

China's Social Protection Schemes and Access to Health Services: A critical review

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Summary

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I. INTRODUCTION

A large number of people in China have escaped poverty thanks to rapid economic growth driven mainly by the economic transition and a wide-range of policy reforms. But at the same time, a “new” poverty is emerging in both urban and rural areas. Both the characteristics of the poor and the nature of “new” poverty differ from the traditionally perceived poverty. In addition, a large proportion of the population have become more vulnerable to poverty as a result of the decline or demise of the transitional social protection system, including the enterprise-based system in urban areas and the community-based system in the rural areas. At the same time the reduced public provision of basic social services, in particular in the area of health, has increased the risk of falling into poverty due to shocks such as illnesses. Regional inequality in access and quality of basic social services is rising as a direct consequence of fiscal decentralization reforms implemented in the early 1990s.

Encouragingly, the pressing issues of poverty, vulnerability and impoverishment caused particularly by a cost escalation of health care services have become more fully recognized by the government and the society at large. A formal and more institutionalized social protection and assistance system is emerging in both urban and rural areas. In 2002, the State Council announced the decision to strengthen the implementation of health assistance schemes in China and highlighted two key areas of policy focus, including improving the rural cooperative medical system (CMS) and promoting medical financial assistance to the poor population.

This paper aims to review the existing social protection schemes in particular focusing on schemes related to health services and provide information on relevant international experience. The objective of this review is to provide a clear understanding of major social protection schemes currently implemented in China and identify knowledge gaps in order to provide information for improving the design of social protection programs that can effectively improve health outcomes, reduce inequality in access to health care and provide financial protection for the poor population.

The review focuses on schemes that can be characterized as demand and supply oriented approaches to protect and assist the targeted population. The demand-oriented schemes cover various types of income or in-kind transfer programs that aim to improve access to health services by the poor population through augmenting their purchasing power. The supply-focused schemes include schemes that reduce the costs of access to health care (e.g. direct health care provision through exemptions or partial fee waivers, expansion of clinics and subsidies to assist households to participate in health insurance). Health insurance schemes which are an important form of social protections schemes are not covered in the review.

This paper has the following sections. Section 2 reviews existing literature both in Chinese and English on China’s social protection schemes focusing particularly on those that can play a role in promoting equity in health service utilization. Section 3 identifies key issues in the area of social protection schemes, including targeting, coverage and benefits and sources of financing. Section 4 focuses on the impact assessment of major schemes on utilization, health expenditures and health outcomes. Section 5 discusses linkages of social protection schemes

with other sector reforms such as government public expenditure, public health; health system reforms, and health insurance. Section 6 concludes.

II. OVERVIEW OF SOCIAL ASSISTANCE SCHEMES

Rural social assistance schemes

Currently, a comprehensive rural social protection system is starting to emerge. While in recent years, China has had a long history of various ad hoc and fragmented rural social welfare programs, the government has implicitly assigned local governments (county and township) and local communities with the responsibility to provide social protection and assistance for the rural population. The major social programs are summarized in Table 1. Despite large regional variation in the coverage, benefits and sources of financing among these schemes, they share two common features. First, these schemes provide only a minimum level of assistance, with limited health care services being covered in some of the schemes. Secondly, the financing of these schemes is predominately from local resources (township, villages and households), while central budgetary support has been reserved for nationally designated poor areas. Recently, it has been widely recognized, in particular within the government, that without adequate financial and institutional support from higher levels of the government, the current rural social welfare system is far from adequate to address rural poverty. The central government has stepped up efforts to expand new programs such as *di bao*. At the same time programs that focus on improving access to health services by the poor, such as the recently established Medical Financial Assistance (MFA) scheme, have attracted the attention of policy-makers in China. A decision has been made by the Ministry of Health (MOH) and Ministry of Civil Affairs (MOCA) to rigorously evaluate the impact of the MFA pilot program with the objective to inform policies for expanding the rural MFA scheme to cover the entire poor population in rural areas.

Before the introduction of the rural household responsibility system, one of the first major economic reform initiatives started in 1978, social protection and assistance programs, such as the *Five Guarantees* (5G), various social relief schemes and Cooperative Medical Schemes (CMS), were mainly provided by collective communes. The demise of the rural collective system following decollectivization in the early 1980s has significantly weakened the traditional community-based social welfare system. Formal welfare coverage in rural areas provided by formal government and collective institutions declined substantially and the quality of basic social services has deteriorated. For example, CMS, which was widely held as one of the most successful models, saw a decline in coverage from 97% to only 5% of the rural population by 1995, although the 2003 national health survey indicates the CMS coverage rate increased to 9.5% in 2003. Despite the impressive economic success brought by the rural agricultural reforms, it has been widely recognized that a large share of the rural population have not shared in the benefits of rapid economic growth and rural poverty and vulnerability have become major problems as a result of the collapse of community-based rural social assistance schemes.

The central government has responded to these issues through establishing an institutional framework and providing direct financial assistance to the nationally designated poor counties. In 1986, the government established the leading Group for Economic Development in Poor Areas to coordinate poverty reduction efforts. An executive body of the LGPR, the Poor Area Development Office (PADO) reports directly to the State Council. Many

provinces, prefectures and counties also established local PADO and Leading Groups. Key central government organizations including MOCA is responsible for coordinating rural welfare programs, the Ministry of Health and Ministry of Education, are responsible for targeted health and education programs; and the regional office of the State planning Commission implements Food for Work Programs and various rural infrastructure project in poor areas (Cook and White, 2001). At the same year, the central government officially announced the formation of the Chinese Rural social protection system which covers social relief, social insurance and social welfare programs under the leadership of MOCA (Fang 2003). Between 1978 and 2001, the central government expenditure earmarked to rural social relief had increased seven folds from RMB 6.88 bln in 1978 to 47.7 bln in 2001.

In the following, we review several key rural social assistance schemes which are being considered to be the major components of China's future rural social protection system. These include the Five *Guarantees* (5G) scheme, Minimum Living Standard scheme (or *di bao*) and the MFA program.

The 5G program which dates back to the 1950s targets mainly the “three no” population: no ability to work, no savings or other income sources and no relatives to depend on. The system experienced a significant decline after the introduction of the rural household responsibility system in the early 1980s. Government efforts to revitalize the 5G include the introduction in 1994 of the Regulations on 5G work and the 1997 Operating policies regarding 5G welfare centers aiming to institutionalize the protection of "three no" populations. The 1994 5G regulation stipulates the benefits to include subsistence living expenses (provided in-kind or in cash), health care provision and funeral costs. Often the 5G program is administered through the centralized township welfare centers and the benefits cover health care components (hospital checkups, fee exemption for minor illnesses at village or township health centers).

In recognition of the severity of rural poverty outside nationally designated poor areas, many provincial governments started to implement rural *di bao* in the early 1990s. This scheme provides income and in-kind transfers to the population living below the national poverty line (RMB 637 per year) to increase their living standards up to the regional poverty line (*di bao* line). The first rural *di bao* scheme started in Shanxi province in 1992. By 2004, around 11 provinces had implemented *di bao* programs, with an additional 4.38 million beneficiaries by mid-year. With the objective to expand the *di bao* program to all rural areas, MOCA has focused its efforts on evaluating the current *di bao* schemes in several regions, including Shandong, Hebei, Sichuan and Gansu provinces. One recent development in the rural *di bao* program is the integration with the urban *di bao* program and extension of the benefits to include non-cash items such as medical care, education and housing. Nanjing and Xiamen city are two localities with such experiments.

The recent medical financial assistance (MFA) scheme which was implemented in several poor regions has played an important role in remedying the widely recognized deficiency in the existing targeted rural poverty programs – lack of assistance to access health care services. The MFA program which started in 1998 was initially designed to reach the 5-10% extremely poor living in poverty-stricken areas and was financed mainly by international development agencies. From 1998 to 2004, MFA schemes have been implemented in 71 nationally designated poor counties, covering 31,780,000 rural residents. Recently, MOH and MOCA have published a joint document which lays out clearly the eligibility criteria, benefit packages and sources of

financing for medical assistance. The MFA program targets the population eligible for 5G and *di bao* as well as people with severe illnesses. The benefits include provision of subsidies to poor households to enroll in the CMS, partial fee waivers for inpatient and outpatient services and exemptions for selected services (e.g. maternal and child health care services). County hospitals and village health centers are the designated health service providers. The sources of financing are from the provincial and county governments and donations from the society and individuals. The official policies for the MFA scheme represent the most important development in China's rural social protection system in the area of health care. In several developed provinces (Beijing Shanghai and Guandong), efforts have been focused on integrating *di bao* with MFA in rural areas.

Urban social protections programs

Until the early 1990s, poverty was regarded primarily as a rural phenomenon by all levels of government and the society as a whole. The existing social relief schemes, although very limited, were targeted at the urban poor, i.e. "three no" population, which represented only a small section of the urban population. By the 1990s, the nature of urban poverty had changed drastically in four key aspects: the number of new urban poor was substantially larger; the new urban poor were able to work, but had no jobs unlike the traditional urban poor; the emerging urban poverty was accompanied by a rising inequality in urban areas; and a large number of the urban poor were rural-urban migrants whose living standards were far below the local poverty line, but who were not entitled to any social welfare schemes.

To fully understand the scale and nature of urban poverty, it is critical to define what constitutes the urban population, although the concept of urban can be defined in several ways. Classifying population according to urban districts and by the official definition of urban are two examples of how the urban population is defined.¹ Regardless of the choice of definition, a major deficiency in China's urban poverty alleviation efforts is the exclusion of a large number of migrants working and living in cities who face greater risks of impoverishment and who are entitled to almost no urban social assistance schemes. Based on the 1999 urban household survey, the poverty rate for urban in-migrants was about 50% higher than for local urban residents (15.2 per cent for immigrants compared to only 10.3 among residents.) (Hussain 2003).

To respond to the increasingly urgent problem of urban poverty, several urban social assistance and protection schemes have started to emerge since 1997 covering only the urban residents, including a support program for laid-off employees, Minimum Living Standard Scheme (MLSS) or *di bao* scheme, medical financial assistance to poor households, and the recently established social assistance stations targeted at rural migrants (currently no detailed information is available on the benefits, coverage and financing with regard to the social assistance stations). Table 2 provides a summary of urban social protection schemes.

The support programs for laid-off workers was the first social protection scheme established to deal with the emerging urban poverty caused mainly by enterprise downsizing and labor market reforms started in the early 1990s. It covered only the laid-off employees of state and collective enterprises. This program was phased out in 2003 in line with the decision to shift

¹ The recent estimate of urban residents with income below the local poverty line was 14 million based on the survey conducted in August-September 2000 by the Ministry of Civil Affairs. The implied poverty rate is 3.1 or 5.3 per cent depending on whether the urban population is based on urban districts or the official definition of urban. (Hussain 2003)

the social responsibilities for the urban poor away from enterprises and towards an institutionalized social welfare system within the organization of the local government. The central government recognized the urgent need to develop programs such as *di bao* which are not enterprise-based but directly administrated by MOCA in order to adequately address the pressing issue of urban poverty, in particular with respect to the changing composition and increasing scale of urban poverty.

