

China: Towards universal coverage by the New Rural Cooperative Medical Insurance

Aidi HU
Social Security Department of the ILO

Is it administratively and financially feasible to give a group of the rural population (as many as 757 million with a per capita income as low as 3,255 yuans per annum¹) access to basic health care in the space of seven years?²

This is what the Chinese Government has been trying to do since 2003 through a so-called New Rural Cooperative Medical Insurance (NRCMI). It plans to complete its establishment in all 2,862 counties³ by 2008, ultimately achieving universal coverage by 2010.⁴ It is reported that, at the end of 2005, the NRCMI had been expanded from an initial 304 to 678 counties, targeting 236 million people, of which 179 million have actually been covered, a rate of 75.8 per cent.⁵

This remarkable success rate is not a fluke, but based on past experience gained, notably from the old Rural Cooperative Medical Insurance (RCMI) invented 50 years ago which was very successful in improving the health of the vast rural population, and from a decade-long experiment conducted since the early 1990s in an effort to revive the old RCMI.

It should also be noted that the setting up of a NRCMI scheme in every county to protect the rural population from illness-related poverty and exclusion, is part of a global effort of the government to address a longstanding and challenging issue of “Three Nong” – the development of rural people, rural areas and rural economy. Despite continuous growth since 1978, primary industry largely lags behind secondary and tertiary industries, as during the period 1978-2004, GDP rose 3.19, 16.1 and 11.9 times respectively.⁶ Income disparity has also been increasing: per capita annual income of the rural and the urban groups was 397 yuans and 748 yuans respectively in 1985,⁷ which compares to 3,255 yuans and 10,493 yuans respectively in 2005.⁸ Given the fact that China is still an agricultural country, the quarter-century long prosperity will not be sustainable, and the goal of establishing a harmonized society where everyone lives decently, will not materialize if the development of *Three Nong* does not catch up. Having fully recognized this, the government is determined to take every measure necessary, including the NRCMI, to speed up rural development and improve the quality of life of the rural population.

¹ The current exchange rate is about 1US\$ = 8 Yuans in Chinese currency.

² National Bureau of Statistics of China, compiled. China Statistic Yearbook 2005.

³ National Bureau of Statistics of China, compiled. China Statistic Yearbook 2005.

⁴ “Notification on speeding up the experiment of the NRCMI” jointly issued by the MOH and other 6 ministries on 10 January 2006.

⁵ Li, Changming. (Chief of the technical guidance term of the NRCMI, MOH). 4 April 2006. Available at <http://society.people.com.cn>. Visited 12 May 2006.

⁶ National Bureau of Statistics of China, compiled. China Statistic Yearbook 2005.

⁷ National Bureau of Statistics of China, compiled. China Statistic Yearbook 2001. Beijing. China Statistics Press, 2002.

⁸ “Green Paper on the Rural Economy 2006” jointly by the Rural Development Institute of the Academy of Social Science of China and the National Bureau of Statistics of China.

This paper will explore this innovative health insurance scheme from both a national and a local perspective, followed by a short conclusion summarizing the main characteristics of the NRCMI and raising some concerns that may need to be thoroughly assessed in due course to improve its performance and increase its coverage.

National perspectives

“To learn from yesterday will assist to better understand today”, says an old Chinese proverb. This Section will conduct a retrospective review revealing how the NRCMI emerged from its initial forms leading to how it looks now.

The initial stage: from the 1950s until the 1980s

Having suffered two centuries of civil unrest, major famines, military defeats and foreign occupation, the Chinese people, especially those living in the rural areas, were extremely poor, had no medical infrastructure and, therefore, no available health services. It is, therefore, not surprising that by the end of the 1940s, just before the inception of the People’s Republic of China, life expectancy at birth was only 40 years. It was in the mid-1950s in these circumstances that the first RCMI schemes were created by a number of Rural Producers Cooperation (RPC) in Shandong and other provinces in response to the needs of their members for primary health care.

Soon after its establishment, the RCMI was strongly supported by the government because of its principles and positive bearing on the improvement of the health of the rural population. By the mid-1970s, 90 per cent of RPCs were operating a RCMI scheme for their members.⁹ Despite a large disparity in form, these village-based schemes had the following aspects in common:

- a medical cabin, equipped with basic medicines and run by one or more doctor/s who were selected from the young educated members of the community and normally received a half-year of professional training;
- financed mainly by contributions from the RPC in question, supplemented by membership fees and income from selling medicines. There was no direct government subsidy, but support through training, vaccination and low-priced medicine was, however, provided on an irregular basis;
- all members of the RPC in question were entitled to free primary health care, sanitation, vaccination and other prevention services provided by barefoot doctors, who also produced and offered some homemade traditional Chinese medicines.

In support of this mechanism, the government started constructing higher level rural medical institutes. Eventually, a so-called Rural Three-Tier Medical Network (RTTMN), consisting of village medical cabins, commune medical centres and county hospitals, was set up within each county border to provide the rural population with low-cost, quality controlled and nearby health services.

⁹ Centre for China Cooperative Medical Scheme. Available: <http://www.ccms.org.cn>. Visited on 10 April 2006.

Consequently, the wide coverage of the RCMI and the establishment of the RTTMN bore fruit: many infectious and local diseases were eliminated or brought under control; infant mortality dropped from 195 to 41 deaths per thousand; and life expectancy at birth rose from 40 to 65 years over the period 1950-1975.¹⁰ On the basis of these results, the Constitution of 1978 stipulated that: “The State should gradually promote the development of ...the RCMI”.

