



## Social health insurance in China: principal reforms and inequalities

### Seguro social de salud en China: principales reformas y desequilibrios

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**ABSTRACT** This article analyzes the social health insurance system in China, its reforms and the principal social inequalities uncovered. Based in the work of a number of authors of reference, it is possible to observe that rural and urban reforms follow the same pattern: large systems that were gradually reduced and then again expanded relatively quickly. Improvements notwithstanding, some of China's historical problems persist, especially the rural-urban gap and regional disparities. The lack of integration of workers that migrate from the country to the city is reproduced in the current Chinese public health system, constituting one of the primary challenges to be faced at present.

**KEY WORDS** Health Care Reform; Social Security; Health Inequalities; China.

**RESUMEN** En este artículo se analiza el sistema de seguro social de salud de China, sus reformas y los principales desequilibrios sociales encontrados. A partir de diversos autores de referencia, es posible observar que las reformas rurales y urbanas siguen el mismo patrón: un sistema de gran tamaño que se fue reduciendo, para volver a expandirse en una forma relativamente rápida. Sin embargo, a pesar de las mejoras, persisten algunos problemas históricos de China, principalmente, la brecha rural-urbana y las desigualdades regionales. La falta de integración del trabajador que migra del campo a la ciudad también se reproduce fuertemente en el sistema de salud pública de China, siendo estos los principales desafíos que se presentan actualmente.

**PALABRAS CLAVES** Reforma del Sector Salud; Seguridad Social; Desigualdades en la Salud; China.

## INTRODUCTION

China underwent major changes since the beginning of the economic reform launched by Deng Xiaoping in 1978, which aimed to overcome the economic setbacks of the country and make it grow from its transition into a market system. Economic growth became a government priority; it also became a way to ensure the legitimacy of the Communist Party of China and to distance the government from the disastrous consequences of the Cultural Revolution (1966-1976). On the other hand, social protection policies became marginalized due to the fact that the government prioritized cost reduction in the public agenda.<sup>(1)</sup> The following economic results were impressive. According to data from the World Bank, GDP per capita (constant 2010 US\$) increased from 347.9 in 1980 to 6,497.5 in 2015.<sup>(2)</sup> However, despite this increase, the social health insurance system, which is part of the social protection system, suffered a major setback when the economic reforms began.

The social health insurance system prior to the reform was characterized for being based on rural communes and work units located in urban areas. Most of the population was protected and had access to medical care, although it was not always of high quality. Beginning in the late 1970s, the prioritization of cost reduction, the dismantling of the existing social protection system as a result of the end of rural communes, and the flexibility and autonomy granted to State Owned Enterprises (SOE) caused most of the population to stop receiving health coverage. This resulted in the degradation of health indexes and the increase in movements expressing social discontent.

In accordance with Yu's analysis,<sup>(3)</sup> the Chinese government had certain incentives to carry out new reforms with the aim of expanding, once more, the social health system. Said incentives included: a) the official ideology of the Communist Party of China (CPC) remained socialist and, in that sense, it was necessary to ensure the social welfare of the

population as a whole, at the risk of losing the legitimacy of the government; b) in addition, with the increase of social discontent, and as a measure to contain any threats to the regime, the construction of a "harmonious society" was prioritized, an expression which became the slogan of President Hu Jintao. The social health insurance system was part of the construction of said society, characterized by greater equality and social security.<sup>(4)</sup>

Thus, from the late 1990s onwards, new reforms are being carried out in China's general health social security system. This article shows that, although the economic reform resulted in the expansion of health coverage, given that in 2011 China achieved universal health insurance coverage,<sup>(3)</sup> the model that had been set only deepened inequalities and consolidated the stratification of Chinese society, answering to the "divide and rule" strategy of authoritarian governments. Therefore, as accessibility to health care appeased social discontent, the granting of benefits for the different social classes of the Chinese population kept the government's support base satisfied and hindered the unification of the other social classes, reducing the potential threats to the stability of the regime.<sup>(5)</sup>

Following this introduction, the article will be divided in three sections. The first section will address the reforms carried out in the rural and urban areas, said reforms will be analyzed separately. Then, all inequalities existing in the current model will be exposed, with special emphasis on the rural-urban gap, the interregional inequality, the differences between the health programs and, finally, the marginalization faced by workers who migrated from the country to the city.

