China：Developing Basic Rural Medical Security System and its experience

Zhengzhong MAO[1], Wei FU[2], Xuefei GU and Yuanping WANG[3]

Population[4]	1’335’000’000
Area	9’640’821 km²
Urban population (%)	46,6
Rural Population (%)	53,4
Age Structure	
0-14 years (%)	20,5
15-64 years (%)	71,5
65 years and over (%)	7,9
Infant mortality rate (per 1000 live births) both sexes[5]	18
Life expectancy at birth (years) female	74,9
Life expectancy at birth (years) male	71,4
Maternal mortality ratio (per 100 000 live births)[6]	45
GDP per capita	
➢ Current USD[7]	3’267
➢ PPP (current international $)[8]	5’971
➢ Constant local currency	22,698 yuan
Total social security expenditure as % of GDP	4,19
Public social security expenditure as % of GDP	3,87
Public social security expenditure as % of Total government	18,61

[1] Professor, Chair of Department of Health Economics, Sichuan University

[2] Ministry of Health

[3] China Health Economics Institute, MoH

[4] National statistics, 2009

[5] WHO, 2008

[6] WHO, UNICEF, UNFPA, World Bank, 2005

[7] World Bank - World Development Indicators & Global Development Finance, 2008

[8] World Bank - World Development Indicators & Global Development Finance, 2008

	expenditure	
	Unemployment rate (%)[9]	4,3
	Human Development Index ranking[10]	92
	HDI poverty indicators – Human poverty index rank	36

The Rural New Cooperative Medical Scheme (NCMS) and the Medical Assistance Scheme (MA) have been established separately since 2002. They are the main medical security schemes targeting rural residents and the poor in China.

Rural New Cooperative Medical Scheme (NCMS)

- Target population: all rural residents
- Enrollment: on a voluntary basis
- Provides reimbursements for enrollees' health spending on inpatient care, outpatient service, some selected catastrophic diseases, pregnancy's institutional delivery, and physical examination. The approximate reimbursement rate of inpatient care was about 39,82% in 2009.
- By the end of 2009, NCMS had 833 million enrollees; the enrollment rate was 94% of the target population and about 62% of the whole population in China.
- NCMS has a multi-channel financing mechanism. Both central and local governments subsidize the enrollees. The household of the enrolled farmers also contribute. Donation from the social sector is another funding source.

Medical Assistance Scheme (MA)

- Target population: the rural poor
- Provides financial assistance as well as exemptions for catastrophic health expenditures and some frequently occurring diseases for the poor and low-income groups.
- MA funds come mainly from government revenue (central and local governments, including public welfare lottery) and from social sector donations.

NCMS and MA have made great improvements in helping rural households, especially rural poor households, cope with financial burden from combating disease. The proportion of out-of-pocket expenditure has come down from nearly 80% to about 60%. Farmers' out-of-pocket spending as a share of per capita net income decreased from 74% to 44% with the introduction of the schemes.

[9] Registered unemployment rate in cities and townships, 2009

[10] UNDP, 2009

However, out-of-pocket share of inpatient cost is still as high (approximately 60%, 70% several years ago), which is beyond the affordability of the poor. Thus, NCMS alone cannot solve the issue of accessibility and equity for the poor. In fact, among its members, the poor utilize many fewer services than the non-poor. This situation will not change unless MA becomes integrated with NCMS, and pays all or part of the co-payment for the poor so that their out-of-pocket share can drop to 20% or below.

In 2009, total NCMS expenditure was about 92.29 billion yuan and MA expenditure was about 5.99 billion. But compared to the overall GDP (33535.3 billion yuan), NCMS and MA expenditures are inappreciable. All of these expenditure amounts represent net benefit expenditures for the beneficiaries (administrative expenditure, which is financed by the fiscal payment and has not been published, is not included).

	2004	2005	2006	2007	2008	2009
NCMS Expenses (100 million yuan)	26.4	61.8	155.8	346.6	662.0	922.9
MA Expenses (100 million yuan)	4.4	7.8	--	28.1	38.3	59.9
Gross Domestic Product (100 million yuan) at Current Year	159878	183217	211924	257306	300670	335353

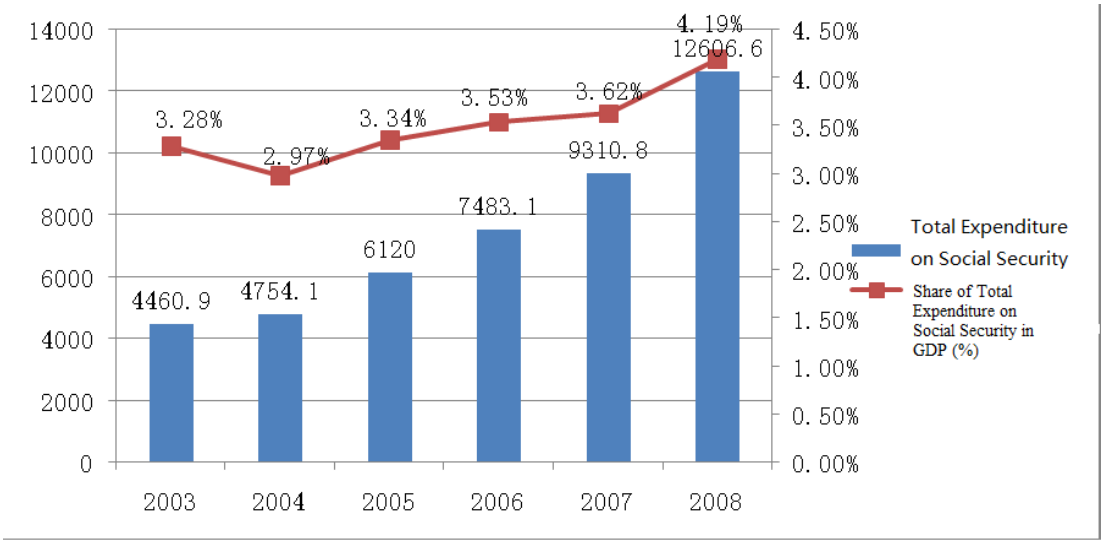
Source : Chinese Health Statistical Digest 2010, MoH,
http://www.moh.gov.cn/publicfiles//business/htmlfiles/zwgkzt/ptjty/digest2010/index.html

The first decade of the new century has witnessed great progress in China's medical security system in rural areas. Moreover, China faces new opportunities, given that its medical security system has been acknowledged as one of the priorities in the ongoing health care reform. This paper presents an overview of the rural medical security system in China, offering a broad context to understand its development and current state.

I. China's Basic Profile

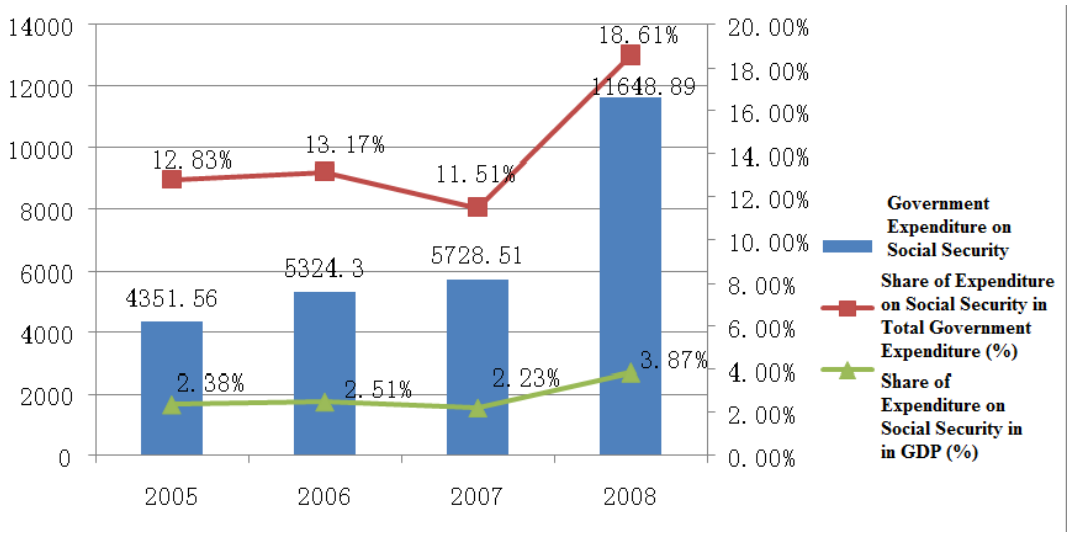
In the 30 years since reform, China has made remarkable strides in almost all fronts of human development, including poverty alleviation, education, health and social security. At the same time, total expenditure on social security and its share in GDP have been growing rapidly (Figure 2). From 2003 to 2008, total expenditure on social security rose from 44.6 billion yuan to 126.1 billion yuan (by a factor of 2.83), while its share of GDP went up from 3.28% to 4.19%. The share of government social security spending in total government expenditure and in GDP also increased dramatically from 2005 to 2008, as shown in Figure 1 and Figure 2.