The *di bao* program is a non-contributory and means-tested program. The official *di bao* regulations stipulate that the benefit level should be set to take account of several considerations, including (1) local minimum wages, basic living allowance for laid-off workers, and unemployment benefits; (2) local economic conditions and local fiscal capacity; and (3) the local inflation rate.

The design of the *di bao* program also incorporates mechanism to encourage reemployment and reduce welfare dependence². The *di bao* program is also under consideration to be integrated with the unemployment scheme and other social assistance programs, and expanded to include the migrant populations. With strong financial support and promotion from all levels of government, the *di bao* program, which was piloted in Shanghai in 1993, has now expanded to over 668 cities and has identified 19,307,875 people eligible for the *di bao* program by mid 2002 (MOCA poverty relief department 2002).

However, one of the major deficiencies of the *di bao* program is the lack of coverage of health care. To remedy this problem, several cities have supplemented the *di bao* scheme with various types of ad hoc medical assistance programs, including in Beijing, Shanghai, Guanzhou, Wuhan, Shunde and Zhengjiang. These programs, although they vary across localities, in general provide a partial or full waiver for inpatient and outpatient services, or subsidies to enroll in medical insurance schemes for the population eligible for *di bao* or 5G. For example, in Beijing, *di bao* and 5G households are entitled to a 50% discount for inpatient services, and a 20% discount on basic surgery fees, and are eligible for medical assistance if the annual health care costs are above 1000 RMB. In Zhenjiang, medical assistance covers two components. First it provides financial assistance to employees eligible for the *di bao* program to enroll in the health insurance schemes, although the amount of subsidies are not recorded in the literature. Secondly, it provides financial protection by setting the ceiling for individual annual health costs at 3500 RMB, with the health scheme covering the remaining health care costs. In 1999, some hospitals also established medical assistance for poor people through a system of special funds which cover the costs of those who could not pay for inpatient services. However, the impact of such schemes is likely to be limited because the financial cost is borne entirely by the hospitals (Zhang, 2003).

III. KEY ISSUES IN SOCIAL PROTECTION SCHEMES

China's social protection system is still in early stages of development. Whether these schemes can effectively protect and assist the poor to access basic health care services depends

² For example, access to benefits is conditional on accepting a job if offered. The design in Beijing provides a full benefit in the first month re-employed, falling to 50% in the second month and ceasing thereafter when income per capita is above the local *di bao* line.

crucially on their design, implementation and management. The following issues, including targeting, benefits and financing arrangement, are particularly important.

Issue 1: Targeting

This section provides an overview of targeting methods employed for several major targeted assistance programs. Based on the existing literature, we assess the targeting performance of these programs; identify problems associated with the targeting methods and knowledge gaps. The assessment focuses mainly on schemes that provide income transfer (e.g. *di bao*, 5G) and medical assistance schemes. In addition, a brief discussion also involves targeting of public financing on health, including expenditure on health facilities (hospitals, health centers and clinics) which provide preferential treatment to the targeted population, and earmarked poverty funding from the central government.

Rural schemes

Choice of targeting method. The targeting strategies used to allocate public resources and provide social assistance programs to address rural poverty have evolved from focusing on county-level targeting to village and household-level targeting. In the mid 1980s, the central government used geographic targeting to identify national poor counties based on a poverty line that was derived from the average net income of all rural inhabitants of the county.³ Severe leakages were recognized under this targeting method. In 1993, the new government “8-7” poverty reduction program started and several adjustments were made both in the calculation of poverty lines and designation of poor counties with the objective to improve targeting. The adjusted targeting method identified 326 national poverty counties (National Bureau of Statistics 2003).⁴

In 2001, the central government announced the 2001-2010 poverty reduction strategies which place improving targeting as a top priority. A new targeting method was developed, with villages and households being the target units. The selection of poor counties was based not only on income, but also on social conditions, geographical and other physical conditions (e.g. priority was given to remote and mountainous areas and minority areas). By the end of 2002, 592 key counties were selected. The identification of poor villages was based on a centrally designed framework which provides the construction of an integrated village poverty index (IVPI). The index includes indicators reflecting living conditions (consumption of grain per capita per year, net cash income, quality of housing); conditions of physical infrastructure (drinking water supply, electricity supply and transportation) and health and education conditions (women’s health and school drop out rate of girls) (see [ADB 2004](#)). The objective of this methodology is to ensure that villages (both within and outside designated key counties) covered by government poverty assistance programs are deemed to be the poorest villages in the county. At the end of 2002, 148051 poor villages were identified as eligible for national poverty financial assistance, among which only about 55.6% are within the key counties. Evidently, the earlier county-level targeting had committed a large targeting error in terms of both under-coverage rate (share of the

³ The estimation of per capita income was based on a survey of sample households (60-100 households per county) collected by the National Bureau of Statistics (NBS).

⁴ The identification is based on a more scientifically calculated poverty line (400 RMB net incomes per capita, in 1993 prices).

poor not covered in the social assistance programs financed from budgetary resources) and leakage rates (share of beneficiaries covered in the program who were not poor).

Overall, the identification of counties and villages can be characterized as a top-down approach, with a central government-led Leading Group responsible for identifying poor counties and the county governments for identifying poor villages. In contrast, the identification of poor households is based on a combination of means testing and community-based targeting. Under the general management of a village committee, this selection process is regarded as highly participatory and transparent (ADB 2004). Communities take responsibility for setting local criteria for eligibility, identifying the poor and vulnerable households, and verifying household eligibility. Four categories of poor households are classified, including relief recipients, the extreme poor, normal poor and the near poor. Each category is supposed to be profiled in terms of per capita income, grain or food consumption, the number of able working age persons in the households, and their potential for further development. In some cases, villages may select beneficiaries using non-proxy criteria, e.g. through informal discussions to assess the special circumstances such as household with members suffering chronic or severe illnesses. The list of selected households is posted in the village. The community-based targeting method which exploits local knowledge for verifying the beneficiaries are widely regarded as a more effective way of identifying the most eligible households/individuals within each community. Such a process is widely used for identification of 5G and *di bao* households in rural areas.

The MFA pilot scheme which was designed to provide financial assistance for the poor to have access to health care used the community-based targeting method to identify eligible individuals/households. The MFA project and eligibility criteria were publicized through radio and newspaper in all villages among project counties. Households were invited to apply for enrolling in the MFA program. The applicants were subsequently visited by village and township level leadership groups for the verification of their eligibility. A list of qualified households was posted publicly for discussion in public meetings. Only those households that were approved after public meetings were provided with a MFA card for receiving partial or full fee waivers for health services at designated health centers. The assessment of eligibility is done annually with the objective of minimizing targeting errors.

Problems. The current targeting methods have several problems. First, the county and district government set the *di bao* line based on the local basic living standards and local government fiscal conditions. Such a method is sensible if benefits are to be paid entirely out of local government financial resources (e.g. county). However, the general consensus is that poorer counties or districts are forced to set much lower *di bao* lines due to more constrained local budget. Hence, the local head count of *di bao* population does not truly reflect the severity of local poverty, which poses a major problem when implementing redistribution policies to address inequality within a province, either in the form of allocating government poverty funds, provision of public services or providing social assistance programs to targeted localities. The evidence from the MFA program study clearly illustrates this point. The requirement to provide matching funds from the local government and loan repayment conditions attached to the MFA scheme have adversely affected targeting performance. It is reported that the poorest counties were likely to be excluded from the project due to their perceived weak fiscal constraints to provide matching funds for the scheme (Wheeler, 2003).

Second, while the community-based targeting approach has the advantages of utilizing local knowledge for the identification of program eligibility; it requires the villages to have the capacity to manage the process required for identification and verification of potential *di bao* households. Problems often associated with such an approach include corruption, cronyism and nepotism. In addition, in most cases, the identification of beneficiaries through fair and transparent procedures can only be guaranteed if the local government (county and township level) can enforce their functions to oversee and regulate the implementation of the community-based targeting.

Targeting performance. Currently reliable information to assess the targeting performance of the rural social protection schemes is very limited. Despite the long history of 5G schemes, no systematic assessment on the targeting performance of 5G programs has been conducted so far. A recent large scale investigation of 5G program which covered 12 provinces was undertaken in 2003 by a task force consisting of key policy think-tanks and research institutes under the leadership of MOCA (MOCA poverty relief department 2003). Although these studies do not focus on targeting issues, evidence from the field visits in many counties indicates that in general, 5G programs are well targeted, and the real issues are the low coverage rate and high medical costs incurred among the population eligible for 5G who have not received benefits due mainly to the shortage of financial resources earmarked to 5G schemes.

The evaluation of the MFA pilot scheme was conducted using several data sources, including the 2002 Chongqing households survey (World Bank, 2002) and qualitative data collected from focus group interviews (Wheeler, Fei et al. 2002). Table 3 provides a summary of the assessment based on Chongqing survey which sampled 4800 households across three counties, two MFA counties and one control county. Evidence from the household survey indicates that the MFA project appears well targeted – MFA participants tend to be poorer measured by per capita income, but also to be in poorer health and have health expenditure accounting for a larger share of total income. In particular, the MFA reached the more needy and vulnerable households whose indebtedness was more likely to be caused by illness, injury and disability. **(Need to comment on the lower panel of the table after Prof Zhang provides some new numbers)** The findings from the survey analysis are also supported by evidence from the field study based on informal interviews in several villages (Wheeler, Fei et al. 2002). For example, in Basong township in Kanhle County, only 5 out 317 families were incorrectly included in the list and they were dropped off the list after second round interviews by program staff (Wheeler, Fei et al. 2002).

Urban schemes

Most of the targeted urban social assistance schemes established since the early 1990s aimed to address “new” urban poverty. These schemes were mainly enterprise-based, except for the recently established *di bao* program and some ad hoc medical financial assistance schemes that were only established in a few cities. The identification of beneficiaries was a trivial issue for transitional schemes such as laid-off worker support program as enterprises provided records of their laid-off employees. However, as these enterprise-based schemes started to phase out and to be integrated with current *di bao* program in urban areas, officials in charge of urban social welfare programs recognized that targeting had become an important issue.

In 1999, the State Council announced official regulations for implementing the *di bao* program, including procedures for identifying the urban poor. In practice, the implementation of targeting methods varies greatly across localities and the local governments are clearly granted considerable discretion. In principle, the procedures include the following steps: (1) individuals submit a written application to the neighborhood committee which is the lowest tier level organization responsible for implementing various social schemes in urban areas; (2) an initial assessment is done based on an income test and an asset test through a visit to the household and verification with neighbors and employment units; (3) the names of applicants who passed the initial assessment will be posted in the local public notice-board for general public approval; (4) those who pass all the above screening steps will be formally approved by the district level government and provided with the *di bao* card for taking up entitlements. Most of the MFA schemes *targeted* *di bao* and 5G population, although special circumstances, such as major illness, was also considered in determination of eligibility.

