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## **Assessment of People's Views of Thailand's Universal Coverage (UC): A Field Survey in Thangkwang Subdistrict, Khonkaen \***

Chalermpol CHAMCHAN\*\* and MIZUNO Kosuke\*\*\*

### **Abstract**

This paper assesses a variety of views held by the Thai people residing in an area considered “rural” in the Khonkaen province of northeastern Thailand concerning the adoption in 2001 of Universal Coverage (UC) through the 30 Baht Scheme. According to findings from a questionnaire process that included casual interviews, a number of respondents expressed favorable opinions of the concepts underlying the implementation as well as its performance so far. This was especially the case with respect to lower medical expenses, qualitative improvements in health care provision, and attitudes toward the 30 Baht Scheme. Some of those covered by other health schemes, mainly the elderly who obtain their health benefits through the Civil Servant Medical Benefit Scheme (CSMBS), even mentioned a preference to be switched to the 30 Baht Scheme if it were allowed. The fixed co-payment of 30 baht per episode is seen as affordable and fairly reasonable to people across socioeconomic statuses, and therefore need not be revised. For most factors related to satisfaction with the utilisation of medical care, average scores indicate satisfaction. The “co-payment” scored the most satisfactory and “transportation costs” scored the least satisfactory. Now that they are entitled to the right to access better medical care through UC, a larger proportion of people reported that they prefer to visit public health facilities when care is needed rather than private facilities more often compared to the pre-UC period. The rate of care utilisation is also tentatively higher. In this study, an analysis of medical care expenses shows an inequitable burden of the expenses on people across three strata of income groups, which are classified by annual household income per head.

**Keywords:** Universal Coverage (UC), the 30 Baht Scheme, people's views, health care, Thailand

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## I Introduction

With the introduction of a new health scheme, the so-called “30 Baht Scheme,” Universal Coverage (UC) was adopted nationwide in Thailand in October 2001.<sup>1)</sup> Those who were not receiving health benefits from the two existing medical care schemes (the Civil Servant Medical Benefit Scheme (CSMBS) and the Social Security Scheme (SSS)) became entitled to receive a 30 Baht Card — or Gold Card — enabling them to access health care at contracted facilities with a co-payment<sup>2)</sup> of only 30 baht (about 0.75 USD) per episode.

The main features of the three health schemes under UC are summarised in Table 1.

**Table 1** Thailand's Universal Coverage (UC): Summary

Pre-UC (Until 2001)	1. The Civil Servant Medical Benefit Scheme (CSMBS)	2. The Social Security Scheme (SSS)	3. The Medical Welfare Scheme (MWS) 4. The Voluntary Health Card (VHC) 5. The uninsured
<b>The UC (from 2001 on)</b>	<b>1. The CSMBS</b>	<b>2. The SSS</b>	<b>3. The 30 Baht Scheme</b>
Population groups covered	Government employees, public sector workers and dependents	Private employees	The self-employed and the rest of the population not covered by the CSMBS and the SSS
Estimated population coverage in 2004 (in % of a total population of 65.1 million)*	10.0 %	11.2 %	78.8 %
<b>Financing</b>			
Source of financing	General tax	4.5% (1.5% each from the employee, employer and government) **	General tax and co-payment
Financing agent	Ministry of Finance (MOF)	Social Security Office (SSO)	National Health Security Office (NHSO), MOPH
Provider payment method	Fee for services and DRG	Capitation	Capitation

\* [Thailand, National Statistical Office (NSO) 2004]

\*\* From 2004 on, the total contribution was adjusted from 3% with 1% each by the employee, employer and government.

- 1) The expansion of coverage to the whole country including the inner Bangkok districts was fully implemented in April 2002 [Tangcharoensathien and Jongudomsuk 2004].
- 2) Specific sectors of the population are exempted from the co-payment, including senior citizens over 60, children under 12, the handicapped, monks, veterans and their families, public health volunteers, community leaders, and those with low incomes (an approval process is required to be considered low income).

Wibulpolprasert [2000] has described serious problems that existed in Thailand's health system prior to the implementation of UC. These included structural inequities in health resource allocation, intraregional and interregional differences<sup>3)</sup> with respect to both the number and level of health care facilities, health workers and practitioners, number of beds, etc., and the lack of adequate health security, especially among the poor in marginal socio-economic groups.<sup>4)</sup> Some citizens were unable to access health care, especially sophisticated and expensive treatments, due to geographical barriers, financial barriers, or both. Those living in remote areas on a minimal income were the most vulnerable group within this context.