## RURAL AND URBAN HEALTH SYSTEM REFORMS

When China began the economic reform in the late 1970s and during the 1980s, major changes were made to the health care system; mainly in relation to the population

already covered by the existing social insurance. Before the reform, most of the population was covered by one of the existing social health programs, such as the Rural Cooperative Medical Scheme in the rural area, or the Government Health Scheme and the Labor Health Insurance Scheme in the urban area, and the Chinese government obtained good results with the health policy, which was focused, mainly, on prevention.

However, after the transition into a market economy, there was a reduction in the coverage and benefits offered by the programs, and the Rural Cooperative Medical Scheme collapsed.<sup>(1)</sup> As a result, there was a significant increase in individual spending on medical care and part of the population was excluded from access to health services.<sup>(6)</sup> Another important issue is the high inflation of medical costs. Due to spending cuts, hospitals lost most of the government subsidies. In addition, the government set artificially low prices for certain medical services, while allowing holdings with profit margins to be charged for certain drugs and technologically advanced examinations. This created an inefficient system, due to the unnecessary prescription of said drugs and clinical studies, and the increase in cost for the population.<sup>(7)</sup> As reported by Jackson, and quoted by Chan, Ngok and Phillips,<sup>(1)</sup> the share of public health expenditure in total public expenditure decreased from 3.1% in 1985 to 2.3% in 2000 and the government's share in total health expenditure went from 37% in 1980 to 18% in 2004.<sup>(3)</sup>

As a result of the political and economic reforms of the late 1980s, China's social health system showed increasing problems; a fact that, in turn, further fueled social discontent: between 1994 and 2005, the number of mass incidents increased from 10,00 to 87,000, weakening the stability of the Chinese government.<sup>(7)</sup> In 2003, the neglect of public health was evidenced with the epidemic of severe acute respiratory syndrome (SARS), which led the Chinese government to reexamine its position and increase its investments in public health.<sup>(3)</sup>

Despite sharing some issues and constraints, the rural and urban system reforms were vastly different, so much so that the specificities of each reform are analyzed below.

## Rural reform

In the period between the 1950s and the 1990s, the rural population had access to medical care through the Rural Cooperative Medical System (RCMS), which was based on the collection of rural communes and production brigades, to finance the medical expenses.<sup>(1)</sup> The monetary contribution of the members of the production brigades was around 1.5 to 3 Chinese yuans on average, annually,<sup>(8)</sup> and the poorest families also had the right to receive medical benefits.<sup>(1)</sup>

Those who provided medical care were the doctors known as "barefoot doctors," rural workers who received one year of training and were paid through work points.<sup>(8)</sup> The medical system had a three-tier structure: the first tier consisted of health care posts in the villages; the second tier was formed by the health centers of the communes and, the third, by the hospitals of the municipality, where the most serious cases were transferred to. The most qualified doctors were at the highest tier of the system, while the first tier was for the "barefoot doctors."<sup>(1)</sup>

The RCMS managed to assist the majority of the rural population: in 1979 its coverage reached between 80% and 90% of said population.<sup>(9)</sup> Kanbur and Zhang<sup>(10)</sup> reported that under the RCMS, healthcare in rural areas showed a wide expansion, with an increase in the number of beds, which went from 0.08 in 1952 to 1.48 in 1980 (each 1,000 inhabitants), as well as in the number of health professionals, a figure that went from 0.95 in 1952 to 1.81 in 1980 (each 1,000 inhabitants). There was also a decrease in the infant mortality rate between 1960 and 1980, which shows the positive impact this program had on public health.<sup>(10)</sup>