How effective are such targeting method for the identification of beneficiaries? Unfortunately, systemic evidence on the targeting performance derived from large scale urban household surveys is still insufficient to allow a formal assessment of the targeting performance of the above schemes. Field visits in several cities (Liaoning, Yunan, Fujian and Shanghai) reveal strict compliance with the stringent assessment process as specified in the *di bao* regulations and the formal refusal rates on applicants is very low, on average less than 5% (Keefe 2004). This indicates that the inclusion errors might be negligible while exclusion errors may be substantial. The latter in particular deserves special attention for two reasons. First, migrants (many of whom are long-term migrants)⁵ are explicitly excluded from the urban *di bao* program, and they account for a large proportion of the urban poor if assessed with relation to local poverty lines. Secondly, the recent urban poverty analysis highlights a concentration of a large number of near poor individuals, i.e. those clustered just above the poverty line, who are not covered by any social assistance schemes, but who are exposed to a high risk to falling into poverty if they suffer from adverse events such as major illness.

Knowledge Gaps. The key knowledge gaps in evaluating the design of social protection programs, such as *di bao* and MFA, in terms of targeting performance, appropriateness of benefits, and potential for expansion of coverage, is the lack of information collected from national surveys. For the urban programs, this would require the collection of survey data representative at the city-level. Although some cities have undertaken special surveys for poverty assessment, such surveys are sporadic and the survey design, in terms of sampling coverage and survey instruments, is inappropriate for conducting program evaluation.

The key government organizations responsible for the social assistance programs have increasingly recognized the importance of using nationally representative surveys to evaluate the targeting performance with the objective to inform program design. More encouragingly, the implementation of program evaluation is feasible and can be done in a timely manner given the existing large scale rural and urban household surveys collected annually by NBS, which can readily be modified to collect information for evaluating social protection programs such as *di bao* and MFA. Recently, urban household surveys conducted between 2003-2004 by the NBS have included for the first time a specific module on the *di bao* program, which provides the

⁵ According to information collected by the Civil Affair Bureaux (a territorial branch of the MOCA), in 1999, about 59% of registered migrants stayed between 1-12months and 26% for 12 months or more.

possibility to thoroughly assess the *di bao* program, in particular on the targeting performance. Such an exercise can certainly be replicated for the rural programs.

In addition, China has periodically conducted a census which can be combined with the national household surveys to map poverty at a highly disaggregated level (e.g. villages and districts for rural and urban areas, respectively). A joint pilot poverty mapping project has been implemented by NBS and the WB in several rural counties.

Targeted public spending on basic health services.

While targeted social assistance programs such as transfers and medical assistance schemes augment poor households financial capacity to purchase health services, the health impact of these programs depends crucially on the quality of health services available to the poor. This begs the question as to how well public resources are targeted in terms of financing public health facilities (e.g. county hospitals, township and village level health centers and clinics) which are used mainly by the poor. Compared with countries of similar income levels, China's public expenditure on health is low, with the average share of government health expenditure to GDP being about 0.7% over the past decade. Health facilities that serve the majority of the poor receive even less budgetary financing and are mainly locally financed. At the national level, out of total government funds earmarked for all types of public hospitals, less than a quarter is allocated to township health centers and clinics which served over 80% of the rural population (Ministry of Health 2003). Although systematic analysis on the quality of health services in rural areas is scarce, several rural poverty case studies show that village level health clinics are poorly equipped – over 13% had no blood pressure monitor, 40% had no sterilization pot and about 36% of health staff had below high school level education (poverty monitoring report).

Since the start of a nation-wide rural poverty reduction program in 1986, the allocation of financial assistance from the central government has focused mainly on promoting productivity rather than on social protection in national poverty counties. In 2002, most of total RMB 3.4 billion poverty funds from the central government budget were used for production oriented activities such as infrastructure investment, only 0.2% being earmarked for village health facilities. Evidently, the benefits of these programs reach mainly the able-bodied or healthy individuals who can actively participate in income generating activities, but fail to target the poor who are often characterized with disability or poor health.

Given the increasing level of budgetary commitment from all levels of government on poverty reduction and improving access to basic services for the poor, surprisingly little is focused on analyzing benefit-incidence of public spending in the current policy debate. Fortunately, the knowledge gaps lie more in the lack of understanding and awareness of the benefit-incidence of government spending than in data availability. For example, the existing national health survey (Ministry of Health 1994; Ministry of Health 1999; Ministry of Health 2004) and national health accounts which are available at the province level allow policy analysts to routinely conduct benefit-incidence analysis (BIA) of public health spending. These rich data sources can be used both to assess the targeting performance of current public spending (using the average BIA method) and analyze the impact of expanding social assistance programs (using the marginal BIA method) which are particularly relevant given government's recent proposals to expand *di bao* and MFA schemes to all urban and rural areas.

International experience

The design of the targeting method used in different countries depends on administrative feasibility and costs, political factors, impact on demand among others. Important design features examined in the literature include: targeting system to be used, eligibility criteria, data for targeting, agency in charge of identifying beneficiaries and whether the targeting is demand or supply-driven. The issue of evaluation of the effectiveness of the targeting mechanisms will be discussed in the section on impact assessment. Other important aspects of targeted social protection programs in health will be described in later sections of this report including the types and levels of benefits provided and the financing and reimbursement of facilities for services provided to the poor.

Targeting systems. A study by Van de Walle (1998) categorized targeting into two broad categories, broad targeting and narrow targeting. Broad targeting operates on the principle that some categories of public spending matter more to the poor than to other groups, for example basic health services. Money spent on grassroots primary health care, therefore, is more likely to benefit the poor than money spent on hospital care. Evidence from benefit incidence analysis seems to confirm this result. Narrow targeting consists of two types of schemes, indicator targeting and self-targeting. Indicator targeting such as means testing or geographic targeting, involves finding a characteristic of poor people that is highly correlated with poverty but more easily and cheaply observed than income. Self-targeting aims to have beneficiaries self-select through incentives that induce the poor to participate, but not the non-poor, or in other words, that have a cost to participation that rises with incomes while benefits remain the same.

A cross-country study by Bitran and Giedeon (2003) found a wide range of targeting systems in use. In almost all countries studied, some form of means testing was used to identify poor individuals or households with incomes below some threshold or with other characteristics associated with poverty. The design features of these means tests varied considerably across countries and these will be discussed below. In addition, several countries also used group targeting or targeting by type of services and geographic targeting.

Geographic and individual targeting are sometimes combined to facilitate the process of identifying target beneficiaries. For example, in Mexico's PROGRESA program, poor localities were identified, and only within those poor areas was the effort made to identify poor households (Skoufias, Davis et al. 1999). In Vietnam both geographic and individual targeting were used to ensure that many of the near poor could be covered and to overcome shortcomings of the household targeting mechanism which led to under coverage of the better-off poor living in disadvantaged communes. In principle, a combination of geographic and household targeting could also be used to provide higher centrally funded subsidies to poorer geographical areas to ensure that all households targeted were covered by adequate resources.

Eligibility requirements In a cross-country comparison of social assistance for health (Bitran and Giedeon 2003), several issues surrounding eligibility criteria were found to have impacts on targeting results including clarity of criteria, awareness among staff and the general population about the criteria, and the need for balance between having strict criteria and being too generous. All countries studied except Cambodia, had an explicit national waiver policy for the poor and all had an explicit policy for exemptions (preventive services for all citizens). But all countries had problems with lack of clarity in their eligibility criteria leading to subjectivity of

staff in identifying the poor, non-uniform implementation across facilities, problems of leakage, and difficulties in monitoring targeting. For example, in Vietnam, the near poor are supposed to receive some assistance for catastrophic health expenses, but there is no definition of what near poor is, nor is there a mechanism in place to identify who is near poor so they in fact receive little assistance.

Setting the level of eligibility criteria is also very important. In Thailand and Chile, the thresholds were set higher than the national poverty line leading to substantial leakages of assistance to the non-poor, sometimes when some of the poor were still not fully covered as in Thailand. However, making the eligibility criteria too stringent by requiring a large number of documents to show income, tax statements or other conditions can often make it too costly for the poor to even request the assistance, especially those in the informal sector, leading to under coverage. Inflation in some countries accompanied by a non-changing or irregularly changed eligibility criteria made it more and more difficult for the poor to be eligible for assistance. It is difficult to apply income criteria in countries where most people work in the informal sector, have irregular income and there is no information system to establish applicant eligibility. Self-reported income tends to be underreported. Many countries use other proxies of poverty such as ability to send children to school, to eat two meals a day, housing characteristics or ability to seek medical care for sick children who are more easily verifiable and strongly correlated to poverty. However the methods for choosing these proxies should be rigorous as arbitrarily selected criteria may lead to leakages to the non-poor or under coverage of poor people as is the case in Indonesia.

Criteria for eligibility must be made known both to potential beneficiaries and especially to staff in charge of assessing eligibility. In many countries the people were unaware of their eligibility for benefits so they didn't request assistance and may have gone without necessary health care.

Data for targeting Having eligibility criteria is not sufficient for effective targeting as the information on the target groups must also be available and not too costly to collect. In programs that implement means testing at point of service, data is usually collected through an interview with the potential beneficiary. Underreporting of incomes is likely in this case as it is difficult to verify what applicants report. Instead, other, sometimes arbitrary and subjective proxies are used including occupation, way of dressing, mode of transport to hospital, recommendation by local authorities, family size, having no relatives, disabled, etc.

Indonesia and Vietnam both take advantage of other Government programs that target the poor to identify households for assistance in health care. In Indonesia, the National Family Planning Committee collects information on proxies for poverty, although they don't correspond very closely to income or expenditure based poverty lines obtained through household level data, leading to leakages and under coverage (Perdana and Maxwell 2004). In Vietnam, the Ministry of Labor's HEPR program annually assesses the poverty status of households to offer them various forms of assistance including health care. While the data used to identify the poor are not perfect, the identification is done in a relatively uniform manner throughout Vietnam and Indonesia and at basically no additional cost to the health assistance programs. In Mexico, PROGRESA first identifies poor localities from Census data, then as part of its overall program information system it collects information on all households in these localities. Certain variables in this survey are used to identify which households should receive the health assistance.

For targeting purposes, data must be available at the household level, so sample surveys are not useful for identifying poor households. However, household survey data is very important for assessment of the effectiveness of targeting and in some cases is also used for identification of easily identifiable proxies that are highly correlated with poverty.

Assigning responsibility for determination of eligibility There is great diversity in the assignment of responsibility for determining eligibility including Central level agencies external to the health sector such as the Ministry of Social Welfare or National Statistical Office, Central or local Health officials, local communities, social workers or medical staff at health facilities. For effective implementation it is important that whoever is in charge of selection is aware of selection criteria, adequately trained to carry out the task, has sufficient resources available (stationery, phone, time, etc.) and conflicting incentives are minimized.