According to the policy declarations of the Ministry of Public Health (MOPH) in March 2001 [Tangchareonsathien and Jongudomsuk 2004: 36; WHO/SEARO 2004: 196], the three main objectives of UC are: 1) universal coverage across the nation, 2) a single standard of benefits and care, and 3) sustainability of the system. The first objective, as the primary goal of UC, is to entitle all citizens to health care access according to their needs (equality of access). The second objective is to assure the same standard of benefits and quality of care (equality of allocation), which is accomplished by merging the three health funds.<sup>5)</sup> Equality of *access* and *allocation* are declared separately, which indicates that accessing care and receiving care are not the same thing [Le Grand 1982 in Culyer and Newhouse 2000: 1812]. The third objective, sustainability of the system, refers not only to financing, but also to institutions and long-term performance. The key objectives of UC policy are the reform of health care system and its financing, promotion of health and access to care, as well as the satisfaction of the people, defined as "the insured," in their utilisation of the system.

This paper presents the results of field research on people's views of UC and the 30 Baht Scheme in a remote subdistrict of Khonkaen Province named Thangkwang. Various impressions, perceptions and opinions of people are assessed to evaluate and monitor the performance of the health care system in rural areas, particularly with respect to accessibility and satisfaction with the care received after UC was implemented. The purpose of the findings is to use them as indicators and a tool for future improvements to the UC system, in order to achieve the declared policy objectives.

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3) These differences were obvious when comparing the central region to the northeastern region [Pannarunothai 2000: 211-219].

4) Figures from 1999 show that 30.1 percent of the Thai population was not covered by any health scheme, with 27 percent falling into the poorest group who earned a monthly income of less than 2,000 baht [HSRI 2001: 36-37].

5) This merge is accomplished through benefit packages and convergence of financing. It is facing difficulties due to opposition from those who expect to be affected, including the labor unions (using the SSS) and public workers (using the CSMBBS).

## II Overview of the Field Survey

The field survey was conducted from the 9th to the 20th of March 2005 in a village called "Suntisuk" in the subdistrict of Thangkwang and in the district of Waengnoi in Khonkaen Province. The province is located in the northeast of Thailand, 445 km from Bangkok, and it consists of 20 districts and 5 minor districts. Waengnoi is a third rank district, which is the rank furthest from the central city of Khonkaen, about 97 km away. The district is considered to be rural and less wealthy than others, as its location is far more remote from the main public highway and inconvenient to reach by public transportation. Suntisuk village, one village among 11 villages in the Thangkwang subdistrict of Waengnoi district, was selected as the field site for the research survey. According to the Waengnoi Community Development Office [Waengnoi CDO 2004], there were 111 households, with approximately 528 villagers residing in the village in 2003. In this study, a questionnaire including a casual interview was given to 80 representatives of 80 households (out of the 111 in the village), which represented a total of 413 residents, or about 80 percent of the 528 villagers.

The health facilities accessed by the people in the village were the Thangkwang Subdistrict Health Centre (only for primary care) and Waengnoi District Hospital. They are located about 4 km and 13 km from the village, respectively. Another alternative is the hospital in Phol, a neighbouring district, which is nearly the same distance away as Waengnoi hospital.

During the interviews, respondents were asked various questions, mainly concerning their attitudes toward and impressions and opinions of their health scheme, their satisfaction with the health care they have experienced, the financial burdens of medical expenses, and changes in health care utilisation patterns after UC was implemented.

## III Basic Characteristics of the Sample Group and Respondents

### III-1. Household Income and Income Strata of the Three Groups<sup>6)</sup>

As mentioned above, an interview including a questionnaire was conducted with a representative of each household, totaling 80 respondents from 80 households. As shown in Table 2, within this sample group, the per capita annual income per household ranged from a minimum of 20,000 baht to a maximum 53,250 baht. The average per capita income was 25,960.2 baht. When we ranked the incomes from the mini-

**Table 2** Per Capita Annual Income

	Family Income /Person/ Year
Minimum	20,000
Mean	25,960.2
Maximum	53,250

6) Household income data was compiled from the "Database of Basic Needs Survey (Chor.Por.Thor): Subdistrict Level" (in Thai) with kind assistance from the Community Development Office: Waengnoi District, Khonkaen.

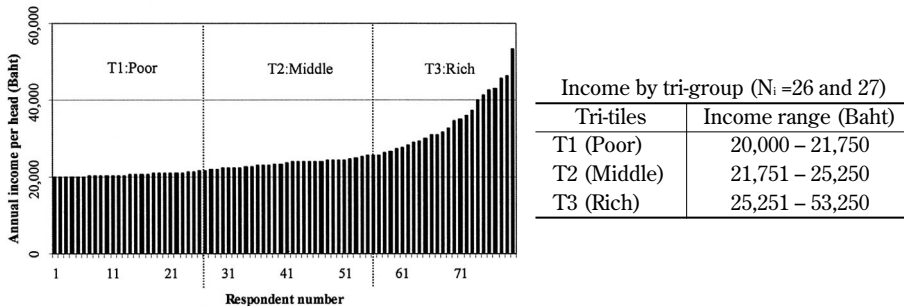


Fig. 1 Three Strata of Per Capita Annual Household Income

imum to the maximum and then divided them into three equal groups, we derived the income strata depicted in Fig. 1. Notice that nearly two-thirds of the households fall into a narrow per capital annual income group earning from 20,000 baht to 25,000 baht, which implies a concentration of low-income households in the village.<sup>7)</sup> From now on, T1 will refer to the “poor” group, while T2 and T3 will refer to the “middle-income” and the “rich” groups, respectively, based on household income level.