However, these positive results do not mean that the RCMS never had to face any problems; this is all the more true in terms

of financing. The economic difficulties faced by certain regions caused cuts or suspensions in the programs, especially when the harvest was lacking, which harmed the already insufficient contributions. Furthermore, the medical service provided was often of lower quality.<sup>(8)</sup>

Under the family responsibility system, the land, which was a State and collective property, was divided by the local government and assigned to the families of the region, which then gained the right to produce and build in said land for a certain period of time; this allowed families to become more autonomous and independent. Each family had a production quota and, once they achieved that quota, they could sell the surplus in the agricultural market or directly to the government. The economic reform carried out since the end of the 1970s prioritized cost reduction in the health sector, mainly through the privatization of medical care which meant, in rural areas, the abolition of the RCMS. The prevailing concept behind researches like that of Chan, Ngok and Phillips's work<sup>(1)</sup> for example, is that of the abolition of the RCMS as a byproduct of the economic reform, which put an end to rural communes and adopted the family responsibility system, which would have meant the end of the RCMS funding base and its consequent lack of sustainability.

However, Jane Duckett<sup>(8)</sup> refutes the paradigm of the economic reform as the main factor in the abolition of the RCMS. She defends the thesis that the reason why the RCMS was abolished was due to a change in the political will of the government and, specifically, a different stance taken by the Ministry of Health, although she does not deny that the end of the rural communes, in fact, led to the suppression of the RCMS' funding sources and the income of "barefoot doctors." Nevertheless, if it had only been a financial issue, other alternatives could have been explored. In addition, the Ministry of Agriculture was not the agency responsible for the program, but the Ministry of Health, which required permission to terminate the RCMS. The system was abolished after the Ministry of Health took a different stance on

the matter when it decided to stop supporting the RCMS and aligned itself, in 1981, with Maoist policies and the Cultural Revolution, both of which were heavily opposed during the period. Taking into account the political and ideological changes introduced under Deng Xiaoping's leadership and the weak impact of the RCMS, the Ministry of Health had few reasons to maintain it.

With the progressive abandonment of the RCMS, the rural population became responsible for financing their own medical care and, therefore, individual payments showed a considerable growth, going from 16% in 1980, to 38% in 1988 and, finally, to 61% in 2001.<sup>(10)</sup> According to Lok Sang Ho,<sup>(9)</sup> after the economic reform and the dismantling of the RCMS, the rural population covered by the social health insurance system reached only 5%.<sup>(9)</sup> Between 1983 and 1998, there was a decrease in both the number of hospital beds and health professionals, going from 1.47 in 1983 to 1.11 in 1998, and from 1.99 in 1983 to 1.71 in 1998 (each 1000 people for both cases).<sup>(10)</sup> According to Meng, as cited by Chan, Ngok, and Phillips,<sup>(1)</sup> this resulted in the overall health deterioration of the population and the resurgence of diseases such as schistosomiasis and malaria in some provinces.

Local leaders made several isolated attempts to address the health issues affecting rural areas. In 2002, an official document titled: Decision in further strengthening health services in rural areas, in which the central government acknowledged the existing defects in granting medical assistance to rural areas,<sup>(1)</sup> was published. Thus, in 2003, the New Rural Cooperative Medical Scheme (NRCMS) was created and it showed a rapid expansion, reaching 97% of the rural population in 2011.<sup>(3)</sup>

The NRCMS is a health program under the Ministry of Health and it is managed at a provincial level with the voluntary registration of family units. It is financed by individual contributions, raised by the local government and the central government, which vary depending on the local socio-economic conditions. In 2010, the minimum

annual contributions per person from the poorest regions were 20 yuans, and 100 yuans divided equally between the local and central governments. The beneficiaries with the most financial difficulties also had their share of the contribution covered by the Medical Financial Assistance Program.<sup>(11)</sup>