As mentioned above, it is important that clear criteria are defined, and that the people in charge of identifying beneficiaries are aware of these criteria and how to implement the targeting process such as means testing, or community based poverty assessments so the process could be implemented uniformly across localities or potential beneficiaries. Written guidelines for waivers and exemptions must have enough flexibility to allow for regional or local variation and have cost norms and budgets to cover the administrative costs of implementing the targeting.

In their comparative study (Bitran and Giedion 2003) found that in several countries reviewed, a lack of office supplies hindered the implementation of means testing to issue hospital fee waivers. Evidence indicates that administrative costs including costs of staff to implement the targeting mechanism must be covered for it to operate effectively. Reliance on health workers to do this work when they are overloaded with medical work has been found to be an ineffective way to implement the program.

Perhaps most important are the incentives to the people responsible for determining eligibility. If the agency in charge of issuing benefits is not the agency that must bear the cost of providing the benefits, they have a tendency to identify too many beneficiaries. A problem found in many countries is that the incentives of facilities to collect user fees to increase salaries of workers is in direct conflict with the incentive for facilities to issue fee waivers to the poor if the fee waivers are not fully reimbursed by an external source of funding. In Indonesia, the grassroots health center directors were in charge of issuing the free health cards, but because they also had a private practice, the more cards they issued the fewer their private patients so they tended to retain the cards or delay issuing them. (Perdana and Maxwell 2004)

In systems where the community is responsible for identifying target beneficiaries, without careful oversight, there is the risk that the benefits are granted as political favors or to relatives of local authorities. In other systems with strong political imperatives to reduce poverty, there is an incentive to local authorities to reduce the number of beneficiaries targeted each year whether it is warranted or not leading to problems of comparability of beneficiaries across communities.

Supply- or demand- driven If the identification actively searches for prospective beneficiaries it is considered supply driven, and usually involves pre-identification of beneficiaries prior to health seeking. If the system passively waits for people to show up and request protection it is considered demand driven and is usually in the form of fee waivers at

point of service. Programs that actively search for beneficiaries will tend to have higher costs for targeting, but will be less likely to suffer from under coverage than the more passive systems. More passive systems often suffer from lack of information or misinformation among potential beneficiaries about protection mechanisms.

In supply-driven systems, there tend to be problems with the process to distribute cards from higher to lower levels of government including high administrative costs, delays and even retention of cards as has been seen in Indonesia and Vietnam.

In demand-driven systems of fee waivers, it is important to monitor under coverage. It could be that those who choose not to apply are those who are better-off and have higher opportunity costs for applying, or the poor who are unaware of the assistance programs, are uncertain of their ability to receive benefits or are generally wary of bureaucracy. Lack of knowledge on protection mechanisms by potential beneficiaries was a recurrent issue in most countries studied by Bitran and Giedion (2003). The poor often have lower access to mass media, are less educated and may have less time to collect information. Health facilities may have incentives to hide this information if it negatively affects facility revenues and their salaries.

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Issue (2): coverage and benefits

This section provides an assessment of coverage and benefits of major social welfare programs currently implemented in China, including 5G, *di bao*, and MFA schemes.

Systematically collected information on the coverage and benefits for each scheme is limited, existing evidence shows these schemes share the following common features: low coverage rate; insufficient benefits, lack of financial assistance for health care cost; large regional disparities characterized by localities with higher poverty incidence being associated with lower coverage rates and more limited benefits.

Income transfer schemes

Table 4 summarizes the rural 5G coverage rate in 2002 by province. At the national level, about 69% of the 5G population was covered by the program, and the average benefit provided by the 5G program was about 65% of local average per capita household. In general, the benefits of the 5G program are mainly a mix of cash and in-kind transfer, with the coverage of health care costs being extremely limited. The recent MOCA study of 5G programs across 12 provinces provides evidence on two major shortcomings of rural 5G, including (1) low coverage rate of 5G population due to inadequate local funding and (2) inadequate assistance to cover health expenses for the 5G population covered by the program.

Table 5 summarizes the rural *di bao* coverage rate and share of the rural poor population across provinces by mid 2004. It appears that provinces with limited pilots (e.g. Yunnan is piloting rural *di bao* in Yuxi prefecture), or no program at all (e.g. Ningxia and Jiangxi provinces) tend to have low coverage rates. Information summarized in Table 5 also reveals a negative correlation between provincial rural *di bao* coverage rates and living standards (measured by the total number/share of poor counties and the 1999 share of total rural poor in province groups) Recent estimates of the total number of beneficiaries suggest a slackening in aggregate beneficiary growth since 2002 when it was 4.078 mln (i.e.14% of the rural poor), although the national level trend conceals much variation at the provincial level. Fujian province experienced a rapid expansion of *di bao* coverage, from around 67,000 beneficiaries of rural *di bao* in 2001 to full provincial coverage in 2004, with an estimated 731,865 rural *di bao* beneficiaries in May 2004. In contrast, Shandong province which was an early starter in rural *di bao*, has been facing major challenges in sustaining coverage and financing the programs introduced in 1997-98.

Only limited information is available about the benefit coverage of rural *di bao*, in particular with regard to non-cash entitlement to the eligible population. Currently, the rural *di bao* program receives limited financial support from the central and provincial governments.⁶ Many regions have implemented various types of supplementary schemes, such as subsidies for health care, education, utilities and housing to provide assistance to the poor. The structure of the benefits (cash and non-cash benefits), and preferential access to basic public services (education and health care) vary substantially across provinces and also across regions within a province,

⁶ Despite the scale of rural poverty, direct government financial support to rural *di bao* is limited compared with that for the urban *di bao*. Of the total RMB 46 mln central government contribution to *di bao* financing in 2002, only about 15% was channeled to the rural *di bao* schemes.

depending on sources of financing and local (county and township level) fiscal capacity. Overall, richer provinces rely more on cash transfers and poorer provinces more on in-kind transfers and other preferential policies in public services.

Table 6 summarizes the recent urban *di bao* coverage and poverty rates across provinces in 2004. Despite the recent rapid expansion of *di bao* coverage, with the number of covered *di bao* beneficiaries increasing from 2 million in 1997 to 19 million in 2002, the national coverage rate was only 6% in 2004. The data presented in Table 6 show a positive correlation between *di bao* coverage and poverty incidence which possibly resulted from the recently increased central government financial subsidies for *di bao* spending in poor localities.⁷ However, on average, regions with higher poverty incidence tend to have lower per capita *di bao* spending due to the current *di bao* cost sharing arrangement with city/district level government shouldering a larger share of the total cost. The recently released *di bao* statistics from MOCA show the *di bao* benefit level in 2004 ranging from 143 RMB per capita per month in Inner Mongolia and Jianxi to 344 in Guangdong. Relative to the average cost of health services (e.g. the average per outpatient visit was RMB 217 in cities based on the 2003 national health survey), the current level of benefits is low and far from sufficient to meet the cost of basic health service for the poor.

Moreover, a large number of *di bao* eligible beneficiaries do not receive the full amount of benefits (Urban poverty report, 2002). Based on information collected from two surveys that are purposely designed to examine the *di bao* program by MOCA in 2002, on average, about 84% of households were able to obtain the full *di bao* benefits. However, large spatial variations exist, ranging from as low as 58% in Bing Tuan and Guanxi provinces to as high as 97% in Beijing and Shanghai, with provinces having higher poverty incidence and more limited public finances in general less likely to provide the full amount of benefits.

MFA schemes

Recognizing the deficiencies in the current urban *di bao* schemes, many cities supplement the *di bao* benefits by providing subsidies and exemptions for basic service access, including health, housing and utilities to *di bao* and 5G households. Large variations in the generosity of these preferential policies across cities are expected, although reliable statistics are limited. Programs that focus specifically on improving access to health for the targeted population are mainly small scale pilots, such as the MFA program implemented in poor counties and a few selected cities.

The rural MFA pilot program was initially designed to cover 5-11.2% of the extremely poor population living in national poverty counties. The benefits of the rural MFA include two components. The first is a subsidy for targeted households to participate in the CMS. Secondly, the scheme provides partial or full fee waivers for selected health services. The health service packages include: free maternal and child health programs; 40-80% subsidies for inpatient costs; 40-65% subsidy for outpatient costs. Field studies indicate that the take up rate varies by locality, and the poorest MFA members often cannot benefit from the MFA scheme due to their inability to pay co-payments or difficulties in reaching health facilities (Wheeler). Results from the 2002

⁷ In 2002, Lianning, Heilongjian, Henan, Hubei, Hunan and Cichun received central government *di bao* subsidies over RMB 3bln.

Chongqing survey show very low take-up rate among MFA members, only 45% in county-A and 25% in county-B use inpatient services when sick.

Unlike the rural MFA program which has a relatively uniform benefit package across localities, the benefits of urban MFA programs vary significantly across cities. Detailed information on the coverage and benefits of the urban MFA is very limited in the existing literature. One published case study focused on the MFA in Shandong province where about 40% of hospitals have implemented such a program (Meng, Sun et al. 2002). The study indicates that the exemption program was designed mainly for marketing purposes to attract patients. Only a small fraction of hospital services were eligible for the discount with the discount rates ranging from 10-50%. The drug charges which make up about 50% of all hospital charges are generally not subject to reductions except in one hospital.

Summary

The above assessment of benefits and coverage of the various schemes points the following problems with China emerging social protection system. First, the system is still in its infancy and cannot function as a social safety net of last resort due to its limited coverage and benefits. Secondly, while the income transfer schemes lack the much needed coverage for health care costs, the existing MFA schemes do not provide adequate assistance to the poor. Thirdly, the substantial regional disparity in benefit and coverage indicates that the fundamental problem lies in insufficient financing. However, the level of financing to social protection schemes is only part of the issue; the sustainability of schemes depends crucially on sources of financing and the financial arrangement across all tiers of government, an issue we will turn to in the following section.

International experience

Most countries attempt to improve health outcomes of the poor through policies aimed at financing basic health services. Some countries combine this with schemes to ensure access to hospital curative care when necessary. Limited funding has hampered the success of these programs.

Coverage of basic services Many countries use "broad targeting" through government provision at grassroots facilities of a package of primary health services including preventive care such as immunizations, Maternal and Child health care and treatment of communicable diseases more likely to affect the poor such as TB and leprosy. (Bitran and Giedion 2003 show this in all countries in their study).