### III-2. Socioeconomic Characteristics of Respondent Households by Income Strata

The socioeconomic characteristics of the respondents’ households arranged by income strata are summarised in Table 3. Consistent with the income distribution shown in Fig. 1, the mean household per capita annual income does not differ significantly between T1 and T2, but there is a large gap between T1 and T2 with respect to T3. The income differences across strata can be explained by varying asset structures and factors of production employed by the households in each income strata. As more than 90 percent of the households in the village fall into the agricultural sector, the amount of land held and labour force capacity are considered the key determinants in generating production and therefore income.

In Table 3, the figures across the income strata show a hypothetical explanation of the relationship between per capita income, the amount of land owned and the number of household members. Compared to the rich, the poor on average tend to own smaller pieces of land. The amount of land for both residential and agricultural activities owned by T1 households is distinctly disadvantageous compared to T3 households, namely 16.2 *rai* to 25.6 *rai* (1 *rai* = 1,600 m<sup>2</sup>). In addition, even though the number of household members is higher among poor households than it is among the richer households, this is not an advantage for the poor since the ratio of active members in the household labour force does not change (about 0.75) across income strata. One reason for this may be an offset from the number of the elderly in these households, which is slightly higher among the poor households.

7) The household poverty line is 20,000 baht per capita annual income, as defined by the Community Development Office (COD).

**Table 3** Socio-economic Characteristics by Income Strata (T1 – T3)

Income strata (Tri-tiles)	Mean				
	Per Capita Annual Income (baht)	Amount of Owned Land ( <i>rai</i> )	No. of HH Members	No. of Elderly*	Ratio of Working Members**
T1 (Poor)	20,609.5	16.2	5.54	1.23	0.75
T2 (Middle)	23,390.7	19.4	5.15	0.70	0.76
T3 (Rich)	33,682.2	25.6	4.93	0.48	0.75
Total	25,960.2	20.4	5.20	0.80	0.75

\*“The elderly” refers to family members age 60 and over.

\*\* Number of members identified as working / Total number of family members

All of these factors are believed to simultaneously affect and determine the socioeconomic status of the household, not only in terms of the per capita annual income that is used to classify the socioeconomic strata in this study.

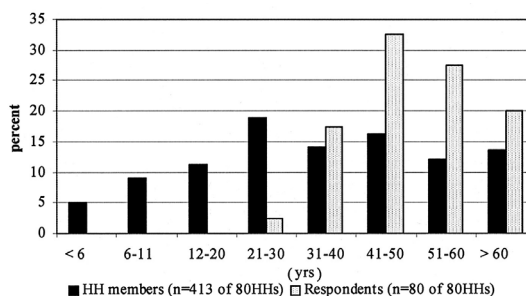
III-3. *Respondent Age Distribution and Household Position*

The age distribution of the 413 members of the selected 80 households and their representatives, the 80 respondents, are depicted in Fig. 2.

In this village, the age distribution of household members falls into a normal distribution pattern. The majority, about 50 percent, falls into the working age, from 21 to 50 years old. Children (including teenagers under 20 years old) and the elderly (over 60 years old) comprise about 25 percent and 13.5 percent, respectively.

In this study, the ages of the interview respondents range mostly from 31 to 60 years old. The largest group, comprising more than 30 percent of total 80 respondents, falls into late middle age, from 41 to 50 years old. Elderly over 60 comprise 20 percent, or 16 respondents.

By placing the elderly into a separate group and then classifying the respondents by position in the household, we find that one-fourth of the respondents are the head of the household. Thirty-two and a half percent were spouses and 23.8 percent were children of the household head.



