schemes to ensure better equity and efficiency is an urgent need.

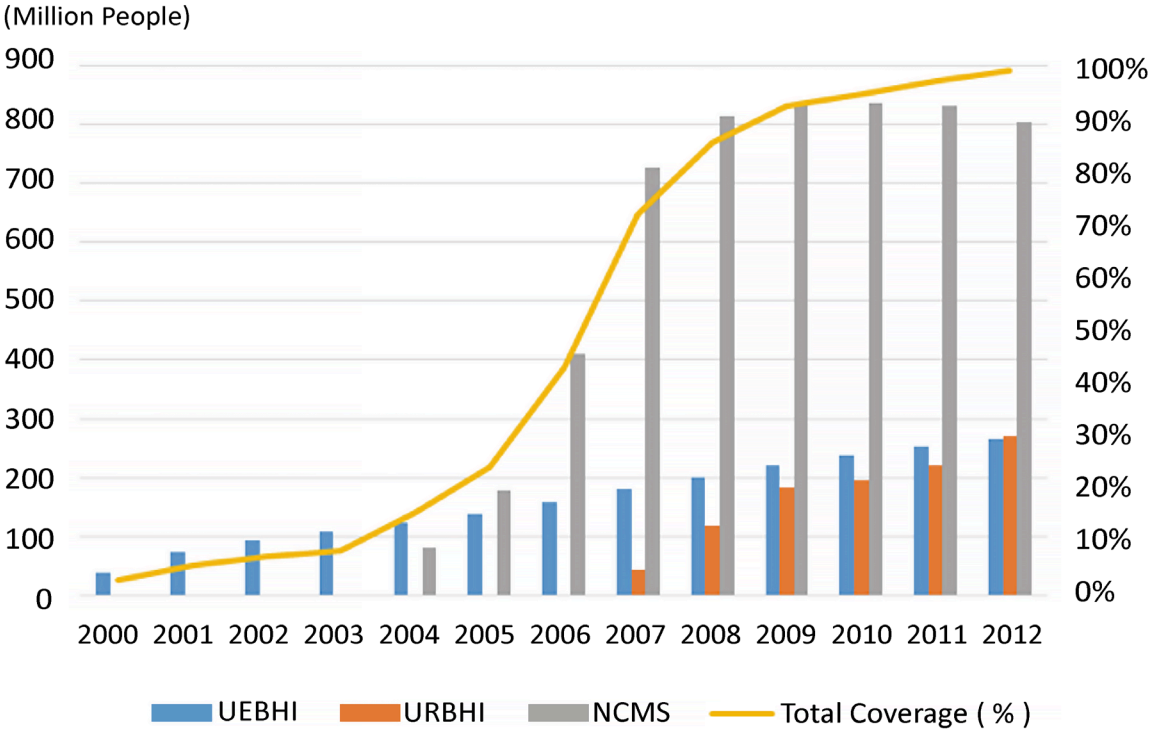
保尔森基金会
PAULSON INSTITUTE

It is, too, a necessary part of achieving the objectives set out in the healthcare system reform that the Chinese government launched in 2009.[8] Chinese decision makers view this reform as the first step to ensuring healthcare access for the vast majority of Chinese in years to come.

This Policy Memorandum begins with a brief introduction of the evolution of Chinese health insurance schemes, including the achievement of universal health coverage in recent years. It then analyzes the political, socioeconomic, and institutional factors affecting the performance of China's current schemes. Finally, and most important, it aims to offer a number of policy options for financing and managing health insurance schemes.

The central objective is to provide more financial protection for China's insured—and to improve the efficiency of using limited resources for healthcare coverage. These policy ideas are targeted mainly at China's central and local government policymakers, as well as health insurance management agencies.

Figure 1. Health Insurance Coverage in China



Source: Center for Health Statistics and Information, Ministry of Health, 2013.

保尔森基金会
PAULSON INSTITUTE

Evolution of Chinese Healthcare Coverage

China has had a longstanding bifurcated healthcare system: one for the urban population and another for its rural population. Prior to the launch of economic reforms in 1978, over 80 percent of the urban population was fully or partially covered by either government insurance schemes (GIS), labor insurance schemes (LIS), or other forms of health insurance. Meanwhile, over 90 percent of China's rural population participated in the cooperative medical scheme (CMS).[9]

GIS and LIS were, in essence, a social health insurance scheme, jointly funded by employers and employees, and provided virtually free healthcare to those covered by the programs. The CMS, on the other hand, was supported by commune collectives with modest premium contributions from rural farmers.