Development of essential or basic health care packages was promoted in the 1993 World Development Report, but have been hard to put into practice. This approach tells what must be done, but not how to do it and doesn't address equity issues. Operationalizing a package of essential services is difficult as most budgeting is done by categories such as health staff, medicines and materials. The approach is more compatible with the vertical program approach although integrated approaches tend to be more cost-effective. (Pearson 2002)

Broad targeting of basic health services in these approaches has some shortcomings. Van de Walle (1998) argued that broad targeting, because it provides services to all, suffers from a large amount of leakage of public funds to the non-poor. In addition, broad targeting of basic

health services does not protect the vulnerable and provide insurance for shocks such as severe illness, although it may reduce the likelihood of such illnesses.

The Mexican government set up a targeted program called PROGRESA designed to increase access and utilization of the poor to basic health, education and nutrition services through monetary transfers directly to poor families on the condition that family members went for health checkups, mothers went for hygiene and nutrition training and children attended school. The money transferred to the households amounted to about 20% of mean household income and could be spent at the discretion of the household. The impact on health was a reduction in malnutrition in children, increased preventive health care visits, and early prenatal visits, significant declines in illnesses among newborns and children under 5, reductions in child anemia and improvements in adult health. Administrative costs were kept low and targeting efficiency was high. While this program overcame the leakage problem of provision of basic services, it did not reduce vulnerability for households suffering from severe illness (Gertler 2000). Gwatkin DR (2003) argues that free government provision of health services leads to high levels of leakages to the non-poor who are more likely to use the hospital services which receive greater amounts of government subsidies. Van de Walle (1993) argues that government spending on basic health services is found to reach the poor almost universally. Increased spending on these services is almost always substantiated. However, there is also a need for provision of more narrowly targeted services to ensure the poor don't fall into poverty due to catastrophic curative health care costs at hospitals.

Coverage of care beyond the basic Primary Health Care package Policies in several countries called for ensuring the poor pay reduced or no fees for curative care services. Attempts have been made to determine a package of essential services that should be covered by health insurance or government subsidies for the poor such as in South Africa, Ecuador, Vietnam and Thailand. For example, Thailand's 30 Baht scheme covers most health services except cosmetic care, obstetric delivery beyond 2 pregnancies, drug addiction treatment, hemodialysis, organ transplant, infertility treatment and other high cost interventions. But many countries failed to define explicitly the set of benefits subject to waivers and exemptions with regard to curative services. Cambodia is now working on developing minimum packages for health centers and hospitals. (Partnership for Health Reform 1996; Soderlund and Peparah 1998; Bitran and Giedion 2003).

Some waivers provided for fees at higher level facilities when referred such as in Cambodia which helped promote more efficient patient flow. Assistance for referrals (at least partial are necessary as these are where the costs are higher and protection is most needed). In Indonesia, Thailand and Vietnam the assistance programs require that beneficiaries seek care at a grassroots level primary health care facility as a first point of entry into the system. Health center staff will then determine whether to refer patients for which they will be provided free care, but for emergencies they can go to the nearest health facility and receive free care. In Thailand and Vietnam, poor people without a health care card can be given fee waivers on an ad hoc basis when seeking care at government facilities, but there is always a risk that their request will be turned down. In research on access of the poor to health services, the problem of non-medical costs as a deterrent to seeking healthcare beyond the grassroots level has become evident including transport costs, accommodation and opportunity costs for accompanying relatives. There was no evidence of effective solutions for these problems as countries rarely have sufficient resources to cover even the medical costs although some of the Cambodian Equity

Funds did provide some assistance for transport and food and in Vietnam, some charities provide free food to poor patients in hospitals.

Issues (3): Sources of financing and sustainability

Fundamentally, the coverage and benefits of various targeted schemes depend crucially on the total funding available to each program, although improving targeting and implementation efficiency can release more sources for expanding program coverage and benefit packages. Many studies that focus on social welfare system financing in China identify the main problem to be related to the decentralized fiscal system. In addition, due to historical and political reasons, the urban poor received disproportionately more protection and assistance from the central government budget and direct provision of social services than their rural counterparts. Recently, central government has implemented various redistribution policies to address the rising inequality in the area of social protection across regions, but little has been done to narrow the significant urban-rural disparity. In the following, we review the sources of financing of major social protection schemes implemented in urban and rural areas with the objective to identify problems associated with the current financing arrangement. Based on the existing information, we also present a projection of the financial costs of selected schemes against recent government proposals of program expansion.

Rural schemes

Rural social assistance schemes that provide income transfers and basic services to the targeted population are mainly locally financed (e.g. county and township level governments and local communities), except for those that targeted the designated poverty counties where a large proportion of financing comes from the central budget. Typically, financing depends on the capacity of township and villages to raise revenues through their control of local enterprises and collection of agricultural taxes and levies on households. The funds are then directed to finance social programs and the provision of basic social services.

Fiscal decentralization reforms implemented in the early 1990s have significantly weakened the financial capacity of the central and provincial government to implement various redistributive mechanisms and provide basic social services to poor localities. Localities with a disproportionate concentration of poor tend to have the least developed social programs, more limited access to basic services and lack of guarantee of the welfare funding as reflected in observed large regional disparities in the benefits and coverage discussed in the above section.

The rural 5G program which is expected to cover about 10% of the extremely poor in rural areas is largely financed by local communities. The structure of 5G financing (which changed after the 2002 tax reform) consists of village agricultural surplus taxes and provincial or county government subsidies, and the composition varies markedly across regions (5G study, 2003). The recent government decision to provide direct financial support to the 5G program from the central budget represents a first step to include the rural 5G scheme as part of government welfare program. Under the new financing schemes, provincial or county governments allocate funds to township governments who are responsible for allocating funds to the 5G population covered under the centrally managed system. It remains to be seen, to what extent the new financing schemes can reduce inter-provincial disparity in 5G coverage rates and narrow need-benefit gaps currently observed in rural areas. In 2002, Zhejiang province

implemented a new financing method – the creation of 5G funds at the county or township level (Ye and Zhang 2003). This pilot could offer a good opportunity to evaluate the impact of the relatively centralized 5G financing schemes on coverage, the matching of needs and benefits and financial sustainability.

The financing of the rural *di bao* program comes primarily from the local budget, with the county level government playing a significant role in financing, and the town and village-level organizations shouldering the remaining financial burden. Table 4 summarizes the distribution of financing for selected localities where data sources are available. The current low *di bao* coverage rate and significant regional variation in coverage clearly indicate that the sustainability of the *di bao* program depends crucially on the commitment of resources from the central and provincial governments. Recognizing the increasing inequality in social service provision and the inadequate financial and institutional support from the higher level government (central and provincial level) in rural areas, the State Council has recently stipulated the provincial government's financial responsibility for the *di bao* program with the objective to consolidate the existing ad hoc and fragmented schemes and expand the rural social protection schemes to cover all the rural poor. The need to increase financial contributions from higher levels of government evident from the recent experience in Fujian province. The provincial government has increased substantially its financial contribution to the rural *di bao* program, with the large majority of rural counties receiving a 70 percent subsidy from the provincial government towards their rural *di bao* obligations. The immediate outcome of this policy is the rapid expansion of provincial beneficiary and expenditure numbers observed in Fujian in 2004 (Keefe).

The rural MFA pilot program is largely financed by the international development agencies, with the central and local governments providing a small proportion of matching funds. Information on source of financing for rural MFA pilots are available for two counties collected from the Chongqing survey. Table 8 summarizes the distribution of source of financing for one MFA project county (World Bank, 2002), which indicates that limited financial contribution from the provincial and county government - of the total RMB 1.1 mil earmarked to MFA scheme in 2003 for this county, total financing from the provincial and county government accounts for about 16%. Despite evidence from several MFA studies suggesting that the scheme is well targeted and has some positive impact on improving health service utilization among the poor, little is known about the financial sustainability of this type of program once the external financing comes to an end. In the context of the government's recent proposal to expand the MFA program to cover the poor population in all rural areas, a sound understanding of the financial implications of such policy decision is particularly relevant.

Urban schemes

In contrast to the rural schemes, all levels of governments have played an important role in financing urban social protection schemes established since the early 1990s. For example, the total spending on the *di bao* program from all levels of government budget (central, provincial government, prefecture and city government) has increased from RMB 12 bln in 1992 to RMB 105 bln in 2003, in terms of share of government expenditure this represents an increase from 0.32% to 0.5% in the two respective years. Despite the scale of rural poverty, over 85% of

central government contribution (total RMB 46 million) to *di bao* financing in 2002 were channeled to the urban *di bao* schemes.

The *di bao* regulations published in 1997 mandate that financing of *di bao* schemes should be the responsibility of local government, including province, prefecture and county (city) level government. There is no recent data available to provide a disaggregation of sources of financing by province. In 2001, the national average breakdown of spending across levels of administration was 34 percent at provincial level; 32 percent at prefecture (city) level; and 35 percent at county (town) level.

To address large regional inequality in the coverage rate and benefit levels of *di bao* schemes in urban areas, since 2001 the central government has increased its financial contribution to localities with high poverty incidence and weak financial capacity. The positive impact of such a redistribution policy is reflected in the observed positive correlation between coverage and poverty incidence as shown in table 5 in 2004.

Detailed information about the urban MFA schemes is very limited. However, given the ad hoc and localized nature of the existing schemes, the sources of financing can be highly diverse. For example, while many hospitals in Shandong province finance their MFA initiatives almost entirely through their hospital budgets, the MFA schemes operated in Guanzhou city are reported to be financed through a general medical assistance fund, with contributions from city government and donations from society (Ying Shaohua, China health resource, 1999 vol1). In Wuhan, the source of financing MFA programs is shared between city and district level governments (MOCA report).

Summary The above review of the sources of financing of major social protection schemes currently operating in urban and rural China identify the following two issues. First, despite government's recent efforts to increase financial support to rural schemes, to address deeply rooted rural-urban inequality in social protection requires a long-term commitment from a higher levels of governments, in terms of both financing and providing policy direction. Secondly, the sustainability and equity of the current schemes depend on a clear assignment of financial responsibilities among different levels of government, and a higher share of costs borne by higher levels of government (central and provincial), requiring a reversal of current financing arrangements. Also the review suggests that the higher tiers of governments should focus their efforts on localities that are unable to finance schemes providing health assistance to the poor, not just an increase in total funds allocated to the overall schemes.

Financial sustainability: a projection

To expand the recently established social protection schemes to cover all rural and urban poor people represents a key part of government poverty reduction strategies formulated in the late 1990s. However, such policy initiatives raise an immediate question given the current level of coverage and benefit, and the sources of financing. Is such a commitment financially sustainable even if the political support can be sustained and the institutional capacity required for implementing these programs exists? Surprisingly, little attention in the current policy debate has focused on the financial implications of these proposals, in particular from the perspective of

the government budget. In the following, we provide a preliminary estimation of cost required for these schemes, based on existing information collected from various studies.