**Fig. 2** Age Distribution of Household Members and Respondents

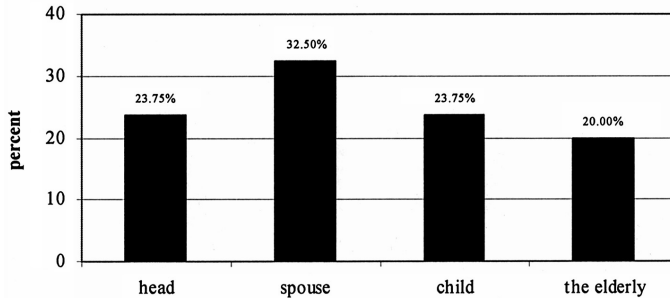


Fig. 3 The Respondents' Position in the Household (Relationship to the Head of the Household)

#### IV Research Findings: People's Views of Universal Coverage (UC)

This section summarizes the views of the UC implementation and related findings from the questionnaires and interviews. This includes data concerning morbidity rates, the burden of medical expenses and changes in health care-seeking behaviour of people after they became entitled to UC with the 30 Baht Scheme.

##### IV-1. Health Scheme Coverage

The health care coverage of the respondents is to some extent consistent with the coverage at the national level. A majority of more than 75 percent is covered by the 30 Baht Scheme, while the remaining 25 percent is covered by the CSMBS and the SSS. In this village, as more family members work in the public sector than in the private sector, the coverage of CSMBS among the respondents was found to be higher, at about 21 percent, compared to the national figure. This consequently results in a smaller percentage of those insured under the SSS, amounting to only 1.25 percent. If we focus on elderly respondents over 60, we find that half of them, or 10 percent of the respondents, are covered by the 30 Baht Scheme, while the other half, another 10 percent, receive their CSMBS benefits as dependents of their children, who work in the public sector. Elderly over 60 who are covered by the 30

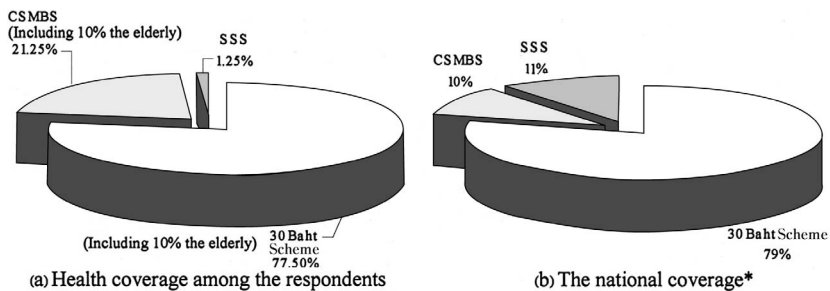


Fig. 4 Health Scheme Coverage

\* Source: [Thailand, NSO 2004]



Baht Scheme are exempted from the 30 baht co-payment when utilizing health care.

#### IV-2. *General Impressions, Attitudes and Opinions*

Among the respondents who are covered by the 30 Baht Scheme (n=62), 75 percent could articulate the basic features of the scheme, including information about when the scheme was adopted, who can obtain a 30 Baht Card, and at which facilities they can receive health care using the card they have. They can also define how the “30 baht” figure for the co-payment refers to. The rest who cannot properly answer are mostly elderly people over 60. Eighty-seven percent report that they are obliged to pay the 30 baht co-payment when receiving care at the designated facilities. The rest who are exempted from the co-payment are mainly the elderly, who as mentioned in the previous section, comprise about 10 percent of the respondents.<sup>8)</sup> About 91 percent of the 62 respondents have received health care using the

**Table 4** Summary of the Respondents' General Views of Their Health Care Coverage

<b>Questions to Those Insured under the 30 Baht Scheme (n=62)</b>	<b>Yes</b>	<b>No</b>
Do you know what the 30 Baht Scheme is (and also the meaning of the number “30 Baht”)?	75.4%	24.6%
Do you need to co-pay 30 Baht when utilising health care?	87.3%	12.7%
Have you ever utilised health care using the 30 Baht Card at a contracted health facility?	90.6%	9.4%
Do you think the cost of health care is less with the 30 Baht Scheme?	97.5%	2.5%
Do you think the quality of health care is improved with the 30 Baht Scheme?	87.0%	Worse = 5.2% Same = 7.8%
Which scheme were you covered by before the implementation of the 30 Baht Scheme?	1. Medical Welfare Scheme (MWS) 2. Voluntary Health Card Scheme (VHCs) 3. Private health insurance 4. Uninsured	12.3% 49.2% 0.0% 38.5%
Compared to the health scheme you were previously covered under, what do you think about the 30 Baht Scheme?	1. Better in general 2. Worse in general 3. Much the same	83.1% 3.1% 13.8%
How do you think in general about the concepts underlying the 30 Baht Scheme?	1. Very good 2. Good 3. Acceptable 4. Poor	41.5% 30.8% 27.7% 0.0%
From 1 (lowest) to 10 (highest) how would you rate your satisfaction with the 30 Baht Scheme?	Mean score = 8.46	
<b>Questions to Those Insured under the CSMBS and the SSS (n=18)</b>	<b>Yes</b>	<b>No</b>
If you could, would you like to switch your current coverage to the 30 Baht Scheme?	27.8%	72.2%

8) The elderly total 20 percent of the respondents. Only half of them are covered with the 30 Baht Scheme.