Figure 1: Changes to Total Social Security Expenditure and its Share in GDP



Source: Expenditures on social security include 2003-2008 expenditures on a new rural medical cooperative scheme published in the *2010 China Health Statistics Summary* on the official website of the Ministry of Health; expenditures on pension insurance, medical insurance, unemployment insurance, labor injury insurance and maternity insurance published in the *2003-2009 Statistical Statement on Labor and Social Security Undertakings* in the official website of the Ministry of Human Resources and Social Security. Expenditures on social welfare and social assistance released in *2003-2009 Statistical Report on Civil Affairs Development* on the official website of the Ministry of Civil Affaris. Data on GDP is from the *2009 China Statistical Yearbook* of the National Statistics Bureau.

Figure 2: Total Social Security Expenditure as a Share of Total Government Expenditure and of GDP



Source: The data on fiscal social security expenditure is taken from the *Social Security and Employment* spreadsheet in the Ministry of Finance's *2005-2008 National Financial Settlement Report*.[11] The government health expenditures related to social security were announced in the *2009 Study Report on China's National Health Account*[12]. Fiscal expenditure data is from the *2005-2008 National Financial Settlement Report* of the Ministry of Finance; GDP data is from the *2009 China Yearbook on Statistics* of the National Statistics Bureau.

In the meantime, China's sustainable and rapid economic growth helps offer more jobs, increase income and alleviate poverty. Using the latest official rural poverty line of 1196 yuan which was announced by China in 2009, it can be said that China had a rural poor population of 35.97 million by end of that year. According to the World Bank report, 254 million Chinese people still consumed less than 1.25 USD in 2005 (purchase power parity), giving China the second-largest number of poor people after India.

Progress in social economic reform has led to a better livelihood, higher educational attainment and a longer life for the Chinese people, as demonstrated by the dramatic

[11] It includes items such as social security and employment services, civil affairs management, allowance to social security fund, supplement to national social security fund, retirement pension, allowances on enterprise reform, employment subsidy, death annuity, reintegration of decommissioned soldiers, social welfare, service for the disabled, urban subsistence allowances, other urban and township social relief, rural social relief, subsistence relief in time of natural disasters, and Red Cross services.

[12] These expenditures include basic medical insurance for urban employees, basic medical insurance for urban residents, new rural cooperative medical scheme, urban and rural medical assistance scheme, health operating expenses of public service units, and medical expenditure allowances targeting enterprise employees

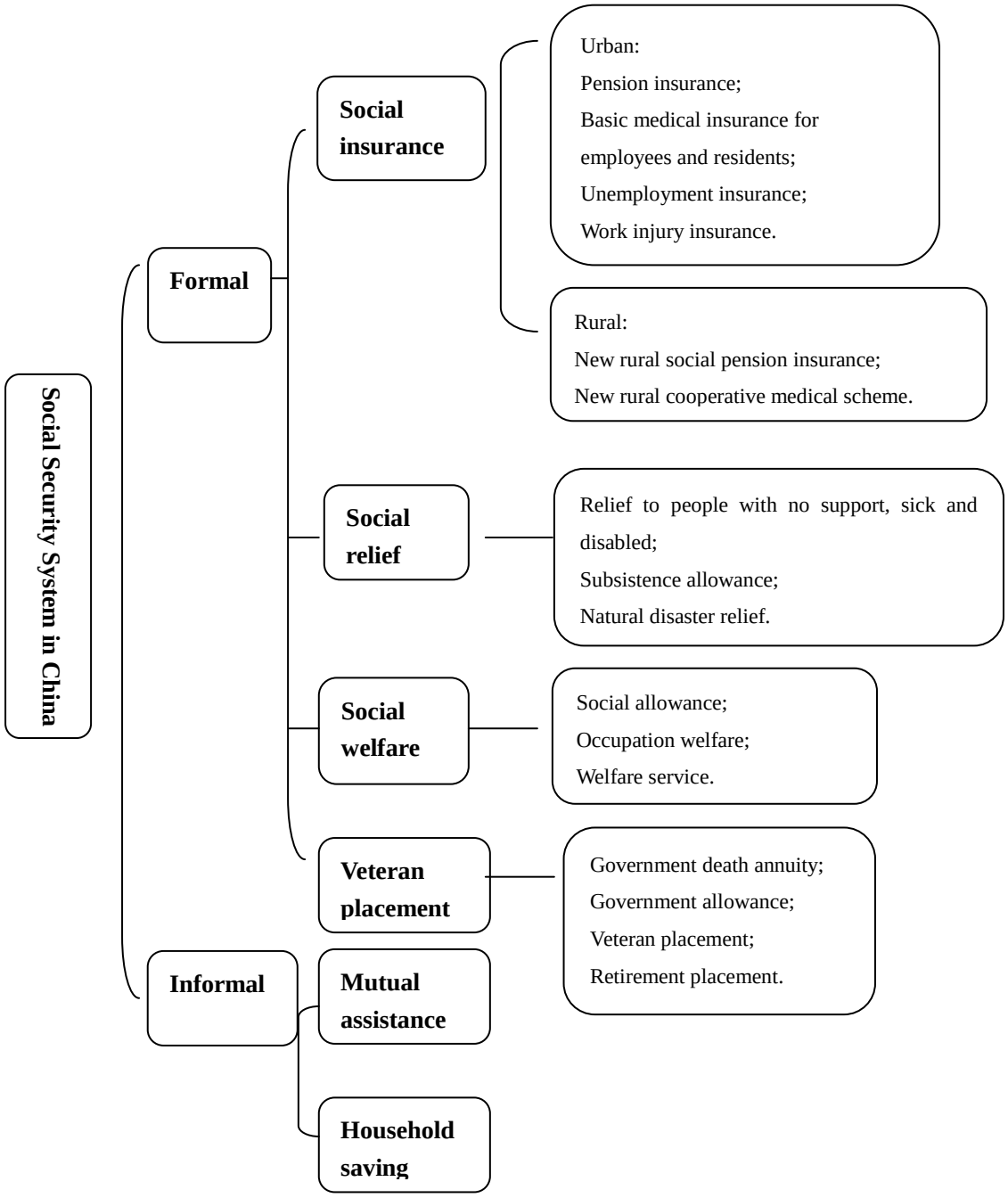
rise of China's human development index (HDI). In 2009, the HDI was 0.793: 0.773 for life expectancy, 0.923 for education and 0.683 for GDP. These figures stand in contrast to 2000, when the HDI was 0.726: 0.80 for life expectancy, 0.76 for education and 0.61 for GDP.

II. The Social Security System in China

During the first decades of the economic reform, the political focus was placed on economic development through market forces. Consequently, social development, including the health sector, was left behind.

However, the guiding concept of the central government has changed. With the official Scientific Outlook on Development as a guiding philosophy for national development, a harmonious society became the goal for social advancement, and a focus on people became the core concept for government administration in the 21st century. Universal access to social security has become a solemn political commitment for the government, making a social security system covering cities and countryside an integral component of the bid to improve livelihoods, promote social economic advancement, and maintain social stability. Social security undertakings have made strong headways in China. At present, social security in China covers social insurance, social welfare, veteran placement, social relief and a housing service, among which social insurance constitutes the core. In cities, China has established a 5-pillar social insurance system covering pension insurance, basic medical insurance targeting urban employees and urban residents, unemployment insurance, work injury insurance and maternity insurance. It has also rolled-out social assistance programs such as subsistence allowances and medical assistance programs. In the countryside, China has in place the new rural cooperative medical scheme, and is currently advancing a subsistence allowance system. In addition, the government is also exploring a rural pension insurance system.