## Urban reform

Between the 1950s and 1970s, almost all the residents in urban areas enjoyed what was known as the “iron rice bowl”: they had a lifetime job in public companies responsible for providing social welfare to their employees, which included housing, education, food and health.<sup>(10)</sup> The social health insurance policy had two different programs: state-owned enterprises (SOE) financed the social health insurance of their employees through the Labor Insurance Scheme (LIS); while employees of government institutions received coverage through the Government Insurance Scheme (GIS), financed through budgetary resources.<sup>(6)</sup>

As in rural areas, the urban health system was organized into three tiers. On the first tier there were the “street clinics,” which performed ambulatory care. In more serious cases, patients were referred to the second tier, formed by district hospitals. Finally, the most complex cases were received by the last tier: the city hospital. Large companies also had their own hospitals, while small and medium-sized companies had clinics and outpatient clinics to care for their employees and provide medical assistance.<sup>(11)</sup> Health coverage not only applied to the company employees, but also to their dependents, who were partially covered. However, this system was not efficient. It worked on a fee-for-service payment for hospital services, which created a “principal-agent problem” since urban workers did not have strong limitations imposed on them in relation to the requested medical service, insofar as their cost was in charge of the company or the State, and the providers of medical services had a

great incentive to “push” as much as possible the use of products and services in order to increase their profits.<sup>(9)</sup> This issue worsened since the reforms of the 1980s, where, in order to reduce costs, the central government began to encourage the “productivity” and “financial independence” of the health providers that should be responsible for guaranteeing their profits.<sup>(11)</sup> Another issue was the lack of socialization of risks between the individual units and the financial weight that this system represented for the companies.<sup>(9)</sup>

As Liu<sup>(6)</sup> explains, with the transition into a market economy, many SOEs encountered limitations imposed by the financial disadvantage of the current social protection system. As a result, a growing number of SOEs began to be unable to pay for the medical expenses of their employees, who were left without coverage. Another issue was the rapid inflation of the prices of medical goods and services, which created a gap between the cost of medical services and the urban income: while urban wages grew on average by 18% per year between 1989 and 1997, the medical cost of ambulatory care and hospitalization costs increased by 26% and 24% per year, respectively.<sup>(6)</sup> Many of China’s social problems have been attributed to this gap, given that it created, for instance, an increase in poverty caused by large medical expenses, and an increase in the population without access to the necessary medical care, creating a greater threat to social stability.

The reform of the urban health social insurance system had the 1998<sup>(11)</sup> publication Decision on establishing the basic medical insurance system for urban employees as a frame of reference when the Urban Employee Basic Medical Insurance (UEBMI), an individual and compulsory health insurance program that replaced the LIS, and that provided medical care to legal urban workers, was planned. This program established that employers should contribute the equivalent of 6% of their salary to the program, and 70% of that contribution should be deposited in the Health Insurance Fund (HIF). Urban workers, on the other



hand, had to pay 2% of their salary, which would be deposited in individual accounts or Health Insurance Accounts (HIA), which also received 30% of its contributions from employers. Retirees were exempt from contributing.<sup>(1,5)</sup>

The UEBMI was effective in expanding coverage, especially in comparison to the previous achievements of the LIS; however, it did not satisfactorily solve the health problems affecting urban areas, where a considerable part of the population still did not receive medical care. The UEBMI and the GIS basically only served to legal workers employed under companies and to state employees, and excluded all those who had unstable or unreported jobs, such as the elderly, students, people with disabilities and the entire urban workforce who were under unreported employment.<sup>(12)</sup>

In 2007, the Urban Resident Basic Medical Insurance (URBMI) was planned, with the aim of covering the population not served by the UEBMI. Enrollment in that health program was voluntary, in order to mitigate the problem of adverse selection. Local governments had the autonomy to choose to implement the URBMI, as long as they followed the general guidelines established by the central government. Thus, government contributions varied according to the region and the financial situation of the beneficiary. On average, payments of individual fees amounted to 64% of costs for the public agenda, while the government contributed about 36% and, in the case of chronic diseases, this percentage was higher.<sup>(12)</sup>