30 Baht Card, among which 97.5 percent were positive about the care they received with respect to lower medical expenses, and 87 percent were positive about improvements in the quality of the care.

Prior to the 30 Baht Scheme, 12.3 percent had been assisted by the Medical Welfare Scheme (MWS), which was provided to financially assist low-income people and those needing assistance up until 2001.<sup>9)</sup> Almost half (49.2%) bought the 500 Baht Card for the Voluntary Health Card Scheme (VHCS)<sup>10)</sup> in order to access health care at registered facilities free of charge for the whole family (of not more than five persons) per year. The group reporting no coverage or assistance by any health scheme was as high as 38.5 percent.

Fig. 5 presents health coverage by income group in the period prior to UC. Of the MWS, the rich (T3) and the middle-income (T2) groups were found to be the major beneficiaries of the assistance (50% and 38%, respectively), which runs counter to the primary aims of the scheme. Of those receiving care through the VHCS, the majority of the card buyers were the poor (T1) at 38 percent and the rich (T3) at 34 percent. The remaining uninsured were mainly middle-income (T2: 48%) and poor (T1: 32%) people. This implies that public health assistance to the poor and nearly poor in this village prior to the implementation of UC was ineffective and misallocated.

More than 80 percent feel that the 30 Baht Scheme is generally better than the scheme under which they were previously covered. Only 3.1 percent feel it is worse, and 13.8 percent sees no difference. In the opinion of more than 70 percent of the 62 respondents, the implementation of the 30 Baht Scheme is generally “good” to “very good.” The average satisfaction score, rating from 1 to 10, is fairly high, at 8.46.

Of the 18 respondents who are currently covered by the CSMBS and the SSS, 27.8 percent (n=5) expressed a preference to switch their health scheme to the 30 Baht Scheme if it were allowed. Notably, most of these are elderly people who receive health benefits from the CSMBS as dependents of their children who work in the public sector. Their motivation primarily concerns the delays and difficulties in reimbursement procedures for medical expenses from the CSMBS. Elderly

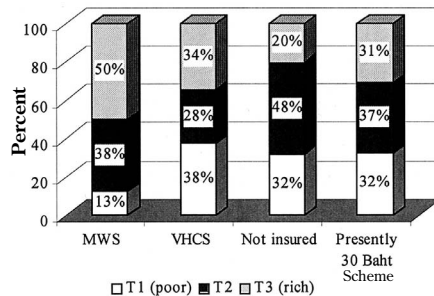


Fig. 5 Health Coverage in the Period Prior to UC for Those Currently Using the 30 Baht Scheme, by Income Strata (n=62)

9) These groups included senior citizens (over 60), children (under 12), the handicapped, veterans and their families, monks, etc.

10) The VHCS is a pre-paid public health insurance scheme supported by the MOPH. By buying a health card for 500 baht, a maximum of five members of the insured family can access medical care at registered facilities free of charge during a one-year period. The VHCS and the MWS were cancelled after UC was implemented in 2001.

**Table 5** Opinions of the Co-payment for the 30 Baht Scheme

Questions to All Respondents (n=80)		
What do you think about the amount of the co-payment of 30 baht per episode?	1. Unaffordable	2.5%
	2. Reasonable	79.7%
	3. Cheap	17.7%
Do you think the co-payment should be fixed at 30 baht or adjusted to be progressive according to the economic status of the patient?	1. Fixed	80.3%
	2. Adjusted	13.2%
	3. Either one is fine	5.3%
	4. Do not know	1.3%

whose children work in the public sector but live outside the village also complain that they rarely receive the money back from their children after the reimbursement of medical expenses. As the 30 Baht Scheme exempts elderly over 60 years old from paying the co-payment, so they therefore prefer to switch to the 30 Baht Scheme if possible. Of those who prefer not to switch (64%), most mention suspicions concerning the quality of the care provided with the 30 Baht Scheme and the satisfaction they have already experienced with their current coverage.

All respondents were asked about the 30 baht co-payment per episode, and most of them, about 80 percent, agree that it is reasonably affordable and need not be adjusted. They reason that the fixed amount is fair and equitable for everybody, no matter if that person is rich or poor.

#### IV-3. *Satisfaction with Health Care Received*

Of the respondents who had experienced receiving health care with the 30 Baht Card (n=55), satisfaction in seven different areas was rated from 1 (the most satisfactory) to 5 (the most unsatisfactory). The mean satisfaction rates are presented in Fig. 6.