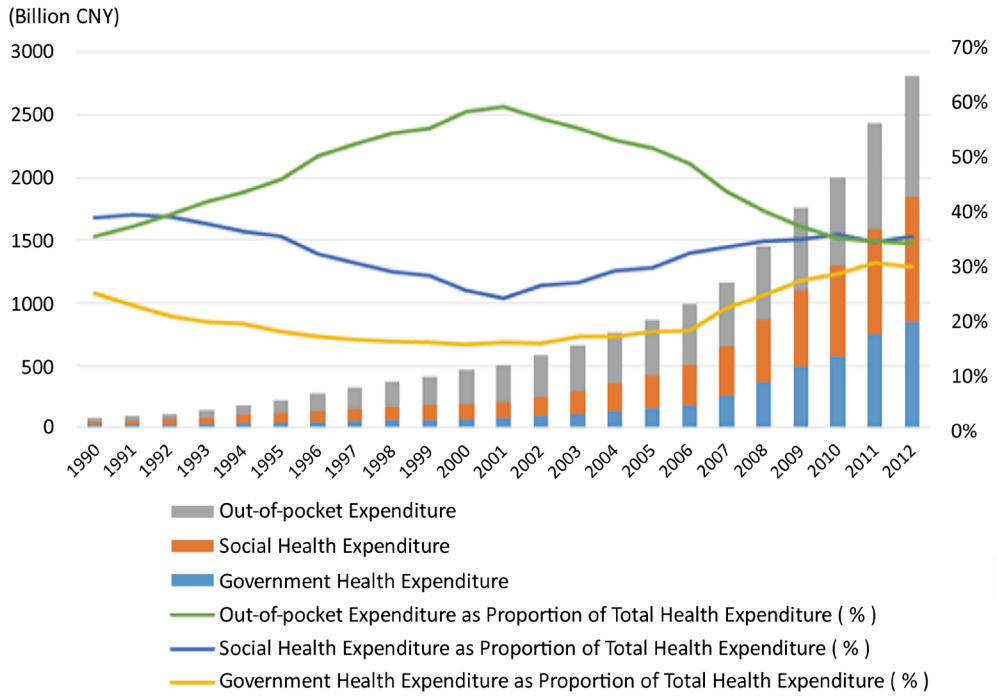
But the transformation of China's rural commune economy into the so-called "household responsibility system" in the early 1980s led to the collapse of the CMS toward the end of the decade. By the early 1990s, less than 10 percent of the rural population was covered by CMS.[10]

In China's urban areas, meanwhile, deepening market reforms and the overhaul of the state sector put significant pressure on state-owned enterprises to sustain support for LIS. For their part, local governments could no longer afford to contribute to an increasingly expensive GIS through their local healthcare budgets. Consequently, both the GIS and LIS became crippled in the 1990s.

This was not all: Since the 1990s, there has been a relative reduction in government funding for Chinese public hospitals, thus forcing hospitals to increasingly rely on user charges. That change has ushered in a rapid escalation of individual healthcare costs. For instance, by the late 1990s, out-of-pocket payments accounted for nearly 60 percent of the total health expenditure in China (see Figure 2). This has imposed significant burdens on the majority of Chinese seeking proper and affordable healthcare, leading to much grumbling about how "getting healthcare is expensive and difficult"—in Chinese, *kan bing gui, kan bing nan*.[11]

Reforms to both GIS and LIS began in the late 1980s. First, the two schemes introduced more rigorous cost sharing—for example, deductible and co-payments—and adopted alterative provider payment methods, such as global budget or case-based payment to fee-for-service. The goal was to effectively control healthcare costs and improve the efficiency of service provision. Later in 1998, the central government decided to merge the GIS

Figure 2. Composition of Total Health Expenditure by Resource (1990-2012)



Source: China National Health Development Research Center, Ministry of Health, 2013.[13]

and LIS into one Urban Employee Basic Health Insurance (UEBHI) scheme, after successful pilot projects in the cities of Zhenjiang in Jiangsu province and Jiujiang in Jiangxi province.[12]

The new UEBHI required individual employees to contribute at least 2 percent of their monthly salary into the scheme, while their employers were required to allocate at least 6 percent of payroll into the fund. The financial resources from the contributions were distributed into (1) individual medical saving accounts (MSA) and (2) risk-pooling funds. The percentage of shares for the two pots varied from region to region and was also subject to the age of the employees. More elderly people often have a larger percentage of the funds given to their MSA.