Therefore, the social insurance system in urban areas was composed, mainly, by the UEBMI, which provided coverage to legal urban workers, and by the URBMI, which was responsible for the rest of the urban population who had unstable or unreported jobs. In 2010, the UEBMI and the URBMI reached, respectively, 92% and 93% of their target groups.<sup>(3)</sup>

## UNIVERSAL BUT WITH INEQUALITIES: PRINCIPAL LIMITS OF MODERN SOCIAL PROTECTION IN CHINA

In 2011, China achieved universal coverage in its health programs after reaching the largest coverage expansion in history.<sup>(3)</sup> However, this did not mean that the Chinese population as a whole had access to the same benefits. In this sense, there were three main types of inequality: between the rural and urban regions, between health programs and, in the integration of migrant workers.

### Inequalities

First, we must address three key concepts before analyzing the inequalities of the Chinese health system: a) the level of generosity of the benefits, which consists of the level of benefits granted by the social health insurance program; b) coverage, which is the percentage of the population covered by the program; c) stratification, which consists in the segmentation that occurs as a result of social inequalities.<sup>(13)</sup>

As Huang argued in two of his texts,<sup>(5,13)</sup> the existing inequalities between social groups in the social health insurance system in China are not a coincidence. The central government did not want large gaps to grow between social classes, as it would stimulate social conflicts and diminish the legitimacy of the regime. On the other hand, the government treated each social class differently, reserving and giving some privileges to their support bases, with the aim of also hindering the horizontal mobilization of the other social classes, who had different interests and preferences.

In this way, the social health insurance system became an instrument of social control and domination, one which prevented any threat to the government from becoming stronger through the formation of social stratification.

The government formed this stratification through the unequal distribution of benefits

Table 1. Main characteristics of the three social health programs of China, 2011.

Characteristics	UEBMI	URBMI	NRCMS
Target groups	Urban employees	Urban children, students, the unemployed, the disabled	Rural residents
Registration fee (%)	92	93	97
Number of people enrolled (in millions)	252	221	832
Enrolled people, as a percentage of the population of China (1.3 billion inhabitants)	19	16	62
Enrollment unit	Individual	Individual	Households
Risk pooling unit	City	City	County
Premiums per person per year (US\$)	240	21	24
Premiums with government subsidy (US\$)	0	18	18
Benefit coverage			
Reimbursement rate for hospitalization (%)	68	48	44
Counties or cities that cover general ambulatory care costs (%)	100	58	79
Counties or cities that cover general ambulatory care costs for serious or chronic diseases (%)	100	83	89
Annual reimbursement ceiling	Six times the average salary of a city employee	Six times the disposable income of local residents residentes locales	Six times the income of local peasants
Supervising government department	MOHRSS	MOHRSS	NHFP

Source: Yu H. Universal health insurance coverage for 1.3 billion people: What accounts for China's success? *Health Policy*. 2015;119:1145-1152. Notes: UEBMI = Urban Employee Basic Medical Insurance; URBMI = Urban Resident Basic Medical Insurance; NRCMS = New Rural Cooperative Medical Scheme; MOHRSS = Ministry of Human Resource and Social Security; NHFP = National Health and Family Planning Commission.

in the social health insurance programs. Huang<sup>(5)</sup> has observed that the health programs with an eligibility criteria based on people who have a professional occupation, like the UEBMI and the GIS, are those that serve smaller portions of the population and that received the greatest benefits, having had, between 2007 and 2010, the highest per capita expenditure of its beneficiaries

in comparison with other programs.<sup>(5)</sup> The program with an eligibility criteria based on residents of urban areas, the NRCMS, is in the opposite position: it covers more people with a more limited set of benefits. Table 1, taken from Yu,<sup>(2)</sup> summarizes the main characteristics of the UEBMI, the URBMI and the NRCMS. This author also highlights the existing disproportion between the population

