Regional Inequality in Healthcare in China

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Regional inequality in healthcare in China is particularly wide. Since 2007, the central government has increased earmarked healthcare transfers to local governments in western and central regions. The state council has also released a health reform guideline in 2009 to address inequality in healthcare. These recent policies have shown some effects to reduce regional health inequality.

However, health inequality cannot be fully addressed as long as local governments remain the major public funder of health provision and insurance.

REGIONAL INEQUALITY IN the Chinese context mainly refers to inequality among eastern, western and central regions in China. Regional inequality in healthcare is particularly wide in China in terms of health indicators such as life expectancy and under-5 child mortality rate.

For example, in Shanghai, the life expectancy was 78 years while it was less than 68 years in six western provinces in the year 2000. Under-5 child mortality rate is 4.58

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per 1000 live births in Shanghai while the number is 42.9 per 1000 live births in the Sichuan province of the western region.

Figures 1 and 2 illustrate the disparity trend of health indicators across regions since year 1990. There has been no significant reduction of health disparity since 1990. Figure
Figure 1 shows that the difference in average life expectancy between eastern and western regions was still more than six years in 2000 while it was seven years in 1990. Figure 2 shows that average mortality rate under-5 in the western region was about two and a half times that in the eastern region in 2005. The gap for under-5 mortality has actually increased between western and eastern regions since 1990. The gap for under-5 mortality has also increased slightly between central and eastern regions since 2003.

Why the Inequality?

Inequalities of healthcare arise as a consequence of regional disparity of both health financing and health care utilisation. Equity in health care utilisation refers to a system in which healthcare service is allocated or distributed according to need rather than socioeconomic status. The inequalities are significant for two reasons. First, with different coverage of health insurance, people with similar income level may have different accessibility to healthcare services. Second, regional distribution of health resources plays an important role in the accessibility of health services, in consequence, people’s health status.

There are two fundamental causes of regional disparity of both health financing and health care utilisation: First, with the fading out of the central plan system in the 1980s, the government reduced its financial responsibility for public health services and transformed them into market oriented services. Consequently, health resources are more likely to be concentrated in regions where people can afford to pay for health. Therefore, disparities of local economic conditions are responsible for the unequal distribution of health resources to a large extent.

Second, decentralised government financing of healthcare worsens regional inequality in this area. It is the responsibility of local governments, in particular, city/county level governments rather than central government, to fund majority of governments spending for both health provision and health insurance. In less developed regions, the fiscal budget of local governments usually is hardly enough to fund health provision. This fact reinforces regional inequality of healthcare.

Health Policies to Reduce Healthcare Inequality since 2000s

The central government has made efforts to reduce regional inequality in healthcare. In 2002, China launched a rural health insurance plan: New Cooperative Medical Scheme (NCMS). Rural residents can join NCMS voluntarily. In 2007, China kick-started voluntary health insurance plans for urban residents without formal employment as well as students and retirees. Total number of enrollees under these two schemes was over one billion enrollees by end 2009 (i.e. 180 million for urban resident plans and 830 million for NCMS).

Health insurance plans under these two schemes in western and central regions are heavily subsidised by the central government (i.e. 40 out of 100 yuan per enrollee in 2009 and 60 out of 150 yuan per enrollee in 2010).

In 2006, a report of 6th meeting of 16th National Congress of Communist Party
highlighted the importance of “equitable provision of basic public services” across regions. The focus of fiscal system will be shifted to provide public services and build up social safety net (Peoples’ Daily Online 2006).

Since 2007, all levels of governments have increased expenditures for basic public services, including basic health services. The central government has also increased healthcare transfers to western and central regions. Figure 3 shows the percentage of central government’s health expenditure (including healthcare transfers) in central government’s revenue. The share of health expenditure has increased dramatically since 2007. In 2006, the share of health expenditure was about 0.6% of total government revenue while the share increased to about 3.6% in 2009.