Unfortunately, following the dismantlement of the RPC system in the 1980s, the RCMI experienced a set back too: the coverage was reduced to 5 per cent in 1992¹¹. Consequently, some infectious and local disease came back, and the health gap between the rural and urban population grew. For example, maternal mortality and infant mortality in rural areas were 2.6 and 2.7 times higher, respectively than in urban areas in 2002, and life expectancy at birth was 69.55 years for the rural inhabitant in 2000, 5.66 years lower than their urban counterparts.¹² Consistent with this, illness-related poverty was also more severe in the rural part of China.

The experimental stage: from the 1990s until the early 2000s

Facing such a situation, the government attempted to revive the RCMI. Specific studies, projects and pilots were conducted, such as:

- 1994-1998: a WHO-sponsored project on the RCMI covering 14 counties of 7 provinces, implemented jointly by the Ministry of Health (MOH), the Policy Research Office (PRO) of the State Council and the Ministry of Agriculture (MOA);
- 1996: an investigation on the RCMI in two provinces executed by a delegation headed by Ms. Peng Peiyun, member of the State Council. This led to a technical seminar and a national conference to advocate the redevelopment of the RCMI;
- 1997: “The Decision on Health Reform and Development” jointly made by the Central Committee of the Party and the State Council, confirming the role of the RCMI and calling for its re-establishment by 2000. In accordance with this, five ministries jointly formulated a milestone document entitled “The suggestions on the development and improvement of the RCMI”, laying down basic principles for later experiments and the development of the NRCMI.

At the same time, many local governments took the liberty of piloting their own new RCMI schemes. At the end of 1996, 183 counties of 19 provinces set up a new RCMI scheme, covering 17.59 per cent of the rural population.¹³ Since then, local experimentation has continued with some success, for example:

¹⁰ Centre for China Cooperative Medical Scheme. Available: <http://www.ccms.org.cn>. Visited on 10 April 2006.

¹¹ Centre for China Cooperative Medical Scheme. Available: <http://www.ccms.org.cn>. Visited on 18 April 2006.

¹² Centre for China Cooperative Medical Scheme. Available: <http://www.ccms.org.cn>. Visited on 10 April 2006.

¹³ Wang, Shidong., and Ye, Yide. “Retrospection and development study on the RCMI”. Chinese Primary Health Care. 2004.4: 10-12.

- Jiading District of Shanghai Municipality: the RCMI scheme, which was financed mainly by individual contributions with financial support from the local economy and the local governments, reached a universal coverage in 2003.¹⁴
- Jiangyin City of Zhejiang Province: the scheme was characterized by the delegation of the management to a commercial insurance firm, and by the breakdown of the urban-rural barrier: all residents, either urban or rural, native or migrant, could participate as long as they were not already insured under an urban health insurance scheme;
- Wuxue City of Hubei Province: having survived for almost 50 years, the scheme was overseen by a Farmers' Conference on the RCMI, during which the representatives of the insured farmers were able to express their own concerns, to assess the management and the use of RCMI funds and to make proposals for necessary changes.

A new development chapter: since 2002

Based on the above-mentioned experiences, the Central Committee of the Party and State Council finally issued a "Decision on Strengthening Rural Health Works" in late 2002, deciding to reintroduce the RCMI system with new principles. In line with this, detailed policies and measures have been formulated by central government to guide, facilitate and monitor the development process. Some aspects of this are outlined below:

Participation

The targeted population is, in principle, the rural residents with some slight variations, in practice. Unlike a social insurance system, the participation in the NRCMI is voluntary, which is insisted upon by central government and embodied in all local schemes. Due to high subsidies and an enforced government leadership – two outstanding characteristics that will be explained in more detail later – the voluntary nature of the scheme has not resulted in low coverage: more than 75 per cent of the targeted population, as indicated earlier, actually participated in the NRCMI schemes in 2005.

It should be borne in mind that the workforce of the rural population comprises mainly self-employed farmers. Due to the reform of the agricultural land system, undertaken in the early 1980s, each rural household is entitled to a piece of land distributed equally among all residents of each village. Only a small number of the insured are workers who have migrated to the cities, though some of them do return to their home village during the high farming seasons.

Like all social insurance schemes, to be actually insured under a NRCMI scheme, the participant has to pay a contribution in full and on time, except for two to three groups, namely the poor, "Five Guarantees" (the elderly, disabled or orphans who have no working capacity, no income and no relatives to support them) and occasionally veterans. Normally, it is the local governments who will pay contributions due on behalf of these groups. Over the period of 2003-

¹⁴ Rural Health Management Department of the MOH, NRCMI Newsletter, No.18, January 2005.

September 2005, the local governments had paid 31 million yuans for them, equal to 1.1 per cent of the overall amount of contributions received by the schemes as a whole.¹⁵

Another condition is household-based enrolment and payment of contributions, i.e. all members of the same household have to join the scheme simultaneously.

Financing

It is financed mainly from two sources: household contributions and government subsidies. This is illustrated clearly by the following statistics: by the end of September 2005, the NRCMI schemes had mobilized 6,498 million yuans, of which 2,735 million yuans were from the insured rural households, 3,524 millions yuans from the government and 239 million from other sources.¹⁶

The government allocation is very high and this striking characteristic is what distinguishes the NRCMI from its predecessor the RCMI, as well as from the current urban health insurance, as they do not have a regular government input. It should be noted that such a subsidy is actually shared between the central, provincial, prefecture, municipal and county governments, sometimes including even the commune governments. But, no standard subsidy-sharing rate exists, except for the ratio of the subsidy from the central government and that from local governments as a whole, which is normally one to one when the scheme is a recipient of the central government subsidy.