served and the level of generosity of the benefits given by each program: in 2011, the UEBMI only served 19% of the population; however, it presented the highest reimbursement rate (68%), while the NRCMS, which covered 62% of Chinese citizens, had a reimbursement rate of only 44%. Huang<sup>(13)</sup> presents empirical evidence which indicates that the probability of being enrolled in programs with broader benefits increases significantly if workers live in the public sector and/or if they work in a larger company. Other factors that influence the type of social health insurance program in which a person is more likely to be enrolled in are, on the one hand, the hukou, a household registration record linked to the place of birth, whereby people with an urban hukou are more likely to be enrolled in employment-based programs and, on the other hand, the socioeconomic status, understood as the level of education and income of the citizen, which relates directly with enrollment in health programs such as the GIS or the UEBMI.

In this way, Huang reveals the paradox created by the reforms in the social health insurance system of China: although the implementation of the UEBMI, the URBMI and the NRCMS caused a large increase in the number of the population who received coverage, they also caused social inequalities to be reproduced in this system, deepening and solidifying the preexisting imparities of Chinese society. The system not only maintains inequalities between rural and urban populations, but it also distinguishes within urban regions between their position in the labor market and the (private or public) sector in which people in urban areas are employed.

Gao<sup>(14)</sup> also revealed that the social health system redistributed its benefits regressively between 1995 and 2002, that is, it had a redistribution that favored the richest part of the population, the reasons why were already mentioned by Huang,<sup>(5)</sup> since the system of health benefits reproduced the divisions in society according to the position in the labor market, sector and type of employment.

In a text published in 2015, Huang<sup>(13)</sup> shows that social health insurance programs

are distinguished regionally through political choices made by the central government and local governments. As already stated, the central government is interested in minimizing threats to the system and maintaining its stability. For this purpose, keeping a certain degree of inequality is convenient, which is guaranteed through the stratification established by social legislation. On the other hand, it is imperative to prevent the growth of social demands, for which it is necessary to respond to them up to a certain level. In that sense, Huang affirms that the central government faces an exchange between having control and granting certain type of concessions: although the central government tries to maintain its leadership through control over the distribution of benefits, it needs to grant discretionary power over the formulation of social health insurance policies to local governments, which have less difficulty in knowing what the needs are of the population of each region.

The central government, however, manages to maintain a certain degree of control over the decisions made by the local governments, mainly because it is responsible for the career incentives of local employees and the management of personnel. Local governments must be able to prevent the population's discontent from increasing too much. Otherwise, it could lead to massive incidents, compromising both the evaluation of their performance in the eyes of the central government and their professional possibilities, in the process. In this way, local leaders must be able to implement a health insurance policy appropriate to the socioeconomic context of the region. In addition, other instruments used by the central government are the aforementioned social legislation and fiscal transfers.

Local governments face certain limitations in their possible political choices in regards to: a) social legislation, since they must comply with the guidelines established by the central government; b) fiscal constraints, since, although they have local resources, they also depend on transfers from the central government; c) social risk, for which Huang uses an estimate of the dependency and labor



mobility rate, calculated as the ratio between the migrant population and the local population. Based on this, local governments have four possibilities: 1) to adopt an insurance model that includes a broad set of benefits and that is inclusive, that is to say, implementing a system in which both the coverage and the level of generosity of the benefits are high; 2) to have a model whose social policy has a high level of generosity in regards to benefits, but with limited coverage and that provides attention to a few social groups; 3) a system in which both the coverage and the level of generosity are low, and; 4) an inclusive model, with broad coverage, but with a limited set of benefits.

Through a cluster analysis made at a provincial level, conducted with the use of panel data surveyed during the period between the years 2007-2010, Huang divided the provinces of China into the four types discussed above, and showed that the political choices made in regard to social health insurance are associated with the socioeconomic conditions of the region. The provinces with greater social risks tend to focus on the coverage of the social health insurance program, while the provinces that have more fiscal resources tend to prioritize the level of generosity of benefits.