Figure 3. The Social Security System in China



Source: Theories on Social Security, Li Zhen, China Labor and Social Security Publishing House, 2000; White Paper on Social Security in China, Information Office of the State Council, P.R. China, September 2004.

Table 1: Population Groups Covered by Different Social Security Mechanisms in China

	Mechanism	**Name**	**Population Covered**
Social insurance	Pension insurance	Basic Pension Insurance for Urban Employees	Employees reaching mandatory retirement age (60 for male, 55 for female officials, and 50 for female workers), with a 15-year or longer record of individual contribution
		Company annuity	Where conditions permit, companies may offer company annuity to employees on top of mandatory basic pension insurance.
		New rural pension insurance	Rural residents at and above 16 (students not included) who are not enrolled in basic pension insurance
	Medical insurance	Basic medical insurance for urban employees	Employees and retirees of all types, including government agencies, public service units, enterprises, civil societies and private non-business units. Employees in informal sector may choose to enroll.
		Basic medical insurance for urban residents	Urban students (college students included), children and other non-employed urban residents
		Supplementary medical insurance	Where conditions permit, enterprises may offer supplementary medical insurance on top of mandatory basic medical insurance.
		Medical allowance system for civil servants	Civil servants and employees of public service units enjoy government medical insurance.

		New rural medical cooperative insurance	Rural residents.
	Unemployment insurance	Unemployment insurance system	Enterprises, public service units and their employees; individuals paying unemployment insurance contributions for over 1 year; employment suspended involuntarily; those who already registered for unemployment and intend to find a new job.
	Work injury insurance	Work injury insurance system	Enterprises and private dealers with employees.
	Maternity insurance	Maternity insurance system	Urban enterprises and their employees. In some regions, female employees of government agencies, public service units, civil societies and enterprises are covered.
Social relief		Subsistence support to groups	The elderly, the disabled and minors with no statutory supporters, or with statutory supporters incapable of offering support; with no labor ability; no sources of revenue.
		Subsistence allowance system	Urban and rural residents with per-capita household income lower than the local minimum living standard; residents with no sources of livelihood and no statutory supporters.
		Medical assistance	Urban and rural poor people afflicted by illness.
		Disaster relief	Disaster-stricken people.

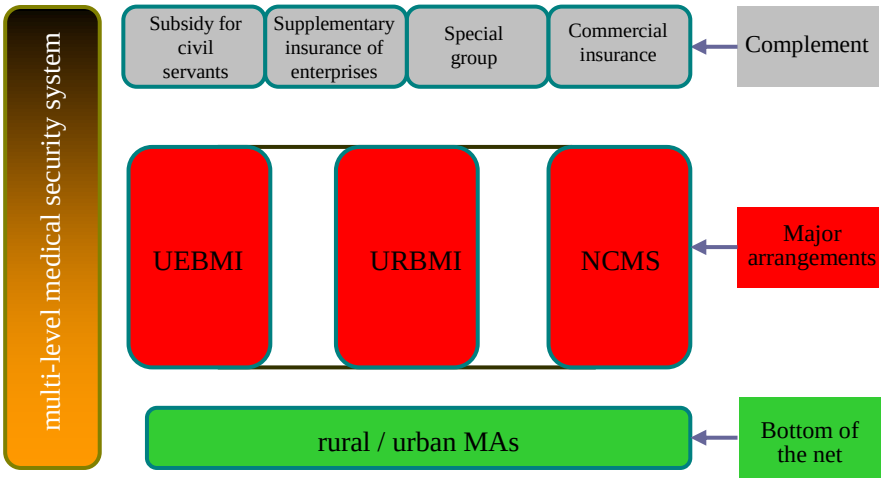
	Relief to homeless and beggars	Urban homeless and beggars.
Social welfare	Social welfare services	The elderly, orphans, the disabled, and other population groups.
Veteran placement	Veteran placement system	Targets of placement, mainly soldiers and their dependants.

Source: edited according to the *Social Security Status and Policies in China* (The White Paper on Social Security in China), Information Office of the State Council, P.R. China, September 2004.

III. Development of the Medical Security System

China has set up a multi-level medical security system. The major players are the Urban Employees Basic Medical Insurance Scheme (UEBMI), the Urban Residents Basic Medical Insurance Scheme (URBMI), and the New Cooperative Medical Scheme (NCMS). MA covers both rural and urban poor populations at the bottom of the safety net and various other health insurance organizations provide supplementary protection (See Figure 4). One of the major goals of the ongoing health care reform is to accelerate the development and improvement of various medical insurance schemes and ultimately to achieve universal access to essential health care.

Figure 4: Framework for China's Medical Security System



The *Decision on Establishing Urban Employees Basic Medical Insurance Scheme*, promulgated by the State Council in 1998, proposed to set up UEBMI and a multi-level medical security system, and listed the tasks and principles of supportive

reform in the health care system. Afterwards, UEBMI expanded to urban informal workers, workers in mixed ownership enterprises and the private sector, as well as rural migrant workers. The scheme is financed by both employers and employees (about 6% of total salary from the employer and 2% from the employee). The contribution is allocated into individual saving accounts and a municipality-level or county-level social pooling fund. The benefit includes both inpatient and outpatient care.

URBMI was piloted in 79 cities nationwide after the State Council released the *Guiding Opinions on Pilot Program of Urban Residents Basic Medical Insurance Scheme* in 2007. The voluntary enrollment scheme targets urban students (including university students), children, and other non-working urban residents. Its contributions are collected based on household size, pooled at the city level, and subsidized by the government. In 2009, the scheme, which protects its members from catastrophic expenditure in outpatient and inpatient care, achieved universal coverage ahead of schedule.

Since the implementation of UEBMI and URBMI, the enrollees in the two schemes have increased rapidly. At the end of 2009, people with the urban basic medical insurance totaled 401.47 million: 219.37 million of them were UEBMI members, and 182.1 million URBMI members. The yearly revenue of urban basic medical insurance funds amounted to 367.2 billion yuan (US$54.239 billion, or US$96.632 billion PPP), and total disbursement reached 279.7 billion yuan (US$41.315 billion, or US$73.605 billion PPP). The accumulated surplus in the pooling fund added up to 288.2 billion yuan (US$42.570 billion, or US$75.842 billion PPP). With stronger capacity, the urban basic medical insurance system has increased its coverage and reimbursement level.

Financing of different medical security schemes has been on rise, as shown in Annex 1.

IV. Establishment & Development of Rural Medical Security System - NCMS & MA

One of the major achievements in China's medical security system is the establishment and constant improvement of the rural New Cooperative Medical Scheme and Medical Assistance Scheme.

1. Establishment and Development of NCMS

In the 1960s the traditional (or so-called "old") Cooperative Medical Scheme was developed rapidly throughout the country and it covered almost all rural residents by the 1970s. Its risk-pooling was at the village level, with funding coming from a village's collective savings, and villagers managed it themselves. The scheme played an important role in providing farmers with primary health care. However, the scheme

broke down in most rural areas because its financing base (the collective economy) was weakening. In the 1990s, China's government managed to resume the scheme but it did not succeed and the government grappled with the issue of rural medical security.

The Decision on Further Strengthening Rural Health Care Work ([2002] No. 13 by CPC Central Committee and State Council), issued by the Central Committee of CPC and the State Council in 2002, proposed to establish NCMS and MA in rural areas. In 2003, the Ministry of Health (MoH), the Ministry of Finance (MoF) and the Ministry of Agriculture (MoA) co-released the *Opinions on Establishing a New Cooperative Medical Scheme (*[2003] No. 3 by the Office of State Council*)*, specifying the organization and implementation of the scheme. It identified NCMS as a voluntary medical mutual-help scheme for farmers that was: organized, guided, and supported by the government; financed by individual, collective, and government monies; and mainly covered catastrophic health expense using pooled funds. Compared with the old CMS, NCMS is characterized by:

1. An ad hoc organization and management system with a clear division of labor and responsibilities. NCMS' administrative departments were set up within the health administrations from the central to the local level. The NCMS Management Office was set up at the county-level and it was given responsibility for management of NCMS funds, monitoring performance of contracted healthcare providers, and reviewing and reimbursing of applications and other daily tasks. The Office was staffed with full-time workers and supported financially by local funds.