To understand which schemes qualify for the central government subsidy, we have to refer briefly to the classification of three regions. In mainland China, three regions, namely the Eastern, Central and Western regions, are grouped. From a development standard, the Eastern is considered to be the most developed zone while the others are less developed, because they present a very different weight in the economy: each producing 60.5 per cent, 22.6 per cent and 16.9 per cent, respectively of the GDP in 2004.¹⁷ In line with this classification, the central government subsidy initially went only to the schemes operated in the Central and Western regions except for those in their municipal areas. As from 2006, the eligible places have been extended to those operated in the municipal areas in the Central and Western regions, as long as the targeted rural population account for more than 70 per cent of the total. It has also been extended to the schemes implemented in six selected provinces of the Eastern region, though a reduced rate is applied to them. In addition, 2006 has seen a rise in the standard subsidy rate from 10 yuans to 20 yuans per participant per annum. Reinforced by an envisaged increase in the number of schemes, the amount of subsidy from the central government alone will be raised from 500 million in 2005 to 4,700 millions in 2006.¹⁸

¹⁵The Public Communication Office of the Ministry of Health. "The pilot of the NRCMI is smoothly unfolding across the country." (7 Jan. 2006). Available: <http://www.moh.gov.cn/public> Visited on 6 April.2006

¹⁶The Public Communication Office of the Ministry of Health. "The pilot of the NRCMI is smoothly unfolding across the country." (7 Jan. 2006). Available: <http://www.moh.gov.cn/public> Visited on 6 April.2006

¹⁷ National Bureau of Statistics of China, compiled. China Statistic Yearbook 2005. Beijing. China Statistics Press, 2006.

¹⁸ Zhu, Zhigang (Vice Minister of the MOF). Interview. 12 March 2006. Available: <http://www.yzdsb.com.cn>. Visited on 10 April 2006.

To be eligible for the central government subsidy, the recipient provinces are required to add at least an equal amount of allocation to their NRCMI schemes regardless of how it is shared among the local governments. This brings the overall government subsidy to 20 yuans in the period 2003-2005 and to 40 yuans in 2006. For those excluded from the central government subsidy some of them are even excluded from the provincial or municipality subsidies, so the actual amount of subsidies they receive from local governments is not necessarily less and sometime even higher.

With regard to the contribution rate, it varies from scheme to scheme, but generally ranges from 10 to 30 yuans per participant per annum. Together with the subsidy, the aggregate income rate was around 30 yuans during 2003-2005 and 50 yuans in 2006.

In addition, it is prescribed that all management costs should not be charged against the regular revenue of the NRCMI schemes. Again, it is the government who foots the bill. As the schemes are pooled and managed at the county level, it is understood that the bills are paid by county governments, sometimes supplemented by their subordinate commune governments and contracted medical institutes when they have to assume part of the management task.

Another important medical aspect is the pricing system of medicines, as they account for as much as 60-80 per cent of the overall medical expenditure in the rural areas. The general price level is considered too high, not only for the NRCMI, but also for the urban health insurance. The government has succeeded in pushing it down somewhat on several occasions, but it is still judged too high, especially from the point of view of the rural population.

Benefits

The composition of the benefit package varies too. Firstly, the coverage of contingencies is different: some focuses exclusively on serious disease-related medical costs, while others cover both serious disease-related and ailment-related costs.¹⁹ It is estimated that among the existing schemes, 28 per cent provides the former type, which is more popular in the developed provinces, and 72 per cent the latter, which prevails in the developing provinces.²⁰ Secondly, the reimbursement rate differentiates considerably, ranging from 10-60 per cent of the eligible medical costs.

Nevertheless, two common features can be observed:

- The benefit level is quite modest as reimbursement rates range from 10-60 per cent. The actual reimbursement level is much lower when taking into account the non-reimbursed deductible, the part of the cost that exceeds the reimbursement ceiling and many non-reimbursable items. It is estimated that the amount of granted benefits would account for only about 20 per cent of the overall medical cost to the insured

¹⁹ There is no standard definition on these terms. Nevertheless, the category of serious disease-related medical cost refers, in general, to that of inpatient treatments and that of outpatient treatments of prescribed catastrophic illnesses such as renal failure, cancers, although the second component may not be specified under some schemes. Whilst the second category of ailment-related medical costs relates to that of outpatient treatment of non-severe illnesses such as catching a cold or having a headache.

²⁰ Li, Meijun, et al. "Comparison of various models of the NRCMI." (18 Oct.2005). Available: <http://www.gz-news.com>. Visited on 10 April 2006.

patient. But this is designed on purpose to match carefully the spending level with the limited financing capacity of the NRCMI schemes. It should be remembered too that, despite the modesty, a benefit payment of 5,000 yuans or 30,000 yuans still represents an important amount or financial relief for many rural households as per capita annual income was only 3,255 yuans in the rural counties in 2005.

- The reimbursement rates were designed on a basis of combining a progressive rate with a regressive one to protect, as far as possible, those with a heavy medical bill and to encourage the use of the local medical facilities, especially at the commune level.

In addition to the common mechanism of pooling funds based on social insurance principles, some schemes utilize the family medical savings accounts based on individual liabilities. The first one is commonly adopted for financing serious disease-related benefits, while for ailment-related provisions, both mechanisms are used. Consequently, there are three combined models: (a) when the benefit package exclusively focuses on serious disease-related costs, it is financed out of a single pooled fund, but when it comprises also ailment-related benefits, in addition to the serious disease-related ones, the other two combinations are: (b) serious disease-related benefits funded by pooled funds, whilst ailment-related benefits by family accounts; (c) both serious disease- and ailment-related ones are financed by pooled funds.

In 2005, 122 million insured people received benefits amounting to 6,176 million yuans, equal to 81.95 per cent of the annual revenue of the schemes; and of which, 5.8 million claims, less than 5 per cent of the total number, were hospitalization-related benefits, costing 4,785 million yuans or 77.49 per cent of the global expenditure.