In most places in China, the MSA fund can only be used for outpatient services, while the risk-pooling fund is used for inpatient care as well as for select NCD services in certain areas. In a few cities, such as Shanghai, the risk-pooling fund can also be used for outpatient services, on condition that the beneficiaries have spent all the money from their individual savings accounts. The deductible and co-pay rates vary greatly across localities, from 8 percent to 40 percent.[14]

保尔森基金会
PAULSON INSTITUTE

Table 1. The Three Basic Health Insurance Schemes

	UEBHI	URBHI	NCMS
Population Coverage	Employees and retirees from urban formal sector (compulsory)	Unemployed residents and children in urban areas (voluntary)	Rural residents (voluntary)
Financing sources	Employees and employers and local/central governments	Individual premium and local/central governments	Individual premium and local/central governments
Services covered	Outpatient services; Inpatient services	Inpatient services; Outpatient services in select cities	Inpatient services; Outpatient services in select areas

Source: State Council, 2007; Ministry of Human Resources and Social Security, 2004 and 2013.[16]

In rural China, meanwhile, it took more time to rebuild a sustainable health insurance scheme. From the late 1980s through the 1990s, a number of local governments, particularly in the most developed regions along the coast, as well as at Chinese universities, research institutes, and international organizations such as the World Bank, UNICEF, and World Health Organization (WHO), all worked to figure out how to revive the CMS.

Many pilot schemes had succeeded to some degree, at least in terms of improving rural access to healthcare and reducing the rural population's financial burden. But scaling up CMS beyond these limited pilots proved to be particularly challenging because of the lack of appropriate and sustainable financial mechanisms.

In October 2002, the Central Committee of the Chinese Communist Party and the State Council convened a national conference on health development. A decision taken at the conference established a New Cooperative Medical Scheme (NCMS) to cover all of China's rural population, especially in the relatively poorer central and western regions of China.[15]

When President Hu Jintao and Premier Wen Jiabao took office in late 2002, their administration emphasized social justice and fairness to improve the welfare of the Chinese population, particularly the country's most vulnerable. A central part of this new social agenda was to address China's healthcare woes. So in 2003, about 300 counties were chosen to pilot the NCMS, with the government contributing 20 yuan ($2.44) per person and individuals contributing 10 yuan ($1.23) per person.

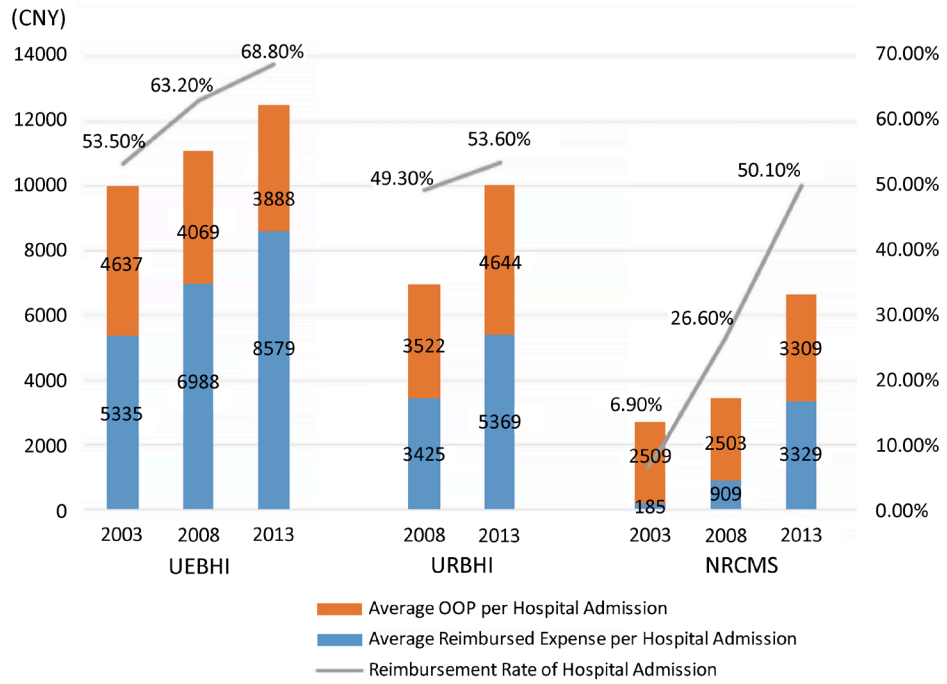
Under the auspices and guidance of the then-Ministry of Health (MOH), each county in China was required to develop a detailed implementation plan for the NCMS, including the design of service

benefit packages and deductible and reimbursement rates, among others. In wealthier regions, such as Shanghai, Jiangsu, and Zhejiang, local governments contributed more to the NCMS, so individuals in these localities received more generous benefit packages than those living in poorer areas.

In general, the NCMS initially focused primarily on covering inpatient services. This was due, first, to the limited availability of funding. Second, it was because of the fact that substantial portions of catastrophic expenditures were related to expensive inpatient care. As the program evolved, a growing number of counties, especially in more developed regions of China, extended benefit packages to cover outpatient care.