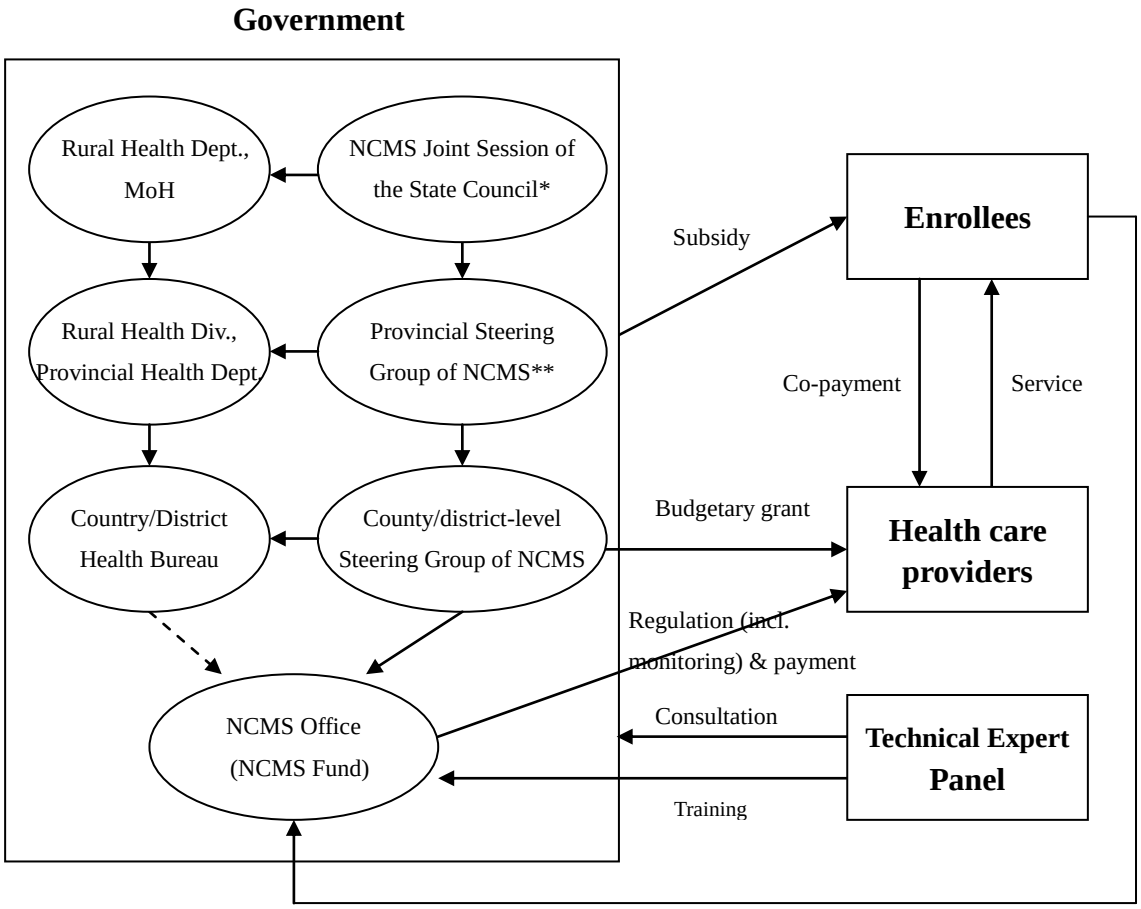
2. Multi-channel financing mechanism. Both central and local governments should subsidize the enrollees and the households of the enrolled farmers should also contribute. In addition, social-sector donations are a funding source. Subsidies from central government have increased from 10 yuan (US$1.477, or US$2.632 PPP) per capita in 2003, to 60 yuan (US$8.863, or USD15.789 PPP) per capita in the central and western regions in 2010. The average per capita contribution collected from all channels has increased from 30 yuan (US$4.431, or US$7.895 PPP) in 2003 to 150 yuan (US$22.156, or US$49.474 PPP) currently.

3. A benefit package focusing on inpatient services (inpatient expenditure). Localities can nonetheless make their own decisions as to whether to include outpatient services in their benefit packages. Since 2008 MoH has encouraged localities to combine inpatient pooling and outpatient pooling in order to discover an effective way to cover outpatient reimbursement, extend the scale of benefit packages, and enhance the reimbursement level.

4. Nail down the principle of voluntary enrollment. The NCMS enrollment is family-based and voluntary. Meanwhile, public monitoring and transparency is also stressed.

5. Establishment of a pooling fund at the county level (the average population of a county is about 300,000). Since 2008, MoH has advocated that places where conditions allow elevate their management and pooling fund to the municipal level.

Figure 5: Framework of NCMS



*It is composed of leaders from 12 ministries, including the Ministry of Health (MoH), the Ministry of Finance (MoF), the Ministry of Human Resources and Social Security (MoHRSS), the Ministry of Civil Affairs (MoCA), and the National Development & Reform Committee (NDRC).

** It is composed of leaders from 12 provincial departments, including Health, Finance, Human Resources and Social Security, Civil Affairs, and DRC.

2. Establishment and Development of MA

MA, funded by the government and voluntary donations from social sectors, offers special financial assistance to the poor and other households that suffer or cannot afford large medical expenses. This medical security scheme helps target groups gain access to necessary health care, and improve their health status. It is a formal institutional arrangement led by the government. MoCA is responsible for its

implementation.

In November, 2003, MoCA, together with MoH and MoF, issued the *Opinions on Implementing Rural Medical Assistance Scheme* ([2003] No. 158 by MoCA), identifying its objectives, principles, coverage, forms of assistance, application and approval procedures, financing and management of the fund, and organization and implementation. The document outlined a standard, well-established medical assistance scheme, to be implemented in all counties' rural areas by 2005. The details:

(1) Target group: those from Wu Bao (the "five guarantees" households), Di Bao (households eligible for China's minimum living standard security system) and other poor farmers complying with the threshold requirements set by local governments.

(2) Diversified financing: MA fund comes mainly from government revenue (central and local governments, including public welfare lottery), and donations from social sectors.

(3) Multi-level assistance: In the NCMS pilot areas, MA first pays individual contributions for its beneficiaries so as to get them enrolled and able to receive the NCMS benefits; secondly, MA provides beneficiaries with additional financial assistance (second reimbursement) if the financial burden from combating disease is still so high that their basic subsistence is threatened. Moreover, in some places, MA gives Wu Bao, poverty-stricken households, and other special groups, additional subsidies for outpatient service, besides the household saving accounts for outpatient care in NCMS. In places without NCMS, MA offers an appropriate amount of subsidies directly to those who suffer from health expenses so great that their household's basic livelihood is badly impacted.

V. Implementation of the Rural Medical Security System

NCMS and MA were rolled out rapidly, soon covering all the country's rural areas.

1. Implementation of NCMS

In its annual report for 2008, WHO evaluated a medical security scheme from three dimensions: width (population it covers), depth (service it covers and its generosity), and its disbursement as a share of health spending. We collected the NCMS data from 563 counties. Given that all of them began implementing NCMS between 2003 and 2005 (excluding counties/districts of Beijing, Shanghai and Tianjin), we reviewed the implementation of NCMS based on those data and announced national data.

（1）Financing and coverage

By the end of 2009, with 833 million members, NCMS had reached an enrollment rate of 94% and almost achieved universal coverage in rural areas. It had covered 55.2 million poverty-stricken people, a 94% coverage rate. Total contribution had amounted to 94.435 billion yuan (US$13.949 billion, or US$24.851 billion, PPP), 113 yuan (US$16.691, or US$29.737 PPP) per capita, in which 74.822 billion yuan (US$11.052 billion, or US$19.690 billion PPP), or 79.2%, had been from government.

According to the NCMS data in the 563 counties, coverage has been expanding steadily, to 93.71% in 2009. In particular, the coverage among poor people has exceeded 95%. Per-capita contribution also rose to 105 yuan (US$15.510, or US$27.632 PPP) in 2009 (See annex 2).

NCMS is non-compulsory, or voluntary, so adverse selection has always been a concern. However, it is not a problem in practice, as almost all the farmers have enrolled. The expansive coverage is attributed to three factors: a government subsidy accounting for about 80% of the total fund; government publicity and advocacy; and the incentive of tangible benefits to members.

（2）Benefits offered

NCMS reimburses members' spending on inpatient care, outpatient service, some selected catastrophic diseases, medical child delivery, and physical examination. Inpatient care is the major focus of the scheme. For instance, in 2009, reimbursement for inpatient care took up 82.6% of the total fund. In contrast, reimbursement for outpatient care, selected catastrophic diseases, and medical childbirth, took up 13.2%, 1.29%, and 1.32% of the fund, respectively.