Organizational structure

At the national level, in 2003 an inter-ministerial NRCMI committee was set up, comprising 11 related ministries which has now risen to 14. Its main roles are to coordinate inter-agency efforts, guide pilot exercises, formulate policies, oversee funds mobilization, etc. It is supported on a daily basis by the Ministry of Health (MOH), the line ministry. Besides, both the Ministry of Finance (MOF) and the Ministry of Civil Affairs (MCA) work closely with the MOH, particularly on financial issues and on matters related to social medical assistance programmes. It should be noted that the Ministry of Labor and Social Security (MOLSS) is not directly involved, although it is the main ministry in charge of all social insurance schemes, except for the NRCMI in China.

This structure is more or less replicated at the local level. However, the central government is much more concerned about policy and development, while the local governments focus on implementation.

With regard to the implementing agencies, there are three types: (a) a public entity newly created under the leadership of the County Bureau of Public Health with various names; (b) an existing social insurance agency; and (c) a commercial insurance company. The current ratio is 94:2:4.²¹ In practice, a part of the daily management, such as contribution collection and benefit

²¹ Li, Meijun, et al. "Comparison of various models of the NRCMI." (18 Oct.2005). Available: <http://www.gz-news.com>. Visited on 10 April 2006.

payment, is often delegated to other organizations, such as the taxation authorities, the commune governments and contracted hospitals.

Medical infrastructure

The government is fully aware that without a sound medical structure, especially at the local level, the NRCMI simply will not work. Unfortunately, like the RCMI, this RTTMN has been significantly weakened since the 1980s, in particularly its two lower tiers: almost all village medical cabins closed down, and many commune medical centres could no longer function properly due to the lack of government allocations.

To revive it, the government has been increasing its financial allocation accompanied by a set of policies and measures. For instance, it advocates forming a partnership between a rural medical institute and a specialized city-based hospital. Once formed, direct medical assistance, such as the donation of medical equipment and professional training, will flow regularly from the donor hospital into its rural counterpart. The national campaign entitled “Improving the rural medical services by seconding 10,000 urban doctors” is a good practice too. It was launched by the MOH in June 2005 and the first cohorts of detached doctors have departed and are now working in some county or commune medical institutes on one-year assignments.

Local experiments

In the previous section a national profile was drawn, in this section it will be complemented by a closer look at three NRCMI schemes selected from three different regions.

The Xiaoshan NRCMI scheme in the Eastern Region

Local context

Xiaoshan Districts of Zhejiang Province is a coastal area in the south as illustrated below, consisting of 26 communes, a land area of 1,420 square kilometres and 1,166,657 residents, of which 852,742 are rural. On the economic side, it generated 50 billion yuans in GDP and 43,058 yuans in GDP per capita, which made it the seventh richest county in the country and gave the county government a comfortable revenue of 2.3 billion yuans in 2004.²²

²² Xiaoshan Statistics 2004. The Statistical Bureau of Xiaoshan District. Available <http://www.hzyl.xs.zj.cn>. Visited on 26 April 2006.



Substantial elements of the Xiaoshan NRCMI scheme

Xiaoshan is among the first group of counties/districts selected for the pilot exercise. After a short preparatory period during which a number of detailed documents, including the Regulation on the Xiaoshan NRCMI scheme, were issued in line with the general guidance laid down by superior governments, the scheme was then launched on 1 October 2003 and has been implemented since. Some of its substantial elements are illustrated below.

Persons eligible participation

All residents, either rural or urban, can participate as long as they are not yet covered by an urban health insurance scheme. Contribution payment made on a family basis is the condition for being actually insured under this scheme, except for three specified groups, whose due contributions are paid by the local governments as explained in the previous section.

Financing

As Xiaoshan is rich, the scheme receives no subsidy beyond the district and commune governments. Table 1, below, gives some more details.

Table 1. Income composition and rate (Yuans per participant per annum)

		1/10/2003-30/9/2004	1/10/2004-30/9/2005
Contribution		20	20
Subsidy	County	10	20
	Commune	10	15
	Sub-total	20	35
Grand total		40	55

Benefits

The benefits are offered under two categories: hospitalization and outpatient care, as displayed in Table 2.

Table 2. Reimbursement rates

Segment of the medical costs	Year	Contracted commune centre (% of I)	Contracted district hospital (% of I)	Other hospitals (% of I)
<i>Hospitalization benefit</i>				
Deductible	1/10/2003-30/9/2004	500		
	1/10/2004-30/9/2005	500		
500-2000 yuans	1/10/2003-30/9/2004	25	70	50
	1/10/2004-30/9/2005	30		
2001-5000 yuans	1/10/2003-30/9/2004	30		
	1/10/2004-30/9/2005	35		
5001-10000 yuans	1/10/2003-30/9/2004	40		
	1/10/2004-30/9/2005	45		
>10001 yunas	1/10/2003-30/9/2004	50		
	1/10/2004-30/9/2005	55		
Ceiling	1/10/2003-30/9/2004	20000		
	1/10/2004-30/9/2005	30000		
<i>Outpatient benefit</i>				
	1/10/2003-30/9/2004	10	None	None
	1/10/2004-30/9/2005	20	None	None

It shows that (a) a heavy emphasis is placed on the part of hospitalization benefit; (b) outpatient costs are only reimbursable when the treatment took place at a contracted commune medical centre and the reimbursement rate remains the lowest one, nevertheless, outpatient costs of five specified serious diseases, such as chronic renal failure are reimbursable now under the hospitalization category; (c) the general benefit level was largely improved in the second year of the operation due to a rise of 75 per cent in subsidy rate.