**Inequality in Health Financing: Current Status**

In spite of these policies, inequality in health financing remains wide. It is largely due to the role of the local government. Local governments, in particular county or city level governments, manage and fund social insurance funds. Reimbursement rate of a local voluntary social insurance plan is set (annually) by local governments according to the financial status of local insurance fund.

Local government subsidy usually accounts for a large share of these voluntary insurance funds. For example, for a typical rural plan, local government subsidy accounts for more than 40% of total insurance funds (i.e. 40 out of 100 yuan per enrollee in 2009 and 60 out of 150 yuan per enrollee in 2010). For a typical urban resident plan in western and central regions, local government subsidy accounts for more than two-thirds of total government subsidy (i.e. 80 out of 120 yuan per capita in 2010). Local governments may increase subsidies for health insurance according to their fiscal needs.

![Figure 3: Health Expenditure as a Share of Central Government Revenue](source: Budget report, various years, Ministry of Finance)
conditions. In other words, for enrollees, the better a local government’s fiscal condition, the more generous the social health insurance plan. There are huge regional differences for health insurance subsidy from local governments. For instance, in Xiamen city, Fujian province, government subsidises 521 yuan per year per urban resident and 190 yuan for a rural resident while Zhengzhou, the capital city of Henan province (in central region), the subsidy was 120 yuan for both cases in 2009.

Apart from local government subsidy, upper limit of reimbursement for health insurance also varies according to local conditions. Upper limit reimbursement is six times local average annual income level. Figures 4 and 5 show regional differences of annual income per capita from 2004 to 2008 in urban and rural areas.

In general, wage ratio between central/western and eastern regions for urban areas has been increasing for the last five years (Figure 4). This trend of divergence is not very evident for rural areas in the western region (Figure 5). However, variances in health insurance policy, which is set according to local average income level, can still be very large. For example, from 2008 data, upper limit reimbursement for an urban resident in the eastern region was higher than that for his counterpart in the central region by 60,000 yuan on average, or about two and a half times average urban income in the central region. Upper limit reimbursement for a resident in the rural areas of the eastern region was higher than his western counterpart by 23,000 yuan on average, which is about seven times the average income in rural areas of the western region.

**FIGURE 4 AVERAGE WAGE RATIO IN URBAN AREAS BETWEEN REGIONS**

Source: China statistical yearbook, various years
Inequality in Healthcare Utilisation: Current Status

Inequality in health care utilisation is a result of the unequal regional distribution of health resources such as health workers and beds. For 2008, there were more than 12 health workers per 1000 population in Beijing, while in many western provinces, the number was below three per 1000 population (similar uneven distribution for the number of beds per 1000 population). Income difference of qualified physicians across regions is also large. Experienced and qualified physicians in central and western regions are more likely to migrate to the eastern region.

Figures 6 and 7 illustrate gaps of health resources across regions from 2004 to 2008. In Figure 6, ratio for the number of physicians and nurses per 1000 population between central-western and eastern regions has decreased since year 2003. For example, the gap for physicians/nurses density between central and eastern region decreased from 79% to 73% in the recent five years. However, the ratio for density of beds has increased slightly since 2004 (Figure 7). These trends show that infrastructure building is the focus of increasing government health expenditure in western and central regions (Figure 9).

Local Fiscal Condition and Healthcare Inequality

Under current Chinese health system, local governments manage and fund both publicly owned service providers (in particular, primary care providers) as well as social insurance plans. Therefore, both disparities in health financing and health service utilisation can be explained by disparities of local government health expenditures to a large degree.
Due to increasing amount of earmarked healthcare transfers from central government to local governments in the western region, the gap between eastern and western/central regions has decreased in the recent five years.