Table 2. Services covered by NCMS (number of reimbursement, thousand), 2008-2009

Year	Inpatient care	Outpatient (pooling*) service	Selected catastrophic disease	Pregnancy's institutional delivery
2008	51,086.3	486,161.4	3,366.5	3,231.6
2009	61,721.4	489,935.8	5,037.3	3,702.5
Up by	20.82%	0.78%	49.63%	14.57%

*The number is only concerned with counties that pool outpatient risk at the county level. The other counties use a savings account model for outpatient services.

（3）Reimbursement to beneficiaries

Let's take inpatient care as an example of the reimbursements paid to beneficiaries of NCMS.

Table 3. Hospitalization rate in the 563 counties (%)

Year	Overall	Eastern	Central	Western
2005	3.05	2.82	3.18	3.60
2006	4.04	3.79	4.02	4.83
2007	4.85	4.58	4.69	5.80
2008	5.76	5.27	5.81	6.96
2009	6.64	6.03	6.75	8.12

Table 4. Actual reimbursement rate of inpatient care in the 563 counties (%)

Year	Overall	Eastern	Central	Western
2005	22.79	21.97	24.25	25.75
2006	26.06	24.20	29.50	31.40
2007	29.46	28.00	31.26	34.49
2008	36.11	33.72	40.03	40.73
2009	39.82	38.04	41.67	44.78

Table 5. Inpatient expenditure & income: distribution on out-of-pocket spending as a share of per-capita income before and after reimbursement (%)

Year	<0.5*		0.50-1.0		1.0-1.5		1.5-		mean	
	Before	After	Before	After	Before	After	Before	After	Before	After
2005	9.15	23.76	54.48	59.05	25.23	12.80	11.15	4.39	0.97	0.75
2006	13.14	36.32	60.22	53.84	20.80	8.76	5.83	1.08	0.86	0.62
2007	14.88	47.85	63.08	46.06	18.83	5.37	3.24	0.72	0.80	0.56
2008	16.73	60.61	64.21	35.62	14.22	3.42	4.86	0.36	0.79	0.50
2009	21.46	70.35	62.13	27.61	13.42	1.87	2.99	0.19	0.74	0.44

*Means that out-of –pocket expending is less than 0.5 percent of income.

With more financing, farmers' utilization of inpatient service has increased, and so has the actual reimbursement rate. Proportion of out-of-pocket expenditure has decreased from nearly 80% to about 60%. It is still a low reimbursement rate. When comparing out-of-pocket spending as a share of farmers' per capita net income before and after reimbursement, we find the share was 74% beforehand and 44% after. In more than 70% of counties, the rate was under 50% after. However, in 19% of counties, the rate was still more than 150%. Generally speaking, NCMS benefits alleviate farmers' financial burden from combating disease.

2. Implementation of Rural MA

Rural MA covered all counties as early as 2005. The revenue and disbursement of rural MA monies has increased continuously (See Table 6), and so has the number of its beneficiaries receiving medical assistance for inpatient spending and subsidies for NCMS contributions (See Table 7). This shows that China's government attaches

great importance to the health care of the poor. The scheme has constantly improved by adopting a lower threshold, using streamlining procedures, achieving better fund efficiency, offering more health service utilization, and decreasing disease burden among the target group. The *Opinion on Improving the Urban and Rural Medical Assistance Scheme* adopted by MoCA, MoH, MoF and MoHRSS in 2009 proposed a "one-stop-shop" service and real-time settlement of medical spending, reimbursement and assistance to increase the number of low-income group beyond Wu Bao and Di Bao households, and to transfer its major focus from assistance for "catastrophic health expenditure" only to common and frequently occurring diseases. From the national data (Table 8), MA still stays at a low level and its role in medical security system is yet to be improved.

Table 6. Revenue and Disbursement of rural MA, 2005-2009 (million yuan, US$, US$ PPP)

Year	Revenue			Disburse-ment			Subsidy for NCMS contribution			Financial assistance for major disease expenditure		
2005	1,090	161.00	286.84	780	115.21	205.26	95	14.03	25.00	480	70. 90	126. 32
2006	2,300	339.73	605.26	1,310	193.50	344.74	260	38.40	68.42	880	129. 99	231. 58
2007	4,100	605.61	1,078.95	2,810	415.07	739.47	480	70.90	126.32	2,050	302. 81	539. 47
2008	5,070	748.89	1,334.21	3,830	565.73	1007.89	710	104.87	186.84	2,740	404. 73	721. 05
2009	8,040	1,187.59	2,115.79	6,460	954.21	1700.00	1,050	155.10	276.32	4,940	729. 69	1300. 00

Source: *Statistic Report on Civil Affairs, 2005-2009*, MoCA.

Table 7. Numbers benefited from rural MA, 2005-2009 (million)

Year	Numbers benefited	Those receiving NCMS contribution subsidy	Those receiving major disease expenditure assistance
2005	8.545	6.549	1.996
2006	15.59	13.171	2.419
2007	28.96	25.173	3.771
2008	41.919	34.324	7.595
2009	47.891	40.591	6.766

Source: *Statistic Report on Civil Affairs, 2005-2009*, MoCA.

Table 8. Benefit of rural MA per case 2005-2009 (yuan, US$, US$ PPP)

Year	Per capita subsidy for NCMS contribution			Financial assistance for major disease expenditure per case*		
2005	11.1	1.64	2.92	240.5	35.52	63.29
2006	19.7	2.91	5.18	366	54.06	96.32
2007	19.1	2.82	5.03	543	80.21	142.89
2008	20.7	3.06	5.45	360.3	53.22	94.82
2009	25.9	3.83	6.82	676.6	99.94	178.05

Source: *Statistic Report on Civil Affairs, 2005-2009*, MoCA.

*: According to MoCA's statistics, major disease prevention is the main (but not only) target of financial assistance for inpatient spending.

3. Integration of NCMS and MA

Given the low reimbursement rate of NCMS and the big share of out-of-pocket spending, affordability still keeps the poor from utilizing health services. To ensure that they get adequate benefits from NCMS and MA and to improve equity, it is necessary to integrate the two schemes in designing a benefit package, management and service.

In terms of designing a benefit package, reimbursement and assistance scheme, the two can be integrated at the following four levels (inpatient services are taken as an example):

Level 1: Getting MA target group enrolled in NCMS. This is the basic condition for integrating the two systems and for making sure the MA target group can benefit from NCMS.

Level 2: Reducing or eliminating the NCMS deductible for MA beneficiaries. It can improve their accessibility to inpatient service and deepen their coverage.

Level 3: Medical assistance after NCMS reimbursement, that is, reducing co-payment by assistance. The MA target group can benefit more if there is a synergy between the two schemes.

Level 4: Provisional assistance for spending that is higher than the ceiling of NCMS compensation. For those who are not in the target group of MA but who have great financial difficulties even after they get cap reimbursement from NCMS, MA reimburses their health spending beyond the ceiling for another two times through provisional assistance or other sources of charity. This is done to prevent the group (a

potentially impoverished population) from slipping under the poverty line. Assistance before the population falls below the poverty line is more cost-effective than regular assistance afterward.

As for management and service, in the best case scenario, MA beneficiaries should only pay out-of-pocket when they are discharged from the contracted healthcare facilities. They should not need to pay the entire cost upfront and wait for reimbursement later. In addition, MA and NCMS should be integrated seamlessly in areas such as fund management, supervision on providers, and information management. The measures above will reduce management costs, enhance efficiency, make the benefits more user-friendly, and clear the institutional barriers to service use for MA beneficiaries.

A case-study of this type of integration in Changshu City, Jiangsu Province, is presented below.

The city introduced NCMS in 2003 and maintained its coverage at more than 98% in recent years. After 7 years of practice and innovation, the city has expanded NCMS to urban areas and established an urban-rural integrated scheme (BMI-NCMS Scheme) that covers all citizens with local Hukou (residence permits) but excludes by UEBMI.

In 2010, the total annual contribution to the scheme was 400 yuan (US$59.08, or US$105.26 PPP) per capita. Of it, 150 yuan (US$39.47 PPP) come from city-level finances, 150 yuan (UD$39.47 PPP) from township-level finances (including 10 from village collectives), and 100 yuan (US$26.32 PPP) from the members themselves.