Furthermore, it should be noted that there are strict provisions on whether or not the incurred medical cost is reimbursable, depending on the category of medical institutes, medicines, services and laboratory tests, etc. In general, the reimbursable scope is much narrower than that stipulated under the urban health insurance schemes.

Organizational structure

Under the general leadership of the district government, the scheme is guided and supervised by the NRCMI leading group consisting of 14 institutional members, implemented by the Health Bureau, and managed by the management office set up under the Health Bureau. In addition, contributions are collected by the commune governments and a part of benefit claims are processed by contracted medical institutes.

Reimbursement procedure

Those insured can submit claims for reimbursement to the management office via the Internet at <http://www.hzyl.xs.zj.cn> or to the contracted medical institute where the treatment took place by presenting their personal NRCMI card issued by the management office. When it is processed by the medical institute, the amount of approved benefits will immediately be deducted from the bill and the insured patient pays only the remainder. Alternatively, the insured person pays the bill in full and is reimbursed later.

Contracted medical institutes are required to send all related files on a monthly basis to the management office for endorsement. Any wrong payments will not be refunded.

Contracted medical institutes

Currently, a total of 74 medical institutes have been awarded a contract, including 50 commune medical centres, 11 district hospitals and 13 higher-level specialized hospitals located outside the district. Regular review and assessment of their performance is envisaged in the regulation. An unsatisfactory report may lead to the cancellation of their contract.

Progress achieved

Table 3 outlines the progress the Xiaoshan NRCMI scheme has achieved in terms of personal coverage, benefits paid and financial situation during the first two years of operation.

Table 3. Performance of the Xiaoshan NRCMI scheme (1/10/2003 – 30/9/2005)

		1/10/2003- 30/9/2004 ²³	1/10/2004- 0/9/2005 ²⁴
Coverage	No. of participants	879,000	915,000
	Participation rate (%)	90.53	94.22
Annual revenue (million yuans)		36	(est.)50.36
Hospitalization benefit	Number of approved claims	*20,000	#27,000
	Amount of paid benefits (million yuans)	*20.44	#35.71
Out-patient care benefit	Number of approved claims	*750,000	#700,000
	Amount of paid benefits (million yuans)	*5	#9.5
Special out-patient benefit	Number of beneficiaries		231
	Amount of paid benefits (million yuans)		3
Totality (estimate)	Total number of claims	924,000	793,000
	Total amount of benefits (million yuans)	30.53	52.32
Annual saving /deficit (million yuans) (estimate)		+5.47	-1.96

²³ Source of data in this column: the Website of the Xiaoshan NRCMI scheme at <http://www.hzyl.xs.zj.cn>. Visited on April 2006, and the Website of the Statistical Bureau of Xiaoshan District at <http://www.hzyl.xs.zj.cn>. Visited on 26 April 2006.

²⁴Source of data in this column: the Website of the Xiaoshan NRCMI scheme at <http://www.hzyl.xs.zj.cn>. Visited on April 2006, and the Website of the Statistical Bureau of Xiaoshan District at <http://www.hzyl.xs.zj.cn>. Visited on 26 April 2006.

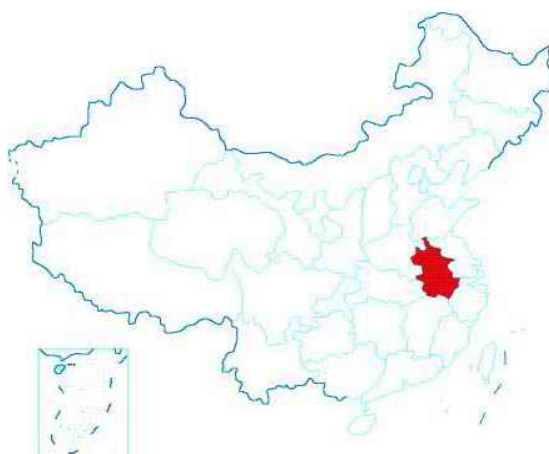
* data of the first 10 months
data of the first 11 months

It demonstrates that (a) even at an early development stage, the actual coverage reached is as high as 90 per cent, if not more; (b) despite the large number of claims, 5 per cent got more than 80 per cent of the benefits. In respect of the actual reimbursement level, in terms of the amount of benefit granted as a percentage of all medical costs, it ranged, on average, from 14.81 per cent in the Linjiang Special Industrial Zone to 21.00 per cent in Xinjie Commune during the last quarter of 2005.²⁵

The Hanshan NRCMI scheme in the Central region

Local context

Hanshan County of Anhui Province, as illustrated below, currently comprises 10 communes, 442,400 residents, of which 358,447 are rural, living on a land of 1,047 square kilometres. In 2005, it produced 3.01 billion yuans of GDP and 6,781 yuans of GDP per capita; for the rural population alone, per capita income was 3,135 yuans; the county government had an income of 102.87 million yuans at its disposal²⁶ – less than 5 per cent of that of the Xiaoshan District Government.



Substantial elements of the Hanshan NRCMI scheme

The scheme has been in operation since 2004. Constrained by the size of this report, the number of elements reviewed in this case study will be limited to two.

²⁵ Website of the Management Office of the NRCMI of Xiaoshan District: <http://www.hzyl.xs.zj.cn>. Visited on 21 April 2006.

²⁶ Hanshan County Statistics 2005. The Statistical Bureau of Hanshan County. Available: <http://www.ahhs.gov.cn>. Visited on 27 April 2006.

Financing

A quick review of the income sources and rates is given in Table 4.