After the successful launch of NCMS and the sustainable development of UEBHI, the Chinese government realized that a substantial portion of the urban population, particularly the elderly and children, remained uncovered by any health insurance. To address that gap, the then-Ministry of Labor and Social Security (MOLSS) launched the Urban Resident Basic Health Insurance (URBHI) scheme in 2007, using an approach similar to the NCMS—that is, pooling

Figure 3. Patient Reimbursement Per Hospital Admission



Source: Center for Health Statistics and Information, MOH, 2008 and 2013.[18]

保尔森基金会
PAULSON INSTITUTE

resources from both central and local governments and from individual premiums (see Table 1).

At the end of 2012, some 265 million and 271 million of China's urban population were covered by UEBHI and URBHI, respectively.[17] Financing for URBHI is more or less the same as NCMS, and the URBHI's benefit packages vary as well. This is because the level of financial contributions differs from locality to locality.

To further break down the different schemes: UEBHI offers the highest reimbursement rate for inpatient service expenses, while NCMS has the lowest. However, the reimbursement rate for NCMS has increased significantly, from 6.9 percent in 2003 to 26.6 percent in 2008, and then 50.1 percent in 2013, thus closing the gap between urban and rural health insurance coverage.

Still, out-of-pocket expenses remain significant, particularly for URBHI, relative to the individual's disposable income (see Figure 3).

As shown above, merely *having* health insurance coverage does not translate into lowering healthcare costs. In some cases, exorbitant costs have made poorer Chinese households fall into poverty. To alleviate the cost burden for the poor, the Chinese government, with support from the World Bank and the Department for International Development of the British government, has developed the so-called Medical Financial Assistance for the Poor (MFA) program in both urban and rural areas.

The fund for MFA, which started in 2006 with a budget of 4.13 billion yuan ($689 million) and has since increased to 18 billion yuan ($3 billion) in 2012, is mainly allocated by the Ministry of Finance (MOF) at the national level, but is managed by the Ministry of Civil Affairs (MCA). Local governments, particularly in wealthier regions, often provide matching funds to support the MFA. The fund is mainly used to (1) help those living in poverty pay premiums to participate in NCMS and URBHI, and (2) increase the reimbursement rates of health expenses for the poor.[19]

Based on MCA data as of 2012, the fund paid health insurance premiums for 58 million people who are defined as those living in poverty (based on the criteria set out by the MCA) and receiving income support.[20] In addition, the fund for MFA is used to increase the reimbursement of hospital care expenses for 21 million poor Chinese. Unlike NCMS and URBHI, there do not exist standard criteria related to the level of financial resources allocated by either central or local governments to support the MFA.[21]

In sum, the political commitment to fixing China's healthcare system has been strong over the last decade. And this is underscored by the degree of central government financial support,

particularly to the NCMS and URBHI schemes. For instance, in 2012, central and local government funding for NCMS was 203.51 billion yuan ($34 billion).[22] This has been one of the most important driving forces behind the rapid expansion of health insurance coverage in China.

But China was likely also influenced by the global trend toward universal healthcare coverage, especially in numerous middle-income countries such as Ghana, Thailand, and Mexico.[23] In 2007, the Chinese government took the unprecedented step of sending invitations to the WHO, World Bank, McKinsey & Company, and several Chinese organizations and universities to solicit healthcare reform proposals for China.

This is yet more evidence of how seriously the Chinese government has sought to confront the question of extending universal healthcare coverage. Various proposals suggested very different models. Ultimately, Beijing opted for a hybrid approach, combining social health insurance (UEBHI) and tax-based prepayment health schemes (NCMS and URBHI) to achieve universal healthcare coverage.

Major Issues in Healthcare Financing and Management

Despite these impressive strides toward universal coverage, significant obstacles and barriers remain, particularly in the effort to create a more equitable, efficient, and fiscally sustainable health insurance system.

Two major—and closely interrelated—problems need to be addressed: disparity in financing the various health insurance schemes and capacity constraints in managing the schemes.

The central government can allocate more fiscal resources to support NCMS and URBHI, but many local governments, especially in poorer regions, face formidable difficulties in providing the so-called matching funds to support the two health insurance schemes on top of other financial commitments. As another Paulson Policy Memorandum on municipal finance demonstrates, since China's major 1994 fiscal overhaul, local governments' tax base has become very limited.[24]

There are huge variations in healthcare funding across the country and among the different insurance schemes.

At the same time, the managerial capacity of Chinese health insurance agencies has been inadequate. NCMS has been managed by the National Health and Family Planning Commission (NHFPC)—the newly merged structure created out of the former MOH—at the national, provincial, municipal, and county/city levels. Meanwhile, UEBHI and URBHI have been administered by the Ministry of Human Resources and Social Security (MOHRSS), which was called MOLSS in its previous incarnation.

This kind of fragmented arrangement, which owes much to historical reasons, has not been helpful in the effort to strengthen the effective management of health insurance schemes in China. In fact, both of these government agencies have limited managerial capacity, and many staff responsible for the health insurance schemes are not qualified to do their jobs.