To assess the financial sustainability of social assistance programs is a difficult task as it can be extremely data demanding. It requires a correct identification of the potential beneficiaries as well as detailed cost information on various components of the programs including both costs of benefit packages and administration costs. This highlights the importance to establish an information system as part of the social protection framework to collect information for monitoring and program evaluation. China currently lacks a system which can provide the needed information for informing the design of social protection schemes. Despite data deficiencies, estimating and projecting financial cost of selected social programs is possible under some assumptions. For example, ADB estimates the cost of filling the poverty gap for the rural absolute poor to be around 0.12% of total fiscal expenditures in 2001. The calculation is based on the official rural poverty line of RMB 627 under the assumption of perfect targeting.

Using the Chongqing survey collected for one of the MFA project counties, it is possible to provide an approximation of the total cost of MFA against the current government proposal to roll out the scheme nationally in rural areas.⁸ The cost information is collected from the Chongqing facility survey, and the inpatient and outpatient utilization rates are estimated from the Chongqing household survey.⁹ Under the assumption of perfect targeting, to cover all 32 million officially identified absolute rural poor (MOCA, 2004), the cost of the MFA program ranges from 7.8% - 12% government health expenditure in 2002 depending on the benefit package.¹⁰ Obviously, these estimates are rough and should be treated with great caution and used mainly for illustrative purposes. Nevertheless they are useful in providing some approximation of the order of magnitude. If these estimates can be used as a general guide, they indicate that with a strong commitment from the higher levels of government (center and province), financial sustainability of schemes such as the rural MFA pilot is not impossible even without any external financing. In particular, given the current extremely unequal allocation of government financing in social assistance programs, and in particular in the area of health, between rural and urban sectors, some adjustments of government health budgets in favor of the rural sector to finance the MFA program are feasible within the current government budget capacity and certainly justifiable on equity grounds.

International experience

Reimbursement of the cost of providing health services to the poor is a key factor affecting success of health safety net programs for the poor. The source of funding for health care for the poor varies significantly across countries.

⁸ The cost is calculated based on the following formula:

$$\text{total cost} = \text{UC} * \text{Prob Utilization} * \text{DR} * \text{No. poor}$$

where UC is the unit cost of service access including inpatient and outpatient service, Prob is the probability of service utilization (one year for inpatient, two weeks for outpatient service), DR is the serves discount rate offered by the MFA program. The total cost for outpatient service is converted to annual cost by multiplying 24 weeks.

⁹ Despite the small sample size of the Chongqing survey, the estimated inpatient and outpatient utilization rates are very close to those estimated from the 2003 national health survey.

¹⁰ If the MFA scheme provides 100% coverage for inpatient and outpatient service costs, about 12% of government expenditure is likely to be needed, while about 7.8% is required if the current MFA coverage applies (i.e. coverage of 75% of inpatient service costs and 60% of outpatient service costs).

Reimbursements of facility costs. Successful waiver programs require that the value of the services waived equal the funding available for the program. This requires knowledge about the number of beneficiaries of the waiver program, their demand for waived services and production cost of services. Without adequate funds, the providers must ration services to achieve balance. However, costing these services is not easy, and even when costs are known, it is difficult for low income countries to guarantee the necessary level of funding. However, lack of mechanisms to compensate health facilities for revenue foregone often led to failure of programs, especially when there were high and uncompensated administrative costs for facility staff involved in implementing fee waivers such as in Kenya and Ghana or in Vietnam prior to the Health Care Fund for the Poor. Indonesia's program improved when they began supplementing facility budgets to defray waiver and exemption costs.

Guatemala's Coverage Extension program in the late 1990s sought to deliver about 15 different kinds of preventive and primary health services free of charge to rural poor people but insufficient info about costs led to under funding and under provision of services.

In Cambodia's EF program and Thailand's assistance programs, facilities were only reimbursed about 70% of the cost of providing services, with the remainder to be covered through cross-subsidization from user charges and insurance reimbursements. In Vietnam, the Government has initially allocated the amount of 50,000 VND per capita from the Central budget to pay for health care for the poor. The amount of spending is being monitored over time and it appears that the amount needed is closer to 100,000 VND. In Cambodia's Equity Funds provided 70% reimbursement of costs. In Thailand also seemed to cover about 70% of the cost of providing services with the remainder was cross-subsidized from user charges and insurance reimbursements.

Most programs examined in Bitran and Giedion (2003) and other studies, suffered from limited availability of funds for assistance and therefore health benefits were also limited either by design, or de facto because of rationing on the part of health facilities that were not fully reimbursed for providing services to the poor. Other effects of low reimbursements were lower quality of services and informal payments paid by the poor to facilities to get health care services. In Chile (Bitran and Giedion 2003), the policy states that all primary and preventive services in outpatient facilities are to be provided free of charge to the poor, limited funding has led to rationing or long waiting periods. In Indonesia, poor quality of services led the poor with free health care cards to avoid using any service, or even to pay for services to get better quality care.

Timeliness of reimbursements to facilities is important to ensure that they provide services to the poor. Delays in reimbursement create a disincentive to provide health care to the poor. It is therefore necessary to streamline bureaucracy in reimbursing facilities for exemptions granted. Must also ensure that payments from central to province and province to district budgets to allocate to facilities is in place. Or pay an advance based on expected exemptions whose use can be accounted for later. As inflation occurs, the costs of health care services also increase and it is important that mechanisms be included in the regulations for reimbursement of services used to be in line with inflation. (Bitran and Giedion 2003)

Basis for reimbursement

The basis for reimbursement- lump sum, capitation or fee-for-service, payment per case resolved (simplified DRG in Chile) - can also affect provision of services to the poor. For example, with fee-for-service reimbursement mechanisms, if the fee reflects the full marginal cost, the provider will have an incentive to provide free care to non-beneficiaries if the reimbursement is higher than the regular price. To avoid cost escalation the financing agency may have to impose a budget ceiling for payment of waived services. In Vietnam, for example, health insurance reimburses facilities on a fee-for-service basis, but imposes low ceilings on payments to facilities leading to discrimination against patients with health insurance overall compared to those paying out-of-pocket.

Capitation, in contrast, consists of the periodic payment to the provider of a fixed amount of money for each registered beneficiary. Since the payment is not tied to volume of services delivered, the incentive of the provider may be to under-provide free care to the poor. There is an important debate in Cambodia's Equity fund on this issue. Capitation for poor patients if utilized in facilities receiving fee-for-service reimbursements by insurance or fee paying patients often led to poorer quality care, fewer medicines and diagnostics. In Thailand, for example, paying patients or those with health insurance pay on a fee-for service basis while reimbursement of waivers for the poor is on a capitation basis. This leads to a strong motivation to under-provide to the poor, and/or some crowding out of the poor in order to better serve paying patients. Lump sum payments to facilities also led to poorer quality care.

Sources of funding to provide health care for the poor

Different sources of funding to pay for health services provided to the poor have been found in various countries. They include state budget spending from the central level or provincial levels, cross-subsidization from health facilities themselves, social insurance, and community based health insurance, charity assistance or household payments and various combinations of these sources. In fact, household payments are an important source of funding of health care for the poor in most countries, but also the most detrimental as this leads to the medical poverty trap in which the poor with little savings must pay for expensive medical care when they are unable to work and earn a living, leading them to sell off assets necessary for their livelihood pushing them further into poverty (Chien 2002).

Government subsidies to health facilities either from Central level funds or provincial or lower level sources are important in most countries, but they are not specifically targeted to the poor and tend to provide greater benefits to the better off who use the hospital facilities receiving higher government subsidies than the poor who tend to use grassroots facilities (Gwatkin 2003) Most countries provide some government subsidies for basic preventive and MCH care for the general population, but amounts of funds are limited leading to under provision or poor quality.

Government budget assistance can also be provided in a more targeted manner to the poor such as in Indonesia, Thailand and Vietnam, where the Central Government has allocated funds to pay for curative care for the poor through issuing health insurance or health care cards to the poor who entitles them to free care at health facilities. In Vietnam, Health Care Funds for the poor were set up in all provinces with 50,000VND from the Central Government and a requirement that the provinces provide an additional 75,000VND. The HCFP can be used to pay

premiums on social health insurance (50,000VND) or to reimburse facilities directly for services used by the poor. The Government solicits donor funding to help poor provinces pay the matching fund of 25,000VND per poor person. In Thailand, budget funding subsidizes participation in a health insurance scheme for the uninsured which covers the poor, and provides a matching subsidy for the near poor who contribute to health insurance.

Several other countries have established compensated funds for partial and full exemptions provided by government health facilities to patients. It is essential that government funds or external funding from donors or lenders be available to grant providers with the appropriate and minimum financial incentive to exempt the poor. However in almost all countries studied by Bitran and Giedion (2003), there was a lack of public funding for waivers of user fees at government health facilities. In some countries, no funds were allocated for this purpose at all and facilities were supposed to take revenues from paying patients to cover the cost. In others some funds were available, but insufficient to cover the entire beneficiary group's use of services.

Community based health insurance is another option for providing funds to compensate for services used by the poor. While these programs have resulted in reducing household health care spending, nevertheless evidence shows that these programs usually don't cover the extreme poor because they are unable to contribute to the programs unless they are subsidized and the level of contributions from poor communities are inadequate to cover the high costs of services. There are also important issues of small risk pools, limited management capacity, and isolation of these schemes from formal health-financing mechanisms and provider networks and sustainability of insurance funds. (Ekman 2004; Preker, Carrin et al. 2004)

Cross-subsidization within health facilities between fee-paying patients and poor patients given fee waivers appears to be the least effective source of funding. Health facilities are usually depending on user fees to cover part of their costs, or as a source of funds to create better incentives for their staff, so there is large disincentive to granting fee waivers to the poor for services used unless these costs are reimbursed from external sources of funding.

Social mobilization for health care funding for the poor is another potentially important source of financing. This includes donations from charity, from companies and private individuals as well as from international donors and NGOs. In Vietnam, the government is holding fund-raising events to collect funds for the Health Care Funds for the Poor, but also soliciting funds from international donors. In some hospitals, local individuals or organizations have set up charity kitchens to provide free food to poor patients and their accompanying relatives.

IV. IMPACT ASSESSMENT

The existing literature provides limited evidence on the impact of the various targeted programs on health service utilization, health expenditure and health outcomes among the poor population. While lack of reliable data sources for conducting impact evaluation partially explains the scarcity, knowledge gaps in the areas of designing survey instruments for data collection and implementing impact evaluation among policy analysts in government organizations and the research communities in China has been the key underlying reason.

Despite the limited empirical evidence from the evaluation of social protection schemes under implementation, it is not implausible to expect limited health impact of these targeted poverty programs. As discussed in the previous sections, while benefits offered in transfer programs (5G and *di bao*) are evidently too low to meet the health costs, and at best can meet the needs of basic living expenses of the poor, direct health program such as the MFA schemes can cover a very limited number of the poor due to limited resources and barriers to access (e.g. requirement of co-payment, and long distance to the designated health centers).