Table 4. Income composition and rate²⁷ (yuans per participant per annum)

		2005	2006
Contribution		10	10
Subsidy	Central Gov.	10	20
	Province Gov.	3	8
	Municipality Gov.	2	2
	County Gov.	5	5
	Sub-total	20	35
Grand total		30	45

Compared with its counterpart in Xiaoshan, the financing aspect of this scheme has the following features: (a) as Hanshan is classified as a poor county, the scheme is entitled to the full range of government subsidies, but the overall subsidy rate remains the same; (b) the contribution rate is 50 per cent lower, which brings the overall income rate down and makes the scheme more dependent on the government subsidy.

Unlike the Xiaoshan NRCMI scheme, the Hanshan scheme has introduced the family savings account to finance outpatient treatment. Therefore, the revenue has to be split between the two funds as shown below.

Table 5. Allocation of resources²⁸ (yuans per participant per annum)

Source of income	2005		2006	
	Family account	Pooled funds	Family account	Pooled funds
Contribution	5	5	5	5
Subsidy		20		35
Total	5	25	5	40

The above table shows that the government subsidy is devoted entirely to the pooled funds, while the contribution is split equally between the two funds. As a result, 83 per cent and 89 per cent, respectively, of the income was allocated to the pooled funds in 2005 and 2006, and the rest to the family account component. It seems that by such an allocation structure, the management tried to match, as closely as possible, the benefit structure that placed a heavy emphasis on hospitalization and other serious disease-related benefits.

²⁷ The Regulations on the Hanshan NRCMI of 2005 and of 2006 (both provisional). Available: <http://www.hanshan.gov.cn>. Visited on 27 April 2006.

²⁸ The Regulations on the Hanshan NRCMI of 2005 and of 2006 (both provisional). Available: <http://www.hanshan.gov.cn>. Visited on 27 April 2006.

Benefit

It comprises five categories, namely ailment-related outpatient care, hospitalization, specified serious disease-related outpatient care, other high-cost outpatient care, and maternity care. The first is granted against the family savings account and the others against the pooled funds. The last two were recently added to the benefit package by the 2006 Regulation in a lump sum form. As far as specified serious disease-related outpatient care benefit is concerned, the number of diseases included increased from 8 to 12 over the period of 2005-2006, and 20 per cent of the related medical cost falling in the segment of 1001-5000 yuans in 2005 or 301-5000 yuans in 2006, respectively, refunded. Similar to everywhere else, the category of hospitalization is the focus of the whole benefit package. Table 6 gives some detailed provisions.

Table 6. Reimbursement rate of hospitalization cost²⁹ (Effective from 1 Jan. 2006)

	Segment of the cost (yuans)	Category of medical institutes		
		Commune	County	Higher level
Deductible (yuans)		200	300	400
Reimbursement rate (%)	<1,000	40	25	10
	1,001-3,000	45	35	20
	3,001-5,000	50	45	30
	5,001-10,000	55	50	40
	>10,001	60	60	50
Benefit ceiling (yuans)		30,000		

Compared with that of the Xiaoshan scheme, it is quite curious to see that the benefit level under this one is higher either in terms of reimbursement rates or in terms the deductible and benefit ceiling, despite less income.

Like other schemes, the benefit offered here has generally increased following the rise of income in 2006. For instance, the overall ceiling for benefits payable by the pooled funds rose from 16,000 yuans to 30,000 yuans.

It is prescribed by the Regulation that if there is extra savings at the end of a year, a second round of benefits may be accorded.

Progress achieved

Of 358,447 targeted rural residents, 301,281 or 84.05 per cent were actually covered in 2005, which has slightly risen to 85.20 per cent in 2006.

A total of 5,948 claims for reimbursement were approved in 2005 with a payment amounting to 4.84 million yuans³⁰. During the first four months of 2005, 1.17 million yuans

²⁹ The Regulations on the Hanshan NRCMI of 2005 and of 2006 (both provisional). Available: <http://www.hanshan.gov.cn>. Visited on 27 April 2006.

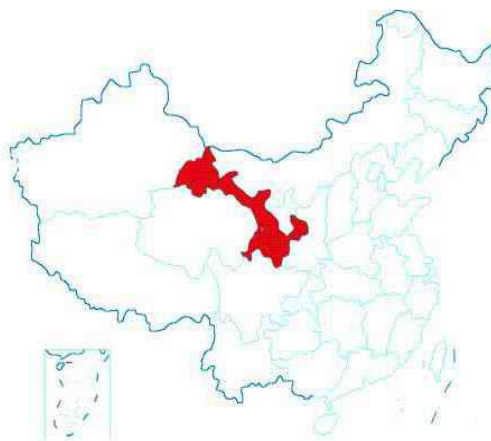
against 5.1 million yuans as the total medical expenses, about 22.9 per cent, were reimbursed.³¹ It was 22.09 per cent for the first quarter of 2006.³²

On the financing side, it received 9 million yuans in 2005, of which 3 million yuans came from the insured households and 6 million from the government.³³ It is anticipated for 2006, the overall revenue will be increased by around 50 per cent due to the rise of 15 yuans in the government subsidy.

The Dunhuang NRCMI scheme in the Western region

Local context

Dunhuang of Gansu Province, as illustrated below, is characterized by a small population with a vast territory: 180,000 residents, of which 96,900 are rural, living in an area of 31,200 square kilometers.³⁴ In 2005, it generated 2.03 billion yuans in GDP, 113,61 million yuans in government revenue,³⁵ and per capita rural income was about 4660 yuans.³⁶



³⁰ Hanshan County Statistics 2005. The Statistical Bureau of Hanshan County. Available: <http://www.ahhs.gov.cn>. Visited on 27 April 2006.

³¹ Website of the Management Centre of the Hanshan NRCMI scheme: <http://www.hanshan.gov.cn>. Visited on 27 April 2006.