Changshu City adopted the model of inpatient pooling plus outpatient pooling. The benefit includes reimbursement for common outpatient costs, chronic outpatient expenses for special diseases, inpatient expenditures and physical examination spending.

MA is integrated with NCMS effectively:

MA’s target group : the Wu Bao households, Di Bao and potential Di Bao targets, the severely disabled, the target group for special care, children whose parents are employees and extremely poor, university students from poor families, and those who suffer extreme hardship due to annual health costs above 50,000 yuan (US$13,157.89 PPP).

Subsidies for the individual contributions to BMI-NCMS: the potential Di Bao targets and the severely disabled excluded by the Di Bao system have to pay their own contribution. The individual contribution of the remaining MA target population is covered by the township-level Finance office where the beneficiaries live.

Assistance for common outpatient spending: For MA beneficiaries, there is no deductible in BMI-NCMS when they apply for reimbursement of their common outpatient cost covered by the BMI-NCMS benefit package. Their outpatient spending beyond 1500 yuan (US$394.74 PPP)(the annual reimbursement cap per capita in BMI-NCMS) can be reimbursed again by the MA fund. The rate is 90% for Wu Bao, Di Bao, and university students from poor families, and 60% for potential Di Bao targets, the severely disabled excluded by Di Bao system, special care targets, and children whose parents are extremely poor employees.

Assistance for inpatient costs and chronic outpatient expenses for special diseases: For MA beneficiaries, there is no deductible in BMI-NCMS. MA offered financial assistance for beneficiaries' actual out-of-pocket costs. The reimbursement rate of MA is 90% for Wu Bao, Di Bao targets, and university students from poor families, and 60% for potential Di Bao targets, the severely disabled who are excluded by the Di Bao system, special care targets, and children whose parents are extremely poor employees.

Assistance procedures: the Wu Bao households, Di Bao and potential Di Bao targets, the severely disabled, the special care target group, children whose parents are extremely poor employees, and university students from poor families bring their medical smart card and related papers with them when seeking care in designated service providers. They only need to pay their actual out-of-pocket cost. That means they can get reimbursement and assistance in real time. The city-level BMI-NCMS management center settles the cost, which is covered by the MA fund, with designated providers in accordance with relevant regulations.

Provisional assistance: MA provides appropriate assistance to BMI-NCMS members who have regular difficulties assuring their livelihood due to an annual health cost over 50,000 yuan (US$13157.89 PPP). The assistance amount ranges from 2000 (US$526.32 PPP) to 100,000 yuan (US$26315.79 PPP).

Results of assistance: the hospitalization rate among MA targets was 32.3%, higher than non-target group. According to Table 12, when the beneficiaries seek medical care in local township-level, city-level, and non-local providers, the ultimate reimbursement rates were 73.09%, 65.42% and 47.52% respectively. Their financial burden reduced greatly. As for the chronic outpatient cost for special diseases, the ultimate reimbursement rate was 83.95% (See Table 10), which solved the problem of large outpatient expenditure for the target group quite well.

Table 9. Reimbursement for the inpatient cost of MA beneficiaries in Changshu City, 2009

Type of provider	Numbers of hospitali-zation	Cost per episode (yuan) (US$ PPP)	Reimbursement from BMI-NCMS per episode (yuan) (US$ PPP)	Assistance from MA per episode (yuan,) (US$ PPP)	Total reimburse-ment per episode (yuan) (US$ PPP)	Ultimate reimburse-ment rate (%)
Township-level	1861	2981.22 (784.53)	1600.76 (421.25)	578.14 (152.14)	2178.91 (573.40)	73.09
City-level	1421	9941.89 (2616.29)	4430.96 (1166.04)	2073.38 (545.63)	6504.34 (1711.67)	65.42
Non-local	81	18205.8 (4791.00)	5607.72 (1475.72)	3042.8 (800.74)	8650.51 (2276.45)	47.52
Total	3363	6289.07 (1655.02)	2893.15 (761.36)	1269.3 (334.03)	4162.45 (1095.38)	66.19

Table 10. Reimbursement for chronic outpatient expenses of MA beneficiaries in Changshu, 2009

Type of provider	Numbers of outpatient assistance	Cost per visit (yuan)	Reimbursement from BMI-NCMS per visit (yuan) (US$ PPP)	Assistance from MA per visit (yuan) (US$ PPP)	Total reimburese-ment per visit (yuan) (US$ PPP)	Ultimate reimbursement rate (%)
Township-level	151	71.08 (18.71)	19.6 (5.16)	29.44 (7.75)	59.04 (15.54)	83.07
City-level	11071	443.28 (116.65)	204.76 (53.88)	168.02 (44.22)	372.78 (98.10)	83.99
Non-local	19	4937.55 (1299.36)	2578.5 (678.55)	1475 (388.16)	4053.51 (1066.71)	82.1
Total	11241	446.43 (117.48)	206.28 (54.28)	168.5 (44.34)	374.78 (98.63)	83.95

VI. Major Lessons Learned from China's Experience

Since 2003, when China introduced NCMS and MA, the country has established a medical security system covering more than 800 million farmers in 2716 counties (districts). The establishment, implementation and improvement of the system have been pushed ahead in a well-organized way, without any significant accidents or setbacks. The achievement is widely acclaimed by people from all walks of life in China. MA has become an umbrella program, protecting each poor individual with a

similar pace and momentum. Reviewing the past experience, these lessons have emerged:

1. Guided by its official Scientific Outlook on Development, the government shows great political will to promote the rural health sector and the medical security system. This is the fundamental driving force behind the rapid establishment and development of NCMS and MA in vast rural areas.

Chinese farmers usually work on their family-based land, live dispersedly, and – despite their large numbers – lack a channel through which to express and represent their interests. This is why, despite the problem's long existence, Chinese society has not paid adequate attention to the absence of farmers' medical security.

Thanks to the Scientific Outlook on Development, rural social development (including the medical security system) has been improved. Guided by the philosophy of the report, China's government has spent a great deal of money on establishing the medical security fund, and has mobilized a huge number of human resources and materials to develop a management organization system for NCMS. All of the efforts reflect the basic principle of NCMS: "government-led." In fact, in 2003 when NCMS was established, it was the first time that China's government had subsidized the demand side (20 yuan per capita) with its fiscal revenue, put a medical security fund in place, and purchased health care for farmers. In 2009, government subsidies for NCMS amounted to 74.822 billion yuan. At present, a county-level management team of 38,671 staff members is in charge of the daily management and implementation of the scheme. Central government also subsidized each central and western province with 6 million yuan for information management system. What's more, there are steering groups of NCMS from the State Council present at all levels of implementation, from the provincial-level down to the county/district-level. They are responsible for the formulation of policies and for overall guidelines so as to make sure the scheme is always on track.

2. Coordination among different departments provides institutional guarantee for the smooth progress of NCMS and MA.

The development of the rural medical security system is not a mission of MoH alone, but one involving many departments, including MoF, MoCA, NDRC and MoHRSS. Balancing obligations and interests among them is always on the agenda. The NCMS Joint Session of the State Council selected MoH to organize the implementation of the scheme and asked other ministries to support it. The Department of Rural Health was set up within MoH to guide NCMS nationwide. MoF is responsible for financing, monitoring and managing the NCMS fund. MoCA is in charge of the issues related to the poor in rural areas. MoHRSS, together with MoH, is responsible for studying how to recruit staff, as well as establishing and operating the organization and management system of the scheme. NDRC plays a major role in developing the NCSM information

system and the service delivery system. NCMS's social security department and health department should often have consultations in order to coordinate the urban and rural security systems.

Those departments are well coordinated for three reasons. First, in accordance with the Scientific Outlook on Development, rural medical security is the common responsibility of many departments and it is an important part of balance and sustainable development. Second, an appropriate leadership mechanism, the NCMS Joint Session of the State Council, is also an effective coordination instrument. By the Joint Session, departments can exchange their ideas frankly, which ensures consistency of the guidelines. Third, the related departments share common interests in the development of NCMS and don't have any fundamental conflicts. Therefore, coordination is not that difficult.

A case in point is the integration of NCMS and MA. The civil affairs and health departments have worked hand in hand to pilot their integration in some places, so that the rural poor can enjoy as much access to health care as do the non-poor. The MA fund pays not only a NCMS premium for its beneficiaries but also part of their co-payment. As a result, service utilization among the poor is as high as or even higher than among the non-poor. The two departments have rolled out the pilot program throughout the country.