Given significantly uneven economic development in different regions of China, equity in the financing of, and access to, healthcare has not improved to the extent that some had hoped. Each city or county often operates as its own stovepiped administrative zone with respect to socioeconomic development plans, including health insurance. Not surprisingly, then, there are huge variations in healthcare funding across the country and among the different insurance schemes.

Take this example: the average per capita funding for UEBHI in 2011 was 3,255 yuan ($545) in Beijing but just

1,630 yuan ($275) in Henan, a province in central China. For NCMS in 2011, the average per capita funding in Shanghai and Guizhou (a poor western province) were 987 yuan ($165) and 225 yuan ($37), respectively.[25]

That vast discrepancy in financing also extends to coverage. NCMS now covers more than 805 million of China's rural population, of which over 250 million are rural-to-urban migrants. Although the precise data is unavailable, it is widely known that only a small percentage of these migrants have been fortunate enough to participate in UEBHI—if they work in a formal sector in cities. The vast majority of migrants often cannot enjoy the benefits of NCMS because they live in a city far away from their home counties and their insurance coverage is not portable. This means that they still have to pay out-of-pocket for healthcare.

Financing disparities is not the end of the problem. It has also led to different benefit policies, which have in turn also given rise to inefficiency in operating and managing health insurance schemes. For example, one tertiary hospital may have to deal with the payments from more than a dozen health insurance management agencies at different administrative levels (provincial, municipal, city, and county). Such fragmentation of health insurance management has frustrated policymakers, hospital administrators, and health insurance providers alike.

Another major management issue is the lack of qualified personnel, particularly for the NCMS program, to manage the collection of premiums and to handle the payment of health service expenses to different service providers, let alone the development and amendment of health insurance policies from time to time.[26] The quality of personnel in insurance management agencies can also be problematic. Many in these agencies have not received proper training for either insurance management or health services. They are not in a position to assess the rationale or effectiveness of the services provided, let alone monitor and audit their quality.

Finally, the methods used to pay for Chinese hospital care are also not helpful to the effective operation of the country's health insurance schemes. Although hospitals are nominally publicly owned, they behave as *de facto* private hospitals, incentivized to maximize profits by charging extraneous fees and drug prescriptions. These practices are rampant in China today, and have led to serious patient anger and violence in Chinese hospitals. The current state of Chinese hospitals is a reflection of market reforms gone awry: specifically, the government significantly reduced financial support to hospitals but prohibited privatization, thus forcing hospitals to increasingly rely on revenues generated from service fees and drug sales merely to survive.

Options For Improving Existing Health Insurance Schemes

The Chinese government should consider certain policy options to strengthen the management of health insurance schemes and improve equity in the financing of healthcare for its citizens. These proposals target government agencies responsible for policy design, implementation, and regulation of health insurance schemes, not least the MOF, MOHRSS, and the NHFPC, and their respective administrative agencies at the provincial and municipal levels.

Photo: Flickr/Tomek Pienicki

First, while public spending on the NCMS and URBHI has increased steadily over the past decade, financial support is still modest, especially when compared to the vastly greater spending on UEBHI. More financial resources should be allocated to these other two programs, thus assuring better services to their beneficiaries.

To illustrate, we can compare spending on one of these two programs to UEBHI spending: annual per capita spending on the NCMS was just over 10 percent of per capita spending on UEBHI (246 yuan ($40) versus 2,196 yuan ($366) in 2011). So to narrow the gap, spending on NCMS should reach much higher—at least to 50 percent of the UEBHI level, for example.

The Chinese government should also develop a specific funding formula for MFA. This would include a fixed amount allocated per person for those living in poverty, as well as a fixed percentage of annual increase. This is what the Chinese government has already done for both NCMS and URBHI.

In doing so, the central government would help to put the MCA on a sounder footing to develop operational policies for better implementation of MFA schemes for the poor. It is imperative to assure extra financial support for China's poor in order to give them access to the essential healthcare they need.

Second, the level of resource pooling and risk-sharing for all three of the main health insurance schemes should be at the provincial level. The rationale for such a province-focused arrangement is to improve equity in the financing of, and access to, healthcare, and the economic efficiency of the operation of the schemes.

保尔森基金会
PAULSON INSTITUTE

In so doing, more financial resources could be shared between poor counties and rich counties within a single province. And this would also enable resource sharing between the poor and rich within a given provincial population.

Significant savings can be found, for example, by standardizing the information system, including billing and reporting, among hospitals and health insurance management agencies. At present, the level of resource pooling and risk-sharing in many places is still at the level of counties and cities, although pilot projects have been undertaken at the municipal level.