In all areas, the level of satisfaction fell into the satisfactory level, with mean scores of less than 3, or the "tolerable" level. The respondents felt the most satisfied with the amount of the co-payment (rated 1.89) and least satisfied with the cost of transportation (rated 2.65) to a health facility, either a health centre or the Waengnoi district hospital. Twenty-five respondents reported that the costs ranged from 10 baht to a thousand baht, depending on the type of vehicle used and whether it had to be rented or hired from others.<sup>11)</sup> With respect to waiting times, doctors, medical instruments, nurses and health staffs, and prescribed medicine; the respondents were fairly satisfied (from 2.08 to 2.33).

#### IV-4. *Impressions of the Existing Health Schemes with respect to the Quality of Care and Benefits Provided*

Fig. 7 and Fig. 8 show the impressions of the respondents with respect to the quality of care and benefits expected when using health care under different health schemes. The respondents

11) There is no public or mass transportation running from the village to either the nearest health care center or Waengnoi district hospital.

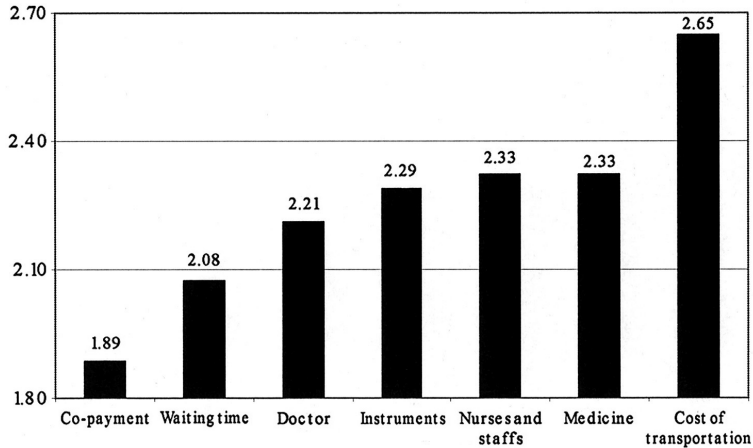


Fig. 6 Mean Satisfaction Rates: 1 (Very Satisfied) – 5 (Very Dissatisfied)

were asked to rank the four health schemes from the first rank (the best) to the fourth rank (the worst). Looking at the scheme that ranked first as shown in Fig. 7, more than half (51%) of the respondents consider the 30 Baht scheme to be the best. Another 40 percent selected the CSMBS, and 6 percent selected the SSS. Fig. 8 shows that the 30 Baht Scheme is rated on average as the best health scheme with the lowest mean score of 1.73; followed by the CSMBS (1.87), the SSS (2.68) and private health insurance (3.5). Most say their decision was due to the fact that with the 30 Baht Scheme the insured need not contribute income to a health care fund as with the SSS, and they also do not have to worry about inconveniences and delays in the reimbursement procedure, as with the CSMBS. As to the quality of care, many respondents agree and trust that at the same facility there would be no variation or discrimination by health providers with respect to patients using different health schemes.

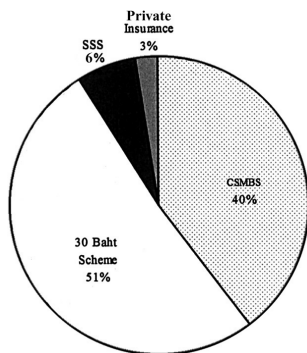


Fig. 7 Schemes Ranked as No. 1 (the Best)

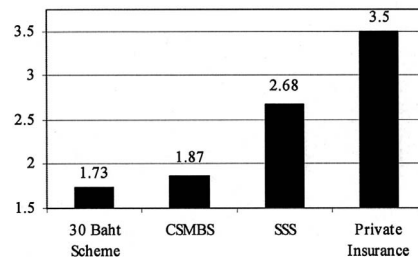


Fig. 8 Health Schemes Ranked by Mean Score: 1 (the Best) to 4 (the Worst)

#### IV-5. *Morbidity, Patterns of Health Care-seeking Behaviour and the Burden of Medical Expenses*

Irrespective of age, the sample group of villagers fell sick and needed outpatient (OP) care an average of 4.5 times per year and were admitted into the hospital for inpatient (IP) care 1.6 times per year. When classified by age group, the rates of OP morbidity varied in proportion with age, rising as age increased. Elderly over 60 years old are the group who fell sick and needed outpatient (OP) care the most. For illnesses that required admission to the hospital as an inpatient (IP), those under 30 were the group with the least risk, averaging about once a year, while the rates of admission for other groups were about 1.4 to 1.75 times that.