³² Website of the Management Centre of the Hanshan NRCMI scheme: <http://www.hanshan.gov.cn>. Visited on 27 April 2006.

³³ Yu, Xiaohua (Vice Governor of Hanshan County). Speech on the County Conference on the NRCMI. (11 Oct. 2005). Available: <http://www.hanshan.gov.cn>. Visited on 27 April 2006.

³⁴ Industrial and commercial association of Dunhuang Municipality. Available: <http://jqgcc.com.onews.asp>. Visited on 2 May 2006.

³⁵ The 13th Commission of the Communist Party of China in Dunhuang Municipality. "Suggestions on the 11th Five-Year Economic and Social Development Plan of Dunhuang Municipality". 21 December 2005. Available: <http://www.dunhuangdj.gov.cn>. Visited on 2 May 2006.

³⁶ The 13th Commission of the Communist Party of China in Dunhuang Municipality. "Suggestions on the 11th Five-Year Economic and Social Development Plan of Dunhuang Municipality". 21 December 2005. Available: <http://www.dunhuangdj.gov.cn>. Visited on 2 May 2006.

Substantial elements of the Dunhuang NRCMI scheme

Numerous studies have indicated that in the Western region, around 20 per cent of the population is below the poverty line, which is about 19.92 per cent in Gansu Province.³⁷ Disease-caused poverty is more severe in this part of China. For instance, the Dunhuang Government estimated that among its rural poor households, 50 per cent were brought down by a serious disease suffered by a family member who had no medical insurance.³⁸

In Gansu, the pilot exercise started in five selected counties in 2003 and one year later, nine more counties were added, including Dunhuang. Again, due to the limited size of this report, only two aspects of the scheme will be reviewed here.

Financing

Table 7 displays its income structure and individual rates effective for 2005 and 2006, respectively. It is interesting to note that, in spite of low rural per capita income, the contribution rate is set at the highest level among the three schemes reviewed in this paper, which consequently brings its global income rate to the top.

Table 7. Income composition and rate³⁹ (yuans per participant per annum)

Year		2005	2006
Contribution		30	30
Subsidy	From the Central Government	10	20
	From the Province Government	5	20
	From the Municipal Government	2	
	From the County Government	3	
	Sub-total	20	40
Grand Total		50	70

Like its counterpart in Hanshan, the Dunhuang NRCMI scheme also has a component of family savings accounts to finance medical treatment of ailments. Meanwhile, the pooled component is further divided into three parts, namely hospitalization, serious diseases and reserve

³⁷ "A survey on the introduction of the NRCMI to Gansu". 13 December 2004. Gansu Economic Daily. Available: <http://www.guasudaily.com.cn>. Visited on 2 May 2006.

³⁸ Wang, Junxu. (the Secretary of the Party of Dunhuang Municipality). Speech. Conference on the Introduction of the NRCMI to the Municipality. 26 November 2004. Available: <http://www.huangqu.gov.cn>. Visited on 2 May 2006.

³⁹ Regulation on the Dunhuang NRCMI scheme. Available: <http://www.huangqu.gov.cn>. Visited on 2 May 2006. And "The Notification on speeding up the experiment of the NRCMI" issued by the MOH on 2 March 2006. Available: website of the MOH.

funds. Thus, once the income is received, it is reallocated into four funds covering different contingencies at a distribution rate illustrated by Table 8.

Table 8. Reallocation of the income⁴⁰ (yuans)

Funds		Contributions	Subsidies	2005	2006
Family account		17 yuans		17.00	17.00
Pooling Funds	Hospitalization	85% of 13 yuans	85% of the subsidy	28.05	45.05
	Serious Diseases	10% of 13 yuans	10% of the subsidy	3.30	5.30
	Reserves	5% of 13 yuans	5% of the subsidy	1.65	2.65

Compared with the Hanshan scheme, the proportion distributed to the family account component is considerably high here: 34 per cent in 2005 and 24 per cent in 2006.

Benefits

Three types of benefits are granted under the three funds, namely outpatient care, hospitalization and serious disease costing more than 20,000 yuans per single visit.

Concerning outpatient care benefit, the claim is submitted for processing to the designated bank where the family account was set up and the allocation deposited. The balance from previous years can be carried over. If no benefit has been claimed during the last two years, the insured person is entitled to a health check at a commune medical centre, the cost of which can be shared equally between the family account and the hospitalization funds.

In respect of hospitalization and serious disease benefits, Table 9 gives more details on evolving deductible, ceiling and reimbursement rates.

Table 9. Benefits available under the pooled component⁴¹

	Category of the medical institute	Deductible (yuans)		Benefit ceiling (yuans)	Reimbursement rate (%)	
		2005	2006		2005	2006
Hospitalization benefit	Commune	200	100	2,000	50	60
	County	400	400	4,000	40	45
	Higher level	1,000	1,000	6,000	30	30
Serious diseases benefit	Commune	200	100	20,000	30	30
	County	400	400			
	Higher level	1,000	1,000			

In 2006, two more benefits were added to the category of hospitalization: (a) a lump sum payable to those who have either been affected by one of the six prescribed serious diseases, or have given birth to a baby in compliance with the national policy on family planning; (b) the

⁴⁰Regulation on the Dunhuang NRCMI scheme. Available: <http://www.huangqu.gov.cn>. Visited on 2 May 2006.

⁴¹ Regulation on the Dunhuang NRCMI scheme. Available: <http://www.huangqu.gov.cn>. Visited on 2 May 2006.

reimbursement rate is higher for those who have proved their determination not to have more children after having had one, whether it is boy or girl, or two daughters.

