

## 4. Achievements of the Health Security System

The achievements of the universal health care scheme being described in this section are derived from the summary report of the study on equity of financing system in Thailand conducted by the International Health Policy Programme which was based on an analysis of the 2004 database.

## 4.1 The Health Security System and the Rich and Poor

According to the 2004 health and welfare survey conducted by the National Statistical Office, when the population is divided into five groups according to household income, the universal health care cards (category "Tor" which exempts 30-baht-per-visit payment) have been distributed to the lowest income group as many as 30% and to higher income groups in lower proportions, respectively. The eligibility for universal health care is more widely spread among the poor than those for welfares under the civil servants benefit and social security funds.

For the universal health care cards of "non-Tor" category which require a 30-baht-per-visit payment have been distributed in general to all income groups in the proportions which are not so different (Figure 8.2).

However, there are some people in the lowest income group that have no exemption for the 30-baht payment; on the contrary, some people in the highest income group receive exemption for such a payment as a result of the Medical Welfare for the Poor and Underprivileged originally of the MoPH which could not effectively screen the poor into the scheme and excluding the non-poor from the scheme.



Percentage of people by type of health insurance and income level 100% 8 15 90% 15 80% 52 51 21 70% 21 60% 23 50% 26 40% 23 30 22 30% 11 20% 30 13 6 19 10% 9 0% **CSMBS** SSS Gold card (tor) Gold card (non-tor) Lowest Low Middle High Highest

Figure 8.2 Proportions of poor and rich people in deferent medical welfare systems

Source: Report on Health and Welfare Survey, 2004. National Statistical Office.

## 4.2 Illness and Service Utilization of the Rich and Poor

For the lowest-income group, their illness rate was highest at 26% of all patients while the illness among the highest income group was only 15% (Figure 8.3). The distribution of outpatients was close to that for inpatients.

While the proportion of illness for lowest-income group was 26%, their proportion of outpatient services was as high as 37% at health centres, 35% at community hospitals, 21% at state tertiary care facilities, and 17% private hospitals. For the highest income group, their illness rate was 15% and the proportion of their service utilization at state tertiary care facilities was 22%. This is due to the fact that most low-income population live in rural areas and have difficulty accessing tertiary care facilities that are normally located in Mueang Districts (in provincial cities). So when they get sick, mainly with illnesses that only require outpatient care, low-income population tend to seek medical care at the subdistrict or district level.



Percentage of patients at various health facilities by income level 100% 15 90% 22 25 36 11 14 80% 17 19 20 22 70% 18 21 22 60% 20 19 20 25 26 50% 18 25 24 19 40% 21 21 23 14 19 30% 16 37 20% 12 35 35 26 26 21 22 10% 17 13 Illnesses requiring inpatient care a community nospitals hospitals Admissions at tertary normal Admissions osuns at tertary mospitals hospitals.
Admissions at Private hospitals Admissions at community hospitals Tertiary care hospitals 0% Community hospitals Health centres Illnesses requiring outpatient Highest Lowest Low Middle High

Figure 8.3 Proportions of people reporting illnesses (percent)

Source: Report on Health and Welfare Survey, 2004. National Statistical Office.

An analysis of inpatient services revealed that the proportion of low-income people using inpatient care was similar to that for outpatient care at state hospitals. At tertiary care hospitals, the proportion of high-income people using inpatient services was consistent with their illness proportion, i.e. The highest-income group had an illness proportion of 15% and an inpatient service proportion also of 15%, while their proportion of using outpatient services was as high as 22%. That was due to the fact that the highest-income group tended to use inpatient services at private hospitals at a high proportion of 36%.

## 4.3 Either Rich or Poor People Benefit from the State Health Budget

This study estimated the benefits the people received from the government health budget, based on the analysis of the differences of the costs of health services at various levels of state health facilities and the out-of-pocket household health expenditures. The concentration curve can illustrate the relationship between the proportion of health care subsidies and the proportions of five groups of people (poorest to richest) according to their household's economic status. The horizontal axis represents the commutative number of people by economic status order, from poorest to richest;

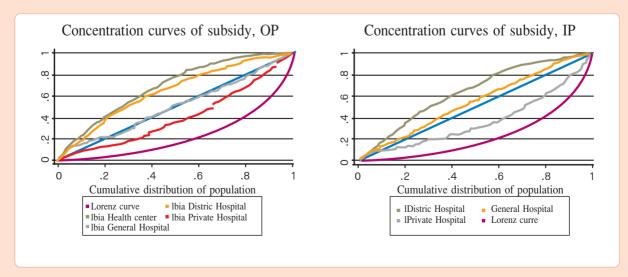
the vertical axis represents the cumulative budget for health care for such people. If the subsidy has a perfect equity between the rich and poor, the relationship will be above the equity line, which is the 45° diagonal between the two axes. That means the subsidy amount is in the same proportion as the number of people in each economic status level. For example, the poorest group (first 20% of entire population) receives 20% of the total subsidy and the richest group (last 20% of entire population also receives 20% of the total subsidy (Figure 8.4).

If the poor receive a larger proportion of subsidy than the rich, the concentration curve will be above the 45° diagonal line. That means the poorest group (first 20% of entire population) receive more than 20% of total subsidy; on the contrary, if the subsidy is mostly concentrated in the rich group, the concentration curve will be under the 45° diagonal.

In addition to using the concentration curve, the comparison of the proportion of subsidy and the proportion of five population groups can be illustrated by using the concentration index (CI), which is two times the area between the diagonal line (equity line) and the concentration curve, ranging from -1.0 to 1.0. If the concentration curve is above the diagonal line, i.e. the poor having a higher proportion of subsidy, the CI will have a negative value, but if the concentration curve is under the diagonal line, i.e. the subsidy being concentrated among the rich rather than the poor, the CI will have a positive value.

Besides, if we want to see whether the health care subsidy can bridge the economic gap between the rich and the poor, a comparison can be made between the concentration line and the Lorenz curve, which shows income distribution in the population. If the income is concentrated among the rich, the Lorenz curve will be under the 45° diagonal. The higher the concentration line of health care subsidy is above the Lorenz curve, the more the subsidy can help bridge the economic gap between the rich and the poor. In such a case, the relative equity or Kakwani index will have a negative value.

**Figure 8.4** Concentration curves of health care subsidies for outpatient and inpatient services at different levels of health facilities





The analysis of the data on outpatient care subsidy at public health facilities from the 2004 health and welfare survey revealed that at the health centre and community hospital level, the CI was negative. That means the proportion of subsidy for the low-income group was higher than that for the high-income group (CI -0.357 for health centres and CI -0.276 for community hospitals). For state tertiary hospitals, the healthcare subsidy for the low-income group was close to that for the high-income group (CI 0.003, the concentration line was close to the diagonal or the equity line).

The subsidy of healthcare expenditure for inpatients at community hospitals was similar to that for outpatients, i.e. the low-income group received a higher proportion of benefits than the high-income group (CI -0.272). Regarding the subsidy of inpatient care at provincial hospitals and other state hospitals, the benefit for the low-income group was also higher than that for the high-income group, but at a lower level than that at community hospitals (CI -0.087).

On the contrary, the health care subsidy at private hospitals was mostly concentrated among the high-income group (CI 0.184 for outpatients and 0.256 for inpatients). It is noteworthy that even though the CI values for private hospitals were positive, the concentration curve was closer to the equity line than the income distribution Lorenz curve was. So it can be stated that financing and health services in Thailand have helped reduce relative economic inequity even at private hospitals: Kakwani index being -0.352 for outpatients and -0.277 for inpatients.