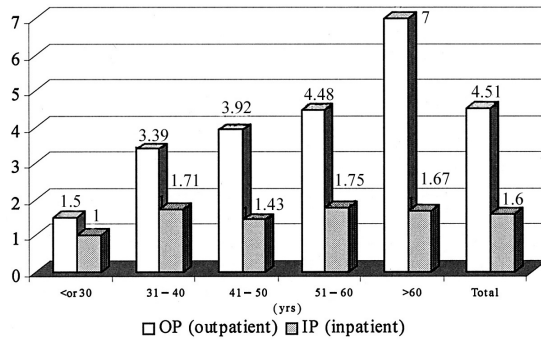
Figs. 10 and 11 show patterns of health care-seeking behaviour and the burden of medical expenses (only after UC was implemented) for both outpatient (OP) and inpatient (IP) care, respectively. The behaviour patterns presented are subjective for individuals before and after the UC period. The actual figures (for the post-UC period) were estimated from separate questions about health care utilisation that are shown together for comparison.

For OP care, there are significant changes in the subjective patterns of care seeking behaviour after UC was implemented. A larger proportion of respondents preferred to utilise OP care at the district hospital (42.5% to 68.4%), while fewer preferred private clinics (17.5% to 6.3%) where medical care expenses are fully charged and cannot be reimbursed using public health schemes. Self-medication is also reportedly less (20% to 6.3%). To some extent, these statistics are inconsistent with the actual patterns. It was found that 18.6 percent still visit private clinics for OP care, while only 46.1 percent visited Waengnoi hospital. Moreover, 8.4 percent reported using OP care at the Khonkaen provincial hospital in the province city. The five levels of medical care expenses shown in Fig. 10 are consistent with this care-seeking behaviour. About 42.5 percent of the respondents reported that their expenses were 100 baht to 500 baht, and 9.6 percent reported expenses over 500 baht.<sup>12)</sup> These groups are paying for OP care out-of-pocket at private clinics, private hospitals or they self-medicate, as shown by the actual patterns of care-seeking behaviour.

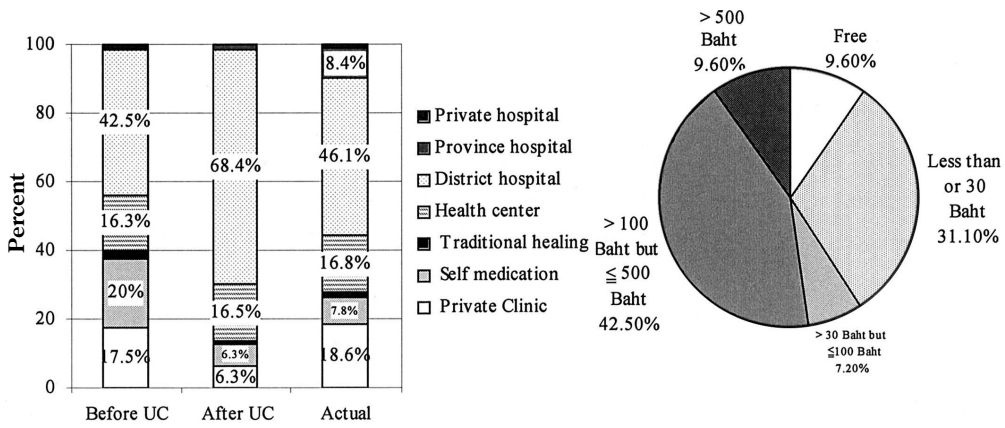
For IP care, shown in Fig. 11, reported patterns of health care utilisation also changed in

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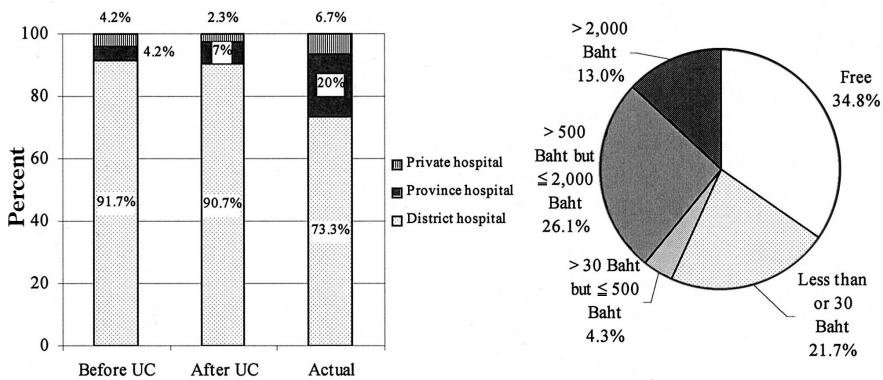
12) The respondents who reported medical care expenses over 30 baht per episode are believed to be: 1) Those who are covered by the CSMBS (21.25% of total respondents); 2) Those who utilized care at Phol hospital, not Waengnoi hospital. In the past, the villagers usually visited Phol hospital for health care as it is located a similar distance from the village as Waengnoi hospital but is easier to access by public transportation and considered equipped with better medical instruments. With the 30 Baht Scheme, they switched to compulsory registration with Waengnoi hospital, as registration is based on the "ruling district" not on "geography." Villagers who felt that 30baht-100baht was not that much money may still prefer to visit Phol hospital for care even if the full fee is charged. During the interview, it was not specified if "district hospital" referred to "Waengnoi" or "Phol" hospital; 3) Those who visited private clinics and private hospitals for the care or those who self-medicated and bought the necessary medicine at the drug store. This includes those who visited public hospitals or health centers, but who also bought additional medicine from drug stores; 4) Elderly with the CSMBS who were not reimbursed by their children. In the interview, "medical expenses" referred to fees paid by the respondents that were not reimbursed by any health scheme. Even if the money was reimbursed by the CSMBS but not sent back to the payers, it was counted within this category.