Progress achieved

During its first-year operation in 2005, it attracted, out of 94,524 rural residents, 87,662 participants with a coverage as high as 92.74 per cent; 3,086 claims for hospitalization and serious diseases benefits were approved with a total payment equal to 2.16 million yuans, about 700 yuans per claim on average.

In 2006, it has covered 88,985 people or 93.77 per cent of the targeted population. The first two months have seen 945 claims for hospitalization and serious disease-related benefits approved with 0.71 million yuans paid.⁴²

Conclusion

From the above overview, either from a national perspective or from an individual case study, a number of common features of the NRCMI can be clearly observed:

- The government has assumed a central leadership in policy and guidance development, financing, the design and implementation of the schemes. It is certain that without such a leading role, the NRCMI could not have piloted and extended so quickly and smoothly.
- More than half the overall revenue the NRCMI has so far generated comes from the government, presenting a stark contrast to the urban compulsory health insurance that has no government subsidy.
- The participation of the targeted rural population is voluntary in spite of the high government subsidy and the established objective of universal coverage by 2010.
- Benefit packages are generally focused on catastrophic-illness and inpatient-treatment
- Financial resources and risks are pooled at the county level with a potentially targeted population between 100,000 and 1,000,000 in most cases. Compared to the old RCMI pooled at the village level, the capacity of the new system for risk prevention and redistribution has been automatically improved by such an extended pooling.
- The schemes are managed by a public NRCMI centre or office under the supervision of the County Bureau of Public Health. All operational costs of the centre or office are met from the general revenue in line with the instructions of the central government.

It is, therefore, not easy to fit the NRCMI into an established category, such as social health insurance due to its nature of voluntary participation or community-based health insurance,

⁴² Zhang, Xiaoliang. et al. «Donghuang's NRCMI is benefiting more people». 14 March 2006. Available : <http://www.gs.xinhuanet.com>. Visited on 2 May 2006.

because it is led and heavily subsidized by the government. Nevertheless, it is closer to social health insurance, and it may become of this type in the future.

Although it is somewhat unrealistic for the author to assess the NRCMI in a comprehensive manner at this earlier stage, certain characteristics of the scheme's nature and design, which will be analyzed below, give cause for concern.

- *Adequacy of benefit provisions* Firstly, due to the narrow scope of reimbursable services, hospitals and medicines, the actual reimbursement rate for catastrophic illness and in-patient treatment related costs is only around 20 per cent on an average, as demonstrated above. This implies that:
 - (a) The insured have to pay the remaining 80 per cent of the total cost of their medical treatment and, given this prospect, some of the insured may be reluctant to seek timely treatment, or may not even seek it at all if they are too poor to pay their own share. As a result, some of those who have received treatment may be pushed below the poverty line. Without doubt, it is poor households who will suffer the most.
 - (b) The emphasis of the benefit package commonly placed on catastrophic-illness and inpatient-treatment related risks results in only a handful of the insured – as few as 5 per cent calculated above – benefiting significantly from this coverage. Enhanced by the nature of voluntary membership, there is a concern about the participation rate, adverse selection and their possible implications for the financial health of the scheme in the long term.
- *Financing sustainability* The inadequate level of benefit is, of course, rooted in the low level of the financial capacity of the NRCMI in general. How to maintain and increase the flow of revenue is vital for the improvement of the benefit level. Nevertheless, there is no legal guarantee or stipulation for the moment, simply because the scheme is not a statute health insurance system. As mentioned above, possible adverse selection arising from free affiliation may undermine its financing equilibrium. In addition, since the scheme is confined to a county, the different situations in socio-economic development in different counties will produce a different financial capacity of individual NRCMI schemes: some are relatively rich while others may not be able to pay the promised benefits to the insured. No mutual support or redistribution mechanism is currently in place.
- *Voluntary participation* As pointed out earlier, this may open a door to possible adverse selection that would lead to healthy people not participating. Consequently, this would undermine both the financial situation, by a decrease in contribution revenue, and the rise in benefit expenditure and realization of the aim of universal coverage. Making it compulsory in due course may have to be considered.
- *Individual medical savings account* Apparently, this is influenced by the urban health insurance model. It may attract to participate in the scheme at the beginning, but they may find later that it has no financial logic. In the meantime, part of the scarce financial resources is blocked in these individual accounts.

- *Quality control and supervision* In general, the monitoring structure seems quite weak, especially where health service providers, mainly hospitals and clinics, are concerned. Part of the reason for the poor supervision and no systematic quality control is due to untrained and understaffed personnel in the NRCMI.
- *Various models* The central government has issued only some very broad and loose guidelines for the design of the scheme and left many important issues for each of the county governments to determine. Surely, this approach encourages local initiatives and ownership, as well as facilitating the adaptation of the scheme to the local situation. However, at the same time, this can lead to a loss of control by the central government of some fundamental aspects from the design stage. In addition, the emergence of many different models may become an obstacle for standardizing the provisions and the possible unification of the system nationally in the future.
- *Linkage with the urban health insurance system* This system provides the urban labour force with compulsory health insurance coverage, and has been in place for more than half the century and accumulated valuable experiences and lessons. The NRCMI can certainly learn a lot from it, especially in the field of supervising health service providers. As well as a proper coverage for rural migrant workers under a unique system, there is an additional need for close cooperation between the two programmes. There is no official definition as yet whether this new group belongs to the urban or the rural population. In practice, such an ambiguity, plus a lack of coordinated approach, results in either duplication or vacuum coverage.

It should be noted that both the overview of the NRCMI and the conclusions made in this paper by the author, are based purely on established knowledge and updated information gathered from various sources. Investigation on site may be needed in future, if a thorough and comprehensive evaluation is to be carried out.