Administrative arrangements that make health insurance portable within a province or region should be developed to facilitate the use of health services by those not working and/or living in the area where they maintain their household registration, or *hukou*. An increasing number of cities, such as Shanghai, Hangzhou, and Zhenjiang, have worked together to develop such arrangements, allowing their residents who have moved to other cities to seek healthcare, and to ensure that they can get reimbursements locally. Such portability is a welcome change for the migrant population from these cities.

Indeed, local governments that are prepared to do so should be encouraged to merge their NCMS and URBHI offerings, building on the existing example of more than half a dozen provinces and municipalities. Such an approach would mitigate the fragmentation of organization and management of China's health insurance schemes and improve operational performance.

For UEBHI, in particular, the time is ripe to abolish the MSA component, not least because in most of urban China it is used only for outpatient services. The majority of young people hardly need to use the MSA fund. And elderly with chronic diseases draw down the fund quickly each year, and they end up paying out of pocket for essential healthcare.

Tough as this reform may be, inaction now may lead only to higher costs in the future.

Instead, the pooled fund for UEBHI should be used to cover both outpatient and inpatient services. Such a change needs strong political backing and may also require significant funding from both central and local governments to complete the transition. Central government funding could be used to support the regions to undertake such a daunting task. Estimated costs for such a transition will need to be determined before detailed policies and operations are put into place.

Tough as this reform may be, inaction now may lead only to higher costs in the future. That is why for Chinese policymakers, addressing such a challenge is a matter of *when*, not *whether*. An increasing number of

elderly Chinese with chronic diseases will simply not have sufficient funds to pay for outpatient services on their own. For instance, China currently has over 200 million hypertension patients and over 100 million diabetes patients. In fact, few cases in the world exist in which countries have used MSAs effectively to provide financial support for access to essential healthcare.

Third, increased financial contributions from government to NCMS and URBHI programs should be used to cover outpatient services. That is because a large portion of NCDs can be addressed at the primary care level.

Photo: Flickr/Rose Symotiuk

It simply does not make sense at all that state-supported health insurance schemes do not take care of hypertension and diabetic patients via primary care until their diseases reach the point that require hospitalization. At present, NCMS and URBHI in many parts of China do not cover any, or only cover selected, outpatient services—something that the vast majority of Chinese NCD patients seek.

Fourth, managerial capacity for administering all three health insurance schemes, as well as MFA, must be strengthened in two respects. One dimension is that the number of staff and professionals working for health insurance management agencies at all levels must be boosted to cope with increasing workloads that have resulted from the rapid expansion of population coverage. The current quota of personnel allocated to these management agencies is insufficient to the tasks and responsibilities.

The other dimension is to improve the qualifications of staff and managers, and find the right mix of professionals with distinct expertise in the areas of insurance management, quality assurance of health services, and others. Many Chinese staff and managers have not received adequate training or acquired the appropriate knowledge and skills to manage the various health insurance schemes, especially in rural areas.

Health management agencies need more staff and professionals who know financial management. But they also need medical experts who can assess the adequacy and appropriateness of the services provided, based on clinical pathways and guidelines.

Still another crucial challenge will be to improve the information management systems used by China's distinct health

insurance schemes at different levels. The management agencies responsible for the three health insurance schemes, as well as MFA, should work together to develop regulations that govern the collection of information by health insurance agencies. Standards and criteria need to be set regarding what data should be collected and the quality of this data.

Finally, a robust monitoring and evaluation system to assess the performance of health insurance schemes in China needs to be established to tackle challenges such as the comprehensiveness and quality of data collected, analytical capacity developed for integrating several types of data from hospitals, health insurance management agencies, and national surveys. The bottom line is that information systems in China need to be integrated to improve the performance of the major health insurance schemes.

Perhaps the most politically difficult reform of all would be to establish a new, quasi-government agency to oversee the operation of the three health insurance and MFA schemes. Such an agency would be independent from the NHFPC, MOHRSS, and MCA, and operate under the direct authority of the State Council.[27]

China's Health Insurance Reform in Broader Context

Insurance is just one component of a broader series of problems that continue to bedevil Chinese healthcare. Unless other challenges beyond the insurance problem are adequately resolved in coming years, the implementation of policy options for insurance may not work as intended. These challenges include the following:

First, China needs to develop appropriate compensation mechanisms for doctors in Chinese hospitals. At present, a large proportion of the income of Chinese doctors comes from so-called bonus payments that are linked to their ability to generate revenue. Consequently, this has resulted in the over-prescribing of services and medicines. Developing appropriate policies for financing public hospitals and paying doctors a reasonable salary is vital to making the system work better.

Another challenge facing China's health system more generally is to regulate the pharmaceutical industry more effectively, including the pricing and quality of drugs. There have, quite simply, been too many problems related to the pharmaceutical sector in China over the past two decades. In recent years, the government has effectively tackled some of the problems, particularly related to the quality of medicines, and has established the national essential medicine system. However, efforts to date have been inadequate. Developing and enforcing more effective pharmaceutical policies is a must, or else escalating drug costs may absorb resources and divert attention from other important reforms.