3. Government-led organization and voluntary-based enrollment: respect for farmers' decisions and a multi-channel financing solution.

While the government is responsible for "organizing and guiding" farmers to participate in NCMS, farmers can make the ultimate decision, which will be fully respected by NCMS. In practice, almost all the farmers choose to participate, which is largely attributable to the big share of government subsidies in the program. In 2003, when NCMS was just introduced, the government subsidy for each enrollee was 20 yuan, accounting for 66.7% of the total contribution. In 2009, the contribution totaled 94.435 billion yuan (US$24.851 billion, PPP), and 74.822 billion (US$19.690 billion, PPP), or 79.23%, was the government subsidy. Meanwhile, farmers' enrollment is family-based but their contribution is on a capitation basis. In 2009, the per-capita premium was 23.5 yuan (US$6.18 PPP). The Civil Affairs Department also paid 917 million yuan (US$241.32 million PPP) for the premiums of poor members. Moreover, NCMS has other financing options, such as donation.

The voluntary nature of the program and its multi-channel financing mode is not sustainable unless the farmers begin to reap more generous benefits and always decide to participate.

4. Rational and democratic decision-making provides technical support to the orderly and setback-free development of NCMS.

NCMS and MA are significant security schemes affecting hundreds of millions of farmers. Even slight carelessness may lead to setbacks, to government's loss of credibility, and to the weakening of farmers' recognition.

When establishing and rolling out NCMS, China adopted a strategy of "gradual roll-out after piloting to glean lessons and experiences." During the process, synergy between government officials and researchers has been given full priority. A technical guidance panel was set up at the very beginning. The panel has undertaken significant investigation, research and on-site supervision, and it has reported problems to program administrators, allowing for orderly adjustment. It has conducted continuous studies and monitoring in areas such as financing, design of benefit packages, fund management and safety, regulation of providers and cost containment. Moreover, it has studied the eastern, central, and western region, and informed the decision-makers of its findings. The Joint Session selected some experienced experts to collect information in five chosen provinces and pass it on to the Session. These measures ensure the relevant policies are stable, coherent, and feasible.

Most NCMS employees were short of knowledge and experience. To catch up to the fast pace of the two schemes, MoH invited experts and experienced officials, and organized repeated large-scale trainings. The training courses cover areas such as NCMS institutional design, its organization and management, financing, management of medical risk, design of benefit packages, provider regulation, cost containment, fund safety and management, and management information systems.

5. The improvement of the service delivery system goes hand-in-hand with the progress of the medical security system and brings the latter into play to protect the health rights and interests of the people.

To ultimately guarantee access to health care for all, financial mechanisms like NCMS are indispensable but not enough. An equally important area is the supply of health services. Delivering services should go hand-in-hand with medical security.

In the past, the allocation of Chinese medical resources was imbalanced. Most were concentrated in big cities and big hospitals. To reverse the situation, the government has developed a rural medical security system and invested a lot in a rural service delivery system.

（1）Improving rural medical infrastructure

China has been implementing the *Development Planning of Rural Health Service Delivery System* since 2006. From 2004 to 2009, the government spent 21.684 billion yuan (US$5.706 billion PPP) to renovate or newly build 36,000 rural health facilities. Among them, 24,000 are THCs (Township Health Centers). As a result, rural

providers have better conditions and stronger service capacity.

In 2009, the central government earmarked funds amounting to 20 billion yuan (US$5.263 billion PPP) for the construction of 986 county hospitals, 3549 central THCs, and 1154 community health service centers.

Rapid progress in the post-earthquake reconstruction of the health service system in Sichuang, Gansu and Shaanxi has accelerated the upgrading of rural medical systems in the three provinces. By the end of November 2009, 1531 projects had started, 760 had been completed, and paid-up investment had reached 12.36 billion yuan (3.253 billion PPP).

（2）Strengthening the team of rural medical workers

From 2005-2009, central government invested 2.145 billion yuan (US$0.564 billion PPP) in the training of health professionals, specifically training for THC directors, apprentices and village doctors in central and western region.

（3）Encouraging urban providers to support rural ones

From 2005 to 2009, the central government set aside 1.04 billion yuan to carry out a partner assistance program benefiting the county hospitals and THCs in 592 national-level poverty-stricken counties and some provincial-level ones. As of 2009, 900 tertiary hospitals had been partnered with 2200 county hospitals.

With a medical security system, farmers have more demand for health care. Only through a competent service delivery system can the demand be satisfied, and can the farmers' health rights actually be protected. In general, since the introduction of NCMS, county hospitals and THCs have provided service to about 82% of hospitalized patients, which suggests success in the development of rural medical institutions.

Which department should manage NCMS? This question was once controversial. The State Council decided that MoH should be responsible for NCMS, which is undoubtedly justified. Moreover, experience has proven that the existing management pattern is helpful for balancing the medical security fund and service delivery, for strictly controlling costs, and for guaranteeing the fund's safety. Based on the data from CHSI and NCMS Research Institute, we compared the inpatient cost national average and the average for NCMS members. In 2005, the annual average inpatient cost of NCMS members was 3260 yuan (US$857.9 PPP), while the national average was 4662 yuan (US$1226.84 PPP). In 2009, the two figures were 3590 (US$944.74 PPP) and 5464 (US$1437,89 PPP) (both in nominal price), up by 9.2% and 17.2% respectively. In 2005, the average hospitalization cost at county hospitals was 3556 yuan (US$935.79 PPP) for NCMS members and 3381 (US$889.74 PPP) for the country as a whole. In 2008, the two figures were 3791 (US$997.63 PPP) and 4115

(UD$1082.89 PPP), up by 6.6% and 21.7% respectively.

VII. Challenges

In spite of great progress, Chinese rural medical security is still faced with many challenges:

1. The coverage is still shallow and a sustainable financing mechanism is yet to take shape.

In 2009, the total per capita contribution was only 113 yuan. The actual reimbursement rate was just 41%, even though 87% of the total funds were used in reimbursement for hospitalization. The outpatient compensation per visit was only 18 yuan (UD$4.74 PPP). There are two ways to enhance the benefit. One is to increase contribution, the other is to control the rising cost of health care.

At present, the contribution amount (from government and farmers' households) and its increase is up to administrative decisions, which are nonetheless influenced by many uncertainties. The NCMS fund cannot rise along with economic and farmers' income growth, unless there is a mechanism for increasing financing which is based on laws and regulations. As such, it is urgent to formulate laws and regulations on rural security system which tie increases in the NCMS subsidy to economic growth. In 2009, the central government's fiscal revenue amounted to 6.8477 trillion yuan (US$1.8018 trillion PPP), while the NCMS subsidy was 29.662 billion yuan (US$7.8058 billion PPP), only 0.39% of the former. A proportion of 0.8% of the fiscal revenue will be needed if the NCMS reimbursement rate for hospitalization rises to 70-80% and to 60% for outpatient service. There should be regulations for planning the steps. This is the essential condition for the sustainable and healthy development of NCMS.

A farmer's annual individual contribution is about 30 yuan (US$7.89 PPP), accounting for only 0.6% of his/her net income, assuming a farmer's per capita net income was over 5000 yuan (US$1315.79 PPP) in 2009. There should also be some rules stipulating that the individual contribution shall increase with a rise in income at a given rate. Most experts agree that the appropriate contribution to income ratio is 1-2%.

2. Curbing the unreasonable rise of medical costs and fostering more effective service purchase is a long-term project.

With more investment in the rural health sector, enhanced service and technical capacity, medical costs tend to go up. As the fee-for-service (FFS) payment system is

currently prevalent, providers have an incentive to offer too many services. Cases of malpractice (over-prescription and over-examination) happen now and then. Average cost goes up too fast (by over 10%) in some places. Therefore, cost containment is a major challenge for NCMS. On the one hand, some places have begun pilot reforms on the payment system by replacing FFS with a case-based or per-diem payment for inpatient service, and with a capitation-based payment for outpatient service. On the other hand, many localities speed up computerized management and strengthen supervision of providers using modern IT instruments. However, all pilot reforms are still at an exploratory phase. We have a long way to go to find out how to make better use of NCMS funds, how to render health service purchasing more effective, and how to benefit members more. Meanwhile, the quality of service has often been neglected. Attention should also be paid to the balance between cost and quality.