The variables tested by Huang, which have an effect on the coverage and level of generosity of the benefits, are: the level of urbanization, which correlates negatively with the coverage of the social health insurance system, but positively with the level of generosity, and economic development, which has a positive impact on both.

As shown in Table 2, Huang<sup>(13)</sup> built two variables: 1) level of generosity (measured by per capita expenditure in social health insurance) and 2) coverage (percentage of the population of a certain region covered by social health insurance). The regions were sorted according to the two variables, and the values were used as input for the cluster analysis. Clusters 1 and 3 are opposite, given that cluster 1 (dual type) has broad coverage and generosity level, while in cluster 3 (status quo type) both variables are relatively low.

The provinces of cluster 2 (privileged type) favor the level of generosity to the detriment of coverage, contrary to what cluster 4 regions do (risk-pooling type).

Urban-rural inequalities have been reproduced in the social health insurance system since its implementation in the 1950s. Kanbur and Zhang<sup>(10)</sup> showed that the rural population received fewer benefits, resulting in fewer beds and health professionals in these regions, as well as higher infant mortality rates. Eggleston, Hsiao and Liu<sup>(15)</sup> support this idea by showing that the same happens with the nutritional status of Chinese children. With the economic reform of the 1980s, the gap grew even more, which is understandable considering that the rural population was left practically unattended and without access to social health insurance, while the urban population, despite facing different problems with the health system, remained partially covered.

The works of Liu<sup>(16)</sup> and Liu and Pan<sup>(17)</sup> help to understand the persistence of regional disparities in the spending and the coverage of health social security systems between regions. Liu's research<sup>(16)</sup> finds evidence that the coverage of the URBMI-health program on which he performs his analysis-correlates positively with the economic development of the region analyzed, that is to say, that the populations of more developed regions tend to also be those that have greater coverage, promoting inequality between regions. Liu and Pan,<sup>(17)</sup> on their part, when analyzing the government's expenditure on health programs during the period between the years 2002-2006, noticed that among the factors that influenced spending, the per capita income of the province, the transfers from the central government and the proportion of the population under 15 years of age had a positive effect, while the social rate of social health insurance coverage and the proportion of urbanization had a negative effect. Once again, uneven economic development between the regions is also shown to lead to inequality in health policies. Chan, Ngok and Phillips<sup>(11)</sup> argue that regional inequalities persist essentially because of the

Table 2. Distribution of population coverage and the level of generosity granted by social health insurance, according to provinces, grouped into clusters. China, 2011.

Cluster	Provinces	Coverage	Level of generosity
1	Shandong	11	12
1	Jiangsu	8	9
1	Zhejiang	16	7
1	Fujian	12	10
1	Guangdong	17	6
1	Tibet	10	3
Cluster average		12	8
2	Beijing	28	1
2	Shanghai	29	2
2	Tianjin	30	5
2	Xinjiang	27	8
2	Ningxia	21	11
2	Qinghai	25	4
Cluster average		27	5
3	Heilongjiang	31	25
3	Jilin	22	30
3	Liaoning	23	13
3	Neimenggu	26	19
3	Hebei	19	23
3	Shanxi	24	17
3	Shaanxi	15	20
3	Hubei	13	26
3	Guangxi	14	27
3	Hainan	20	24
3	Yuannan	18	14
Cluster average		21	22
4	Henan	3	29
4	Anhui	1	21
4	Jiangxi	7	31
4	Hunan	6	22
4	Gansu	5	18
4	Sichuan	4	15
4	Chongqing	2	16
4	Guizhou	9	28
Cluster average		5	23

Source: Huang X. Four Worlds of Welfare: Understanding subnational variation in Chinese social health insurance. *The China Quarterly*. 2015;222:449-474. Notes: Cluster analyzes were calculated using the "cluster linkage" command in STATA / IC 12.0 for Windows. Ward's method was used as the agglomerative linkage method, and the stop rule executed was that of the Duda-Hart index  $J_e^{(2)}/J_e^{(1)}$ . All figures were rounded to the nearest whole number to facilitate comparisons.

decentralization of the government, which means that the governments of the poorest regions, which do not have significant or sufficient financial resources, are responsible for most of the financing and development of social health insurance, thus reproducing the inequality of economic development.