保尔森基金会
PAULSON INSTITUTE

Endnotes

[1] The author would like to thank Drs. Sen Gong of the Development Research Center of the State Council and Kun Zhu of the Institute of Medical Information of the Chinese Academy of Medical Science for their helpful comments on earlier drafts. Ling Xu of the Center of Health Statistics and Information of the National Health and Family Planning Commission provided some of the data used in this policy memorandum. Dr. Wenhui Mao of Fudan University's School of Public Health assisted in preparing the figures in the paper and the references.

[2] Center for Health Statistics and Information, Ministry of Health, *China Health and Family Planning Statistical Yearbook 2013* (July 2013), accessed at http://www.nhfpc.gov.cn/zwgkzt/tjnj/list.shtml.

[3] Tang S, Brixi H, and Bekedam H. "Advancing Universal Coverage of Healthcare in China: Translating Political Will into Policy and Practice," *The International Journal of Health Planning and Management*, 2014. 29(2): 160-174, accessed at http://onlinelibrary.wiley.com/doi/10.1002/hpm.2207/full.

[4] Meng Q, Xu L, Zhang Y, Qian J, Cai M, Xin Y, Gao J, Xu K, Boerma JT, and Barber SL. "Trends in Access To Health Services and Financial Protection in China between 2003 and 2011: A Cross-Sectional Study," *Lancet*, 2012. 379: 805-14.

[5] Sun J, Deng S, Xiong X, and Tang S. "Equity in Access to Healthcare Among The Urban Elderly in China: Does Health Insurance matter?" *The International Journal of Health Planning and Management,* 2014, 29 (2): e127-e144; also see Yip WC, Hsiao WC, Chen W, Hu S, Ma J, and Maynard A. "Early appraisal of China's huge and complex health-care reforms," *Lancet*, 2012. 379(9818): 833-42.

[6] Long Q, Xu L, Bekedam H, and Tang S. "Changes in Health Expenditures in China in 2000s: Has the Health System Reform Improved Affordability," *International Journal of Equity Health*, 2013 June 13; 12:40. doi: 10.1186/1475-9276-12-40.

[7] Wang L, Kong L, Wu F, Bai Y, and Burton R. "Preventing Chronic Diseases in China," *Lancet*, 2005. 366(9499): 1821-4.

[8] "State Council Opinion on Deepening Healthcare System Reform," State Council, March 17, 2009, accessed at http://www.gov.cn/jrzg/2009-04/06/content_1278721.htm.

[9] Tang S, Liang H, Meng Q, and Baris E. "Addressing Inequity in Access to Healthcare in Urban China: A Review of Healthcare Financing Reform Experiments," World Bank 2003, Working Paper Series No. 2004-5; also see Gu X. and Tang S. "Reform of the Chinese Healthcare Financing System," *Health Policy*, 1995. 32(1): 181-91.

保尔森基金会
PAULSON INSTITUTE

[10] Feng X, Tang S, Gerald B, Malcolm S, and Gu X. "Cooperative Medical Schemes in Contemporary Rural China," *Social Science & Medicine,* 1995. 41(8): 1111-8

[11] Gerald B. & Gu X. "Health Sector Reform: Lessons from China," *Social Science & Medicine*, 1997. 45(3): 351-60.

[12] Tang S, Liang H, Meng Q, and Baris E. "Addressing Inequity in Access to Healthcare in Urban China: A Review of Healthcare Financing Reform Experiments," World Bank 2003, Working Paper Series No. 2004-5; also see Gu X. and Tang S. "Reform of the Chinese Healthcare Financing System," *Health Policy,* 1995. 32(1): 181-91.

[13] China Statistics Yearbook 2013, National Bureau of Statistics, accessed at http://www.stats.gov.cn/statsinfo/xxgknb/201403/t20140325_529533.html

[14] "Create a New Phase of the Scientific Development of Health and Family Planning—'face to face lecture' special report set (2013)," National Health and Family Planning Commission 2014, China People's Publishing House.

[15] "State Council Decision on Further Strengthening Rural Health Work," October 19, 2002, accessed at http://www.gov.cn/gongbao/content/2002/content_61818.htm.

[16] "Guidance on Conducting the Pilot of Basic Medical Insurance for Urban Resident," State Council, 2007, accessed at http://www.gov.cn/zwgk/2007-07/24/content_695118.htm; also see "The Current Situation of Social Insurance in China in 2012," MOHRSS, 2013, accessed at http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/shizhengyaowen/201306/t20130618_105477.htm; also see "Issuance of Notifications About the Drug List for National Basic Medical Insurance and Work Injury Insurance," MOHRSS, 2004, accessed at http://www.molss.gov.cn/gb/zt/ypml/ypml.htm.