In the absence of empirical evidence derived from impact evaluation studies, this section provides an assessment of the health impact of various targeted programs using results published from two sources of information: the analytical reports based on the 1993, 1998 and 2003 National Health Survey conducted by MOH (Ministry of Health 1994; Ministry of Health 1999; Ministry of Health 2004) and two studies on the rural MFA pilot program based on household survey data (Zhang) and participatory assessment method (Wheeler).

The National Health Surveys. The three waves of national household surveys are collected using a multi-stage stratified sampling method, with stratification across poverty levels of villages for the rural sample and stratification by population size for the urban sample. These surveys collected detailed information on health service utilization, cost of health services, health status as well as health service provision, service financing and quality of service provision. More importantly, these surveys can be readily modified to allow the collection of information for evaluating the current social protection schemes (e.g. *di bao* and MFA). Currently, the household level data is not publicly accessible, only highly aggregate key indicators constructed from the three surveys are published by MOH. This information, although extremely limited, can shed some light on the health impact of social assistance schemes, although any tentative conclusions derived from the analysis should be interpreted with great caution.¹¹

Table 9 and 10 summarize information on health service utilization, health expenditures associated with utilization of services and the share of health expenditures in per capita income across four levels of poverty for the rural sample and across income quintile for the urban sample between 1993-2003. Focusing first on Table 9 from the rural survey. It is striking to observe that between 1993 and 2003, while little progress was made in terms of improving inpatient service access in all rural areas, outpatient service utilization actually decreased. The cost of service access which has increased substantially over this period is likely to be the key underlying factor causing the decline in service access in rural areas. In addition, health care costs have become a major financial burden to the rural population, particularly among the poor. The share of health service costs to per capita income has increased sharply between 1993 and 2003, with the share for outpatient services rising from 29% in 1993 to over 50% in 2003, and for inpatient service from 79% to 97%. The increase in health service costs as a share of per capita income is significantly larger for the population living in poor localities. For example, the share of outpatient cost out of income increased from 35% in 1993 to 100% in 2003 in the poorest villages compared with the better-off village where the corresponding increase was 26% to 46%. Similar trends were also observed for the urban sample reported in Table 10.¹²

¹¹ It should be noted that no information is recorded on how the inpatient (annually) and outpatient rates (two weeks preceding the survey) are estimated with regard to their representativeness of the four groups of villages. The report shows substantial smaller sample size for the poorest villages.

¹² It is worth noticing that the surveys show, the unit cost of inpatient and outpatient services for the lowest quintile to be lower than for the top quintile in urban areas, suggesting that poor households opt for lower quality services.

Despite the high level of aggregation, data presented in Table 9 and 10 provide very discouraging evidence. Basically, during the period from 1993 and 2003, the poor have not experienced any improvement in health service access and reduction of financial burden of health service cost, despite the massive government poverty reduction efforts targeted at the poor localities in rural areas.

Evaluation of MFA. The impact evaluation of the rural MFA pilot program has been conducted using both household survey for Chongqing and qualitative data collected from participatory assessment and focus group interviews. The Chongqing survey which collects a random sample of three counties, two MFA counties and one control county, is particularly valuable for filling the current knowledge gaps on impact evaluation of targeted health schemes in rural areas. Table 11 provides a summary of the first stage impact analysis of the MFA pilot program using the Chongqing survey on health service utilization and health expenditure for two MFA project counties.

The comparison of MFA members with non MFA-participants in the two project counties indicates that the MFA program has had a positive impact on health care service utilization. On average, MFA members have higher health service utilization (outpatient, inpatient and the duration of hospitalization) than non-eligible households. It should be noted, that such a comparison does not control for covariates that are highly correlated with high service utilization rates. In particular, the MFA scheme is designed to target the poorest households, and individuals suffering from chronic and severe illnesses. To what extent the higher health service utilization rate can be attributable to the MFA program is unclear based on the unconditional comparison.

Knowledge of the differential MFA benefit package between the two project counties (MFA covers both outpatient and inpatient services in County-A, but only inpatient costs in County-B) provides additional information for evaluating the health impact of MFA. Under the assumption that the eligible groups in both project counties are directly comparable, it is possible to analyze the impact of MFA on utilization and costs of outpatient service access. As shown in Table 11, outpatient utilization among the MFA eligible beneficiaries in county-A (21%) is much higher than that in county-B (14%), which can be attributable to the MFA program if the comparability assumption is valid. The comparison also indicates that the MFA program plays an important role in reducing the financial cost of health service, with the share of unit cost of outpatient service to monthly income reduced from 60% in County-B to 26% in County-A.

Despite the useful results arrived from the first stage analysis of the Chongqing study, they have limitations. To provide empirical evidence for informing the program design, in particular for the program expansion requires a more rigorous impact evaluation of the MFA pilot scheme conducted using properly developed evaluation methods¹³. Encouragingly, the Chongqing survey, despite the sample size limitation, provides such a possibility. The survey allows construction of the counterfactual group from the control county and comparison of key outcome indicators between the MFA beneficiaries from the two MFA counties with their matched individuals in the control locality.

¹³ Two commonly used methods can be applied to the impact evaluation of MFA using the Chongqing survey: (1) regression based approach and (2) propensity score matching method. To check the robustness of the results, both approaches can be applied and checked against evidence collected from qualitative studies based on focus group interviews and field visits conducted by Wheeler et al.

To improve the design and implementation of China's social protection program, major knowledge gaps exist in two areas: (1) collecting surveys purposely designed for impact evaluation and (2) conducting impact evaluation using commonly used impact evaluation methodologies. Currently, both the human capacity and infrastructure for conducting a nationally representative household surveys required for such analysis exist in China. For example, CBS has the capacity to collect nationally represented household surveys annually. The recent collaboration between CBS and various key ministries, such as MOH, MOE, and MOCA, has resulted in a proliferation of household surveys focused on social protection (for a complete summary of surveys and data information see Appendix). While these survey data have provided important information on current situations in the areas of the 5G program, old age support, and other rural social protection schemes, none of these surveys are properly designed for program evaluation. The Chongqing survey was designed specifically for conducting impact evaluation of the rural MFA scheme, however commonly used evaluation methodologies have not been applied, reflecting a common knowledge gap in this area.

International experience on impact evaluation

Assessment of performance of targeting mechanism, impact on health care utilization and ultimately impact on health are essential parts of social protection policy. There are important aspects of targeting mechanisms that need to be monitored including coverage, leakage and administrative costs. Through monitoring of their targeted assistance programs for health, Thailand and Indonesia have been able to make important policy design changes to increase effectiveness. Chile was able to identify massive leakages from the program by cross-checking with a tax database.

It is also important to examine the overall impact of the program on access to care, financial burden on households and health impact, however this is rarely done (Bitran and Giedion 2003). When problems are identified it is important to investigate to find appropriate solutions, for example, to gradually fine-tune the reimbursement to facilities when costs of providing care are not known with certainty in order to ensure that reimbursements are not too generous, leading to greater leakages, but are also not too tight, leading to under coverage. The study on targeting of households in PROGRESA and on the health impact of the program are widely considered as the gold standard of evaluation of safety net programs (Skoufias, Davis et al. 1999; Gertler 2000).

V. LINKS TO OTHER CRITICAL REVIEWS

There are important links between the issue of social protection and the subjects of other critical reviews.

Access to public health programs are widely considered to yield the most cost-effective gains in health status and by their nature tend to be used more by the poor than by the better off (Van de Walle 1998). For example the issue of clean water, prevention and treatment of infectious diseases such as TB and leprosy, and the provision of basic maternal and child health services yield high returns and are most needed by the poor.

The need for reimbursement of health facilities for care provided to the poor was found to be a critical factor determining the success of social safety net programs in health. Public expenditures are usually the only source large enough to ensure the necessary amount of spending, either through direct reimbursement of facilities, or through subsidizing insurance premiums. Allocation of public funds for health care in a pro-poor manner is an important aspect of a social safety net for health as it can ensure that poor areas with few local resources and high health needs have the funds they need to pay for health care for the poor. A report by Pearson (2002) points out the advantages and shortcomings of using allocation formulae, earmarking funds for health and the need to verify the actual government spending that has been allocated.

Health insurance mechanisms have many advantages for ensuring a safety net in health care. However, it is important to find ways for the poor to participate as they are often unable to afford the premiums. It is also important that a mechanism is found to cover non-medical costs for the poor as these are not usually covered by health insurance. Finally, the manner in which health insurance reimburses facilities is important because of the incentives it puts in place for providing quality services.

Access to better quality health services for poor people in remote and disadvantaged areas is difficult even if the health care fees are paid because local facilities tend to be of poorer quality and better facilities are too far away. Governments tend to invest more heavily in hospitals than in primary care facilities leaving the rural poor with poor quality services. Increasing demand for health services through fee waiver or health insurance mechanisms may lead to increases in demand for services in facilities that are already overcrowded thus increasing waiting times and affecting other aspects of quality of care. It will be important not only to provide financial mechanisms to improve access of the poor to health services, but also to ensure the quality of services available.

VI. CONCLUSION

This paper reviews existing literature both in Chinese (including published and unpublished documents) and in English on social protection and assistance schemes currently implemented in China. Three key conclusions arrive from the literature review.

First, a comprehensive and more institutionalized social protection system has started to emerge in urban and rural areas to address the pressing issue of poverty and vulnerability resulting from China's economic transition and a wide range of policy reforms over the past two decades. In particular, recently developed medical financial assistance programs that aim to address the need to provide social assistance in the area of health care for the poor represent the most significant development in China's social welfare system. This also reflects the recognition in particular among policy-makers that poor health, disability and the significant rise in cost of health care are all major causes of poverty and barriers to escaping from poverty.

Secondly, the government's support plays an important role in improving the newly established social protection system that is effective in targeting, better matching the needs with benefits, and sustainable in the long-run. Strong evidence from the existing literature indicates that the Central government's decision to mandate the management of social welfare system within key provincial and county-level government organizations, and clearly assign the

financial responsibility to all government levels is critical for the observed expansion of program coverage and reducing large regional disparity in program coverage and benefit.

Third, key government institutions responsible for managing and implementing social protections schemes, including MOCA, MOH, MOE, and other organizations, are increasingly aware of the importance of collecting information for monitoring and evaluating existing schemes, with the objective to improve targeting and expanding the schemes to cover a larger share of the poor population.

The major problems identified from the review are three. The first issue is related to targeting. While the 5G scheme which covers about 10% of poor is in general well targeted, the urban income transfer schemes excludes a large number of poor living and working in urban areas. The rural-urban migrants who account for an increasingly large share of the urban poor are excluded from these schemes. A large number of near poor who are particularly vulnerable to falling into poverty from adverse shocks, in particular financial cost of illness, are currently not covered by any formal social protection schemes (e.g. *di bao* and MFA), except some localized and ad hoc relief programs existing in some regions. Second, the current benefit and coverage, although varying greatly across regions, is not sufficient to meet the costs of basic health care services. This weakness results from a combination of insufficient funding earmarked to social protection schemes, current financing arrangement in which the lower levels of government bear a disproportionate financing obligations and a decentralized fiscal system which limits the provincial as well as the central government's capacity to implement a redistribution mechanism.