### The issue of the migrant worker

In 2012, the number of rural migrants in the cities was 236 million people.<sup>(3)</sup> The situation of these workers is particularly delicate in the context of China. The economic reforms arrived with a growing influx of workers who migrated from rural areas to urban areas in search of better opportunities, which guaranteed a workforce for the growing economic activity. However, migrant workers and their families faced various difficulties at integration, including social protection problems: between 1993 and 1996, only 6.7% of migrant workers in Shanghai were enrolled in any social health insurance program.<sup>(1)</sup>

One explanation for this low participation was the maintenance of the rural *hukou*, which forced migrants to remain enrolled in the program of their region of origin, creating a financial obstacle for the integration of migrant workers. As mentioned above, the coverage granted by the NRCMS was lower than that of the urban programs, this meant that migrant workers had a higher cost for receiving medical attention in the city and, if they wished to obtain reimbursement for their expenses, they would have to return to their original region, raising the costs of the transaction.<sup>(3)</sup>

In addition to having limited access to social health insurance programs, migrants are more vulnerable, mainly to infectious diseases, because their working and living conditions tend to be more precarious. By having less access to social health insurance, migrant workers took less preventive and immunization care, had less access to medical information and did not regularly consult with a doctor, which often resulted in seeking help only when the disease was already in a very

advanced state.<sup>(1)</sup> Therefore, the migrant population, despite having access to the NRCMS of their regions of origin, is at a disadvantage in terms of the protection provided by the Chinese health insurance system.

### CONCLUSIONS

Based on a series of reference authors, the analysis of the reforms of the Chinese social protection system and its results made it possible to verify the enormous progress made in this field. After the setback in the social protection policy caused by the transition of China into a market economy in the 1980s, the Chinese government has managed to reverse some indexes quickly, such as the reach of universal social insurance coverage, thanks to the creation and expansion of the UEBMI, URBMI and NRCMS, and the reduction of out-of-pocket expenses of the population, whose average went from 60% in 2001, to 35% in 2011.<sup>(3)</sup>

However, the benefits are not equally distributed among the population, which leads to the paradox of expanding coverage while reproducing and deepening the inequalities. Although this paradox could be blamed on certain factors such as an unequal economic development between regions, Huang<sup>(5)</sup> argues that one of the most important elements for the emergence of this paradox is the will of the government, which makes use of a common tactic of authoritarian regimes: the “divide and rule” strategy. Therefore, the reproduction of existing socio-economic differences in the population fulfills the role of hindering their horizontal mobilization, since it makes it harder to reach a common ground, given the different contexts and interests.

Although Table 1 shows the differences between the three analyzed programs, it does not account for the analysis of the inequalities between regions, since it presents the data at a national level. Interregional inequalities derive from local governments’ autonomy to develop and implement programs in their regions and from factors such as an unequal

economic development, which also leads to different levels of benefits. The control of personnel management and career incentives of local employees gives the central government the option to seek efficiency through the performance evaluation system, but local leaders remain vulnerable to the limitations imposed by the socio-economic conditions of the region.

In addition to the existing inequalities between regions and between programs, another issue that has not yet been resolved is that of the migrant worker: despite their contributions to the economic development, this

significant portion of the population remains excluded from health programs in most of their target cities.

Finally, given the low general level of reimbursement, the population remains exposed to high financial risks for health expenses,<sup>(3)</sup> especially the sector of the population with fewer resources.

It is therefore concluded that, despite there being important developments in recent decades, China's health insurance system still has many gaps to fill, so it is imperative to continue making progress in the reforms.

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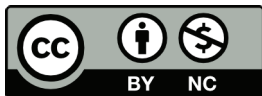
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