[17] Center for Health Statistics and Information, Ministry of Health, *China Health and Family Planning Statistical Yearbook 2013* (July 2013), accessed at http://www.nhfpc.gov.cn/zwgkzt/tjnj/list.shtml.

[18] "Analysis Report of National Health Services Survey in China," Center for Health Statistics and Information, MOH, 2008 and 2013.

[19] "Opinions on Further Improvement of the Urban and Rural Medical Assistance System," MOHRSS, 2009, accessed at http://www.mohrss.gov.cn/yiliaobxs/YILIAOBXSzhengcewenjian/200906/t20090615_83715.htm.

[20] Social Services Development Statistics Bulletin 2013, Ministry of Civil Affairs, accessed at http://www.mca.gov.cn/article/zwgk/mzyw/201406/20140600654488.shtml.

[21] Ma X, Zhang J, Meessen B, Decoster K, Tang X, Yang Y, and Ren X. "Social Health Assistance Schemes: The Case of Medical Financial Assistance For the Rural Poor in Four Counties of China," *International Journal of Equity Health*, 2011 October 20; 10:44; also see Hao Y, Wu Q, Zhang Z, Gao L, Ning N, Jiao M, and Zakus D. "The Impact of Different Benefit Packages of Medical Financial Assistance Scheme on Health Service Utilization of Poor Population in Rural China," *BMC Health Services Research*, June 17, 2010 10: 170.

[22] National Health Accounts Report 2013, National Health Development Research Center, MOH.

[23] Han Q, Chen L, Evans TG, and Summerskill W. "Recent Scientific Health Developments in China," *Lancet*, 2010 March 27; 375(9720): 1055-6.

[24] Wong, Christine, "Improving China's Municipal Finance," *Paulson Policy Memorandum*, December 2012, Paulson Institute, accessed at http://www.paulsoninstitute.org/think-tank/paulson-policy-memoranda/2012/improving-chinas-municipal-finance/.

[25] *China Health and Family Planning Statistical Yearbook 2012*, Center for Health Statistics and Information, MOH.

[26] Yan F, Raven J, Wang W, Tolhurst R, Zhu K, Yu B, and Collins C. "Management Capacity and Health Insurance: The Case of the New Cooperative Medical Scheme in Six Counties in Rural China," *The International Journal of Health Planning and Management,* 2011. 26(4): 357-78.

[27] We made such a suggestion in the WHO proposal for China's health system reform, submitted to the government in 2007. Many senior officials from the National Development and Reform Commission privately agreed to what was proposed, but the proposal was met with fierce objection from then-Ministry of Health and Ministry of Labor and Social Security.

About Policy Memoranda

Paulson Policy Memoranda are concise, prescriptive essays. Each memorandum is written by distinguished specialists and addresses one specific public policy challenge of relevance to the aims of The Paulson Institute.

Policy Memoranda offer background and analysis of a discrete policy challenge but, most important, offer realistic, concrete, and achievable prescriptions to governments, businesses, and others who can effect tangible and positive policy change.

The views expressed in Paulson Policy Memoranda are the sole responsibility of the authors.

About The Paulson Institute

The Paulson Institute, an independent center located at the University of Chicago, is a non-partisan institution that promotes sustainable economic growth and a cleaner environment around the world. Established in 2011 by Henry M. Paulson, Jr., former US Secretary of the Treasury and chairman and chief executive of Goldman Sachs, the Institute is committed to the principle that today's most pressing economic and environmental challenges can be solved only if leading countries work in complementary ways.

For this reason, the Institute's initial focus is the United States and China—the world's largest economies, energy consumers, and carbon emitters. Major economic and environmental challenges can be dealt with more efficiently and effectively if the United States and China work in tandem.

Our Objectives

Specifically, The Paulson Institute fosters international engagement to achieve three objectives:

- To increase economic activity—including Chinese investment in the United States—that leads to the creation of jobs.
- To support urban growth, including the promotion of better environmental policies.
- To encourage responsible executive leadership and best business practices on issues of international concern.

Our Programs

The Institute's programs foster engagement among government policymakers, corporate executives, and leading international experts on economics, business, energy, and the environment. We are both a think and "do" tank that facilitates the sharing of real-world experiences and the implementation of practical solutions.

Institute programs and initiatives are focused in five areas: sustainable urbanization, cross-border investment, climate change and air quality, conservation, and economic policy research and outreach. The Institute also provides fellowships for students at the University of Chicago and works with the university to provide a platform for distinguished thinkers from around the world to convey their ideas.

5711 South Woodlawn Avenue
Chicago, IL 60637
paulsoninstitute.org

保尔森基金会
PAULSON INSTITUTE