3. Equity and accessibility for the poor and the migrant

For members, the out-of-pocket share of inpatient cost is still as high as approximately 60% (even 70%, several years ago), which is beyond the affordability of the poor. Thus, NCMS alone cannot solve the issue of accessibility and equity for the poor. In fact, among members, the poor utilize many fewer services than the non-poor. This situation will not change unless MA and NCMS become integrated and MA pays all or part of the co-payment for the poor so that their out-of-pocket share can drop to 20% or below. However, given the current size of the MA fund, it is impossible. We conducted a rough estimation of MA's funding need.

According to the statistics of MoCA, there were 62.677 million MA beneficiaries in 2009. The financial assistance disbursed added up to 8.04 billion yuan (US$2.116 billion PPP), that is 128.3 yuan (US$33.76 PPP) per capita.

The NCMS data from the 563 counties show that, for members, the average inpatient cost per episode was 3780 yuan (US$994.74 PPP) and the actual reimbursement rate was 41% in 2009. If this were also the case with MA beneficiaries, their out-of-pocket cost per episode would be 2230 yuan (US$58.68 PPP) after compensation by NCMS. The two schemes together cannot cover 80% of their total cost, unless the reimbursement rate of MA is 39%, or 1474 yuan per episode. Supposing the hospitalization rate was 9.9%, there would be 6205023 MA beneficiaries hospitalized, claiming 9.15 billion yuan (US$2.408 PPP). Currently, within disbursed MA funds, the proportion of outpatient compensation to the inpatient reimbursement is about 3:7 (excluding cost of non-communicable chronic diseases and catastrophic health expenditures). Based on this, the MA fund for compensation would be 13.07 billion yuan. In 2009, MoCA helped 43.66 million farmers with their NCMS contributions. Supposing the per capita contribution was 30 yuan (US$7.89 PPP), the total disbursement would be 1.3 billion yuan (US$0.342 PPP). In that case, the MA fund would have needed 14.37 billion yuan (US$3.782 PPP) in 2009, while its actual

revenue was 8.04 billion (US$2.116 PPP). This suggests a shortfall of 6.33 billion yuan (US$1.667 PPP).

Even if MA has more financing, without effective integration with NCMS, it cannot maximize its benefit to the poor. At present, only a few counties integrate the two effectively. Administrative instruments are needed to promote their integration throughout the country.

Rural migrant workers number about 120 million. Being away from home, they usually have a greater demand for medical service. Yet, due to a lack of management capacity, NCMS often refuses to reimburse, or reimburses at a very low rate, the medical expenses (for example, outpatient costs) that occur where migrants work. This negatively impacts migrant workers' service utilization and benefits. Hopefully, with a national information network, members will receive compensation even in a place other than where they enroll. However, under the current circumstances, it is hard to achieve such a system.

4. NCMS should improve its own management capacity to meet the needs of the growing rural security system.

At present, every NCMS employee serves about 38,000 members. Many workers are in need of technical training. Moreover, the average operating cost per county is only 600,000 yuan (US$157894.7 PPP) and there is an average of 310,000 members per county. Given these circumstances, it is not surprising that providing high-quality medical security services is difficult.

Rural medical security is a long-term project. The prerequisites for its stable development include adequately qualified workers, the provision of various trainings opportunities for them, and sufficient operating costs. Unfortunately, we do not currently have these elements in place.

The NCMS benefit package, too, is yet to be improved. Outstanding questions include: how to allocate funds among inpatient compensation, outpatient compensation, and reimbursement for catastrophic health expenditure; and how to maximize the depth of coverage without running a deficit? In recent years, we have consistently had some counties running a deficit and others running an overly high surplus simultaneously. Clearly, there is significant room for the adjustment of the benefit package.

The development of management information systems (MIS) for rural medical security is imbalanced between localities. Some places have not made ample progress in the past several years. Provincial-level MIS, in particular, lag behind. This is a barrier to offering convenient compensation services to members. Therefore, it is quite pressing to accelerate MIS development.

5. Integration of the urban and rural medical security systems

Balanced development calls for urban-rural integration. Yet there is a gap in contribution amounts between the rural and urban medical security systems. In addition, residents in the two areas have different typical reasons for seeking medical care. Urban citizens prefer high-level urban hospitals, while farmers usually go to grassroots providers. To integrate the urban and rural systems, extra attention should be paid to protecting farmers' interests and preventing urban residents from taking advantage of farmers. Urban-rural integration suggests support from urban areas to rural areas and from industry to agriculture. Nevertheless, in some places, this principle is violated. As a result, the service utilization and benefits of farmers lag far behind those of urban residents. How should the urban and rural medical security system be integrated? What about the institutional management of the integrated system? All of these uncertainties remain to be solved.

China is currently undergoing health care reform. The essential goal is to guarantee access to health care to all equally and to promote health for all. One of the initiative's major components is boosting the development of the medical security system. This brings new vitality and new opportunities to the improvement of the rural system. We are convinced that China is capable of tackling challenges and overcoming difficulties so as to make the rural medical security system a success.

Note. 1.00US$ = 6.77 RMB/yuan in the official exchange rate and 1.00US$ = 3.8 RMB/yuan PPP.

Annex 1 - Financing of China's medical security system (unit: billion)

	2005			2006			2007			2008		
	RMB	US$ Official rate	US$ PPT	RMB	US$ Official rate	US$ PPT	RMB	US$ Official rate	US$ PPT	RMB	US$ Official rate	US$ PPT
Yearly Revenue of UEBMI	140.554	20.761	36.988	174.710	25.806	45.976	221.424	32.707	58.269	288.550	42.622	75.934
Yearly Revenue of URBMI										15.493	2.288	4.077
Contribution by government										7.449	1.100	1.960
Contribution by individuals										6.775	1.001	1.783
Yearly Revenue of NCMS	7.534	1.113	1.983	21.359	3.155	5.621	42.796	6.321	11.262	78.458	11.589	20.647
Contribution by government	4.235	0.626	1.114	15.048	2.223	3.960	32.591	4.814	8.577	65.571	9.686	17.256
Contribution by individuals	2.873	0.424	0.756	5.801	0.857	1.527	9.576	1.414	2.520	12.068	1.783	3.176
Interests and others	0.427	0.063	0.112	0.510	0.075	0.134	0.629	0.093	0.166	0.819	0.121	0.216
MA	0.890	0.131	0.234	1.954	0.289	0.514	4.249	0.628	1.118	6.800	1.004	1.789
total	148.978	22.006	39.205	198.023	29.250	52.111	271.020	40.032	71.321	389.302	57.504	102.448

Source: China Health Economics Institute, MoH (CHEI), *Health Expenditure Report 2009*.

Annex 2 – Data NCMS - Coverage NCMS in the 563 counties (%)

Year	Overall	Eastern region	Central region	Western region
2005	74.92	79.03	71.84	68.47
2006	83.49	86.80	81.18	78.30
2007	89.33	90.87	88.38	86.82
2008	93.25	94.01	92.83	92.24
2009	94.55	94.96	94.55	93.71

Annex 3: Coverage NCMS among poverty-stricken population in the 563 counties (%)

Year	Overall	Eastern	Central	Western
2005	70.41	69.54	69.61	71.43
2006	87.61	89.70	86.07	86.67
2007	89.14	93.69	86.27	86.94
2008	89.71	94.96	88.26	86.47
2009	96.25	97.83	94.78	95.83

Annex 4: Contribution NCMS in the 563 counties (yuan per capita)

Year	*Overall*			*Eastern*			*Central*			*Western*		
	RMB	US$	US$ PPP	RMB	US$	US$ PPP	RMB	US$	US$ PPP	RMB	US$	US$ PPP
2005	37.78	5.58	9.94	43.85	6.48	11.54	30.20	4.46	7.95	28.70	4.24	7.55
2006	53.03	7.83	13.96	58.92	8.70	15.51	46.42	6.86	12.22	43.79	6.47	11.52
2007	65.61	9.69	17.27	75.16	11.10	19.78	53.65	7.92	14.12	53.71	7.93	14.13
2008	104.45	15.43	27.49	118.22	17.46	31.11	89.41	13.21	23.53	87.84	12.97	23.12
2009	126.51	18.69	33.29	145.35	21.47	38.25	102.63	15.16	27.01	105.93	15.65	27.88