Third, while the government has started to address the issue related to source of financing for income transfer schemes, such as 5G and *di bao*, by stipulating the financial contributions assigned to different levels of government, it remains unclear how schemes which provide health assistance to the poor, such as MFA and various fee waivers and exemptions are financed, in particular when the management of social protection programs is segmented horizontally across all line ministries while the financing arrangement follows a hierarchical system.

Forth, while key government organizations are increasingly aware of the importance of improving targeting and evaluating social protection schemes, how to design surveys suitable for such analysis and employ appropriate methodologies to implement impact evaluation remain a major knowledge gap. Currently, China possesses the capacity and infrastructure for conducting large scale national household surveys (in urban and rural areas), but how to incorporate appropriate survey instruments to collect information for program evaluation has not been brought to the attention of the policy-makers. Even for household surveys collected specifically for program evaluation (e.g. rural MFA), commonly used evaluation methodologies are not applied, reflecting the lack of knowledge of commonly used evaluation methods among policy-analysts in China.

Table 1: The rural social protection schemes

Scheme	Target/coverage	Benefits	Financing	Note
Five guarantees (5G)	targets mainly the “three no” population . The estimated 5G population is 2.968 mil in 2002., representing 0.39% rural pop and 10.52% rural poor. The uncovered eligible 5G population is estimated to be 0.98 mil in 2002 (under coverage rate 30.6%).	Subsistence expenses, limited health care and housing. The benefit level varies largely across regions.	The structure of 5G financing which changed after the 2002 tax reform consists of village agricultural surplus taxes and provincial or county government subsidies	County civil affairs bureaus and villages councils administrate the 5G programs.
Di bao	Di bao households are defined as those with living standards below the regional poverty line. The national poverty line of RMB 637 was set as the lower bound poverty line. By 2002, 4.078 mln rural residents received di bao benefits. In 2004, national coverage rate was 6%.	Periodical fixed-rated relief in cash or in-kind transfers. The di bao benefits rang from 143 – 344 RMB per capita per month. (for regional Di bao level see Tab p19, Keefe). In limited localities benefit include health care (Nanjing and Xiamen city).	Three-tie financing with county level sharing a large share, town and village share the remaining burden.	County level MOCA responsible for di bao implementation. Local ministries of health and education are also involved.
Medical Financial Assistance (MFA)	Eligible include 5G, di bao population and individual with major illnesses.	1 provide subsidies to participate in CMS, with the level of subsidies vary by locality, ranging from fully to partially contribution to CMS. In general 10RMB from provincial government, 10 RMB from county government and 10 RMB from individual. 2. provide discount and exemption to health care services (free maternal and child health programs; 40-80% discount of inpatient costs; 40-65% discount of outpatient costs)	Current pilots project include external financing (World bank/Dfid), central and local government matching fund, and individual contribution. Government policies stipulate the establishment of MFA fund, with contribution from all level government budget, and donations from society.	Implemented in 71 poor counties, and Tibet. MOCA has been assigned for managing MFA schemes.
Poverty Relief	Rural poor (tekunhu) who have lost their work capacity due to serious illness, disasters and accidents, or becoming handicapped. Mainly provided to poor household living in poor areas and regions which can not provide Di bao subsidies.	Mix of temporary one-time relief and periodical, fixed rate relief in cash or in-kind transfers (including discounted health and education). Information from a few province suggests average RMB 120 per year.	Provincial government budget	MOCA
Natural Disaster Relief	Population in disaster-stricken areas	Temporary one-time relief in cash or in-kind transfers		

Table2: The urban social protection schemes

Scheme	Target/coverage	Benefits	financing	Note
Support program for laid-off employees (formalized in 1997 and phased out in 2003)	Regular employees of state and urban collective enterprise laid off due to restructuring	Basic living allowance, 70-80% of local minimum wage; subsidized medical care.	Joint financing from enterprises, Unemployment Insurance Fund and higher level government budget.	Administered by enterprise under the supervision of MLSS bureau.
Di bao scheme (since 1998 implemented in all cities)	All urban residents with per capita income below local Di-bao level. In 2003, the estimated urban Di bao population is 22.49 mln	The benefit is designed to be a “top up” minimum income guarantee (for 5G, this usually means a benefit equal to the full di bao level) with additional in-kind provisions and preferential prices on social services (e.g. exemption or reduction on health care payments, education fee exemption) and reduced utilities prices.	A combination central, provincial and local government budget. IN 2001, the average breakdown of di bao financing was 34% at the provincial level; 32 at prefecture (city)level and 35 % at the county (town) level.	Local MOCA, street committees.
MFA	Di bao beneficiaries; urban residents who participate in urban health insurance with per capita income above Di bao level, but below local minimum wage; households with special difficulty circumstances (e.g. major illness).	The benefit package varies by city. Discount or exemption of inpatient and outpatient services, surgery costs. The scheme cover the full costs for households with members of catastrophic illness.	Vary by locality. Beijing: city health bureau Guangzhou: city government donation from society and charity organizations. Wuhan: city and district government Shanghai: city and town government. Shandong: financing come from hospital own budget.	Urban MFA schemes are only implemented in several localities. Beijing, Shandong, Liaoning, DaLian, Guangzhou, Wuhan, Shanghai, Zhenjiang
Social assistant station Started in 2003	Rural migrants who become street people (homeless)	Food, housing and emergency health services		

Table 3: The assessment of MFA targeting performance: evidence from the Chongqing survey

	MFA County-a		MFA county-b	
	MFA members	Non MFA members	MFA members	Non MFA members
Key features				
Illness (past 2 weeks)%	31.8	18.4	17.4	12.9
Chronic illness%	37.4	13.9	21.6	10.4
Income (per capita annual)	1095	1845	1098	1480
Health exp per head	233	148	285	168
Health exp/tot exp %	18.8	8.5	17.6	10.4
Cause of indebtedness % (Inability to work due to illness injury and disability)	23.4	8.5	31.5	15.2
Targeting performance	Per capita income/exp (mean & medium)	Share of MFA recipients	Per capita income/exp (mean & medium)	Share of MFA recipients
Poorest quintile				
2rd				
3th				
4 th				
Top quintile				

Sources: The above numbers are taken from the final report on MFA evaluation (The World Bank, 2002)

Table 4: Rural Five Guarantees Coverage 2002

Region	Five Guarantee Protected Population	Not Protected 3 No's Population	% of Total 3 No's Population Not Protected
Beijing	6917	0	0.00%
Shanghai	5188	0	0.00%
Guangdong	173316	0	0.00%
Jiangsu	162500	4000	2.40%
Xinjiang	28709	1600	5.28%
Hainan	19343	1700	8.08%
Hubei	193346	18900	8.90%
Jilin	66149	6500	8.95%
Yunan	68413	8000	10.47%
Shaanxi	62113	9500	13.27%
Sicuan	223000	41000	15.53%
Chongqing	99508	18800	15.89%
Liaoning	66176	13000	16.42%
Jiangxi	161604	32200	16.61%
Shandong	211000	45100	17.61%
Guangxi	217553	57590	20.93%
Hunan	333100	96500	22.46%
Gansu*	43220	12897	22.98%
Zhejiang*	63659	20000	23.91%
Fujia	58000	19000	24.68%
Inner Mongolia	41860	14000	25.06%
Ningxia	5845	2000	25.49%
Anhui	227000	100000	30.58%
National	2968156	908178	30.60%
Heilongjiang	68876	32000	31.72%
Tibet	9756	4891	33.39%
Shanxi	31799	21300	40.11%
Qinghai	7798	5500	41.36%
Henan	178717	156200	46.64%
Guizhou	65911	64500	49.46%
Tianjin	3440	3500	50.43%
Hebei	64340	98000	60.37%

Source: Gu, Xiang, & Zhang, 2004

*Data for Gansu and Zhejiang Provinces recalculated based on original data and MOCA 2003a.

Table 4. Provincial rural di bao coverage, mid-2004

Rural <i>Di bao</i> Coverage of Provincial Rural Population	Provinces	Total number/share of poor counties, 2001	Total share of rural poor, 1999
Over 2%	Fujian and Shanghai	0 (0%)	0.3%
Between 1% and 2%	Beijing, Guangdong, and Zhejiang	0 (0%)	1.1%
Between 0.5% and 1%	Hainan, Jiangsu, Jilin, Liaoning, Shaanxi, Tianjing	63 (10.6%)	11.9%
Between 0.1% and 0.5%	Anhui, Gansu, Guangxi, Hebei, Heilongjiang, Henan, Inner Mongolia, Qinghai, Shandong, Shanxi, Sichuan, Guizhou, Hubei	366 (61.8%)	59%
Under 0.1%	Chongqing, Hunan, Jiangxi, Ningxia, Tibet, Yunnan, Xinjiang	163 (27.5%)	27.7%

Source: MOCA, 2004 and China Statistical Yearbook 2003; World Bank, 2003 for poverty shares.

Table 5: Provincial per capita urban *di bao* spending and poverty rates

Region	Urban <i>di bao</i> coverage rate, 2004 (%)	<i>Di bao</i> monthly per capita spending, 2004 (yuan)	1998 poverty rate (income headcount)
Beijing	1.98	233	0.73
Tianjin	4.04	76	6.77
Hebei	5.47	58	5.20
Shanxi	8.99	57	7.17
Inner Mongolia	8.46	55	6.40
Liaoning	8.08	57	6.13
Jilin	12.43	59	7.54
Heilongjiang	9.22	56	6.92
Shanghai	4.35	141	3.24
Jiangsu	1.41	81	1.20
Zhejiang	0.78	123	1.62
Anhui	8.15	52	2.89
Fujian	1.79	54	2.18
Jiangxi	11.26	57	3.42
Shandong	2.70	53	5.05
Henan	6.81	58	8.39
Hubei	9.61	53	5.67
Hunan	9.94	52	3.61
Guangdong	1.30	71	0.68
Guangxi	6.52	56	3.01
Hainan	5.73	51	7.94
Chongqing	9.80	74	4.72
Sichuan	8.67	56	5.00
Guizhou	7.64	59	3.69
Yunnan	9.72	63	11.31
Tibet	12.81	78	4.09
Shaanxi	9.11	55	11.95
Gansu	10.74	34	6.44
Qinghai	14.46	74	5.63
Ningxia	13.51	65	13.51
Xinjiang	10.90	63	6.16
National	6.44	70	4.73

Note: The correlation DB coverage to poverty rate is 0.557 (t-stat 3.61) and the correlation DB pc spending to poverty rate is -0.397 (t-stat 4.71).

Sources: NBS (2003); MOCA (2004); Hussain (2003) on urban poverty rates. Note: urban population for 2002 and *di bao* data for 2004, so that coverage rates approximate. *Di bao* per capita spending national unweighted

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