Local government’s capability in reducing healthcare inequality could be seen in Figure 8 shows the gaps of government health expenditure per capita across regions.
shares of health expenditure in local government revenue. Figure 9 shows that the share of health expenditure is increasing for all regions. However, the share for the eastern region was less than seven percent while the shares for central and western regions were 13% and 16% respectively in 2008. The latter figure suggests that it is less likely for local governments in central and western regions to catch up with health conditions.
in the eastern region using their own resources, given limited fiscal room for them to increase health expenditure. On the contrary, the central government has much more fiscal room to reduce regional inequality in healthcare by increasing transfers to local governments or increasing health expenditure directly (Figure 3).

2009 Health Reform Guidelines

To further address healthcare inequality, the Chinese government released new guidelines for health reforms in April 2009. First, the central government will increase subsidies allocated to health service providers. In particular, networks of primary care health service providers, many of which are subsidised by central fiscal budget, are to be built in every county. In rural areas, the central government will invest in 29,000 township health clinics and 5,000 township health centres. In urban areas, the central government will invest in 11,000 community health clinics and 3,700 community health centres. Government expenditure for public health activities is set at a minimum of 15 yuan per person in 2009 and 20 yuan per person in 2010. The central government has also been subsidising local governments in poor regions to fulfill this requirement for expenditures on public health activities.

Second, the central government will increase subsidies to finance social health insurance plans, in particular for social health insurance plans in central and western regions (i.e. the amount of subsidy has been increased from 40 to 80 yuan per person from year 2010 for rural health insurance plans; for urban plans, the amount of subsidy increases from 20 to 40 yuan per person).

Third, physicians are allowed to register in more than one health institution, thanks to the health reform guidelines released in April 2009. Hospital physicians can have part-time private practices. Hence, hospitals in poor regions may keep qualified physicians with relatively low wages. This policy may be interpreted as an alternative way to relieve fiscal burden of local governments in poor regions.

The Ministry of Health has also started drafting a blueprint for future Chinese healthcare system since early 2008, “Healthy China 2020”, which is expected to be finished by end 2009 but not released until March 2010. It is a blueprint for long term development, a complement to the health reform guidelines released by the State Council in April 2009. Under this blueprint, basic health service and public health service will be carefully defined according to national health conditions. Next, a health system with universal and equal access to basic health service and public health service will be established in China by 2020. To achieve these goals, increasing central government investment and fiscal transfers for healthcare is necessary.

Issues to be Addressed

Some recent health policies are already having a positive effect on reducing regional inequality of health resources and financing, in particular the western region. These health policies, to some degree, may reduce regional healthcare inequality further with the increase in central fiscal subsidy/transfers. These policies are also rational responses to the current Chinese fiscal system where the central fiscal position is relatively strong.
and variances of local fiscal conditions lead to regional inequality of health provision and financing.

However, central-local fiscal relationship remains a key issue to be addressed for the ongoing health reform. Public expenditure on health still comes mainly from the local budget. For example, in 2008, total health expenditure from central government including healthcare transfers was 82.7 billion yuan while total government health expenditure was over 275 billion yuan. Local governments finance 70% of total government expenditure. Even if the local governments in central and western regions receive all of central government’s healthcare transfers, they still have to finance 47% of total government health expenditure.

For ongoing health reform, the Chinese government will be investing 850 billion yuan on health from 2009 to 2011. Nevertheless, 60% of these health expenditures will be financed by the local governments. Regional inequality in healthcare cannot be fully addressed as long as local governments remain as the major public funder of healthcare and insurance, given widening inequality of local fiscal conditions.

Furthermore, under the current fiscal system, most subsidies from the central government over health insurance and infrastructure for health service providers are allocated in the form of matching grant. In other words, transfers from the central government will be allocated only after the local government contributes certain amount of subsidy from its local budget. Local governments in poor regions with tight budgets could not fulfill this requirement and are therefore forced to restrict its financing to health insurance and provision.

Finally, government expenditure is more effective in infrastructure building (e.g. number of beds) than improving patients’ accessibility to physicians/nurses. The more effective use of fiscal resources in central and western regions has yet to be addressed. More resources may be channelled to keep and attract qualified and experienced physicians and nurses to reduce regional inequality in healthcare in the future.