**Fig 9** Annual Averages for Times Sick (for Outpatient Care) and Times Admitted into the Hospital (for Inpatient Care)



**Fig. 10** Patterns of OP Care-seeking Behaviour (% of Respondents) and Expenses



**Fig. 11** Patterns of IP Care-seeking Behaviour (% of Respondents) and Expenses

interesting ways after UC was implemented, especially at provincial and private hospitals. As a percentage, more people preferred to be admitted for IP care at provincial hospitals (4.2% to 7%), while fewer preferred private hospitals (4.2% to 2.3%). However, the actual pattern shows some dissimilarities. Only 73 percent received IP care at Waengnoi district hospital, whereas 20 percent received care at provincial hospitals and 6.7 percent received care at private hospitals. Evidently in this village, UC has lessened the financial burden of high-cost medical treatments during IP care. More than one-third (34.8%) of the respondents who had been admitted for IP care reported that the care was free of charge. Another 21.7 percent paid 30 baht or less. The rest who paid more than 500 baht (about 40%) are those who voluntarily received care at private hospitals or public hospitals, either in the district or provincial hospitals, without exercising the right to which they are entitled by their health scheme.

Interesting data concerning the burden of health care expenses<sup>13)</sup> (for OP and IP care) across income groups is revealed by income strata. As a percentage of per capita annual income, those in the poor group (T1: 3.01%) were found to be shouldering the heaviest burden of OP expenses compared to the other groups (T2: 1.9%; T3: 0.79%). However, for IP care, the expenses for T1 seem better financially supported either via the 30 Baht Scheme or other health scheme compared to T2, whose IP expenses were as high as 3.34 percent of their annual income.

This data shows that even after UC was adopted, there are still inequities in the burden of health care expenses for patients across the socioeconomic strata. People with less ability to pay (T1 and T2) are paying proportionally more for health care compared to those in a better position to pay (T3). A significantly negative Pearson-correlation (-0.220<sup>14)</sup>) between "income" and "medical expenses for OP and IP care," with concentration curves<sup>15)</sup> of them

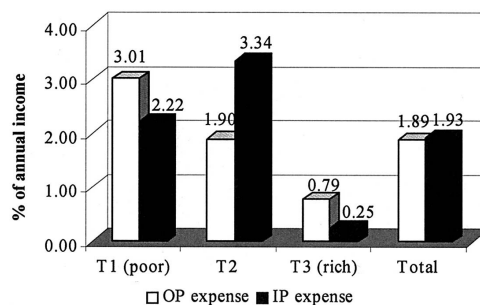


Fig. 12 Health Care Expenses (% of per Capita Income) by Income Strata

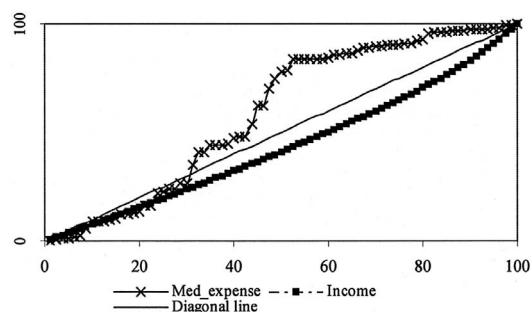


Fig. 13 Concentration Curves for Income and Medical Expenses

13) Health care expenses here are the sum of expenses over 12 months.

14) The correlation is significant at a 0.05 level (one-tailed).

15) The concentration curve (CC) for medical expenses plots the cumulative percentage of the number of ↗

plotted in Fig. 13, also corroborating the inequities<sup>16)</sup> in medical expenses.

IV-6. *Behaviour Changes among People Covered by the 30 Baht Scheme*

Of respondents who are presently covered by the 30 Baht Scheme, care utilisation at public health facilities, either at a health center or district hospital, is reported more often by the majority, about 79 percent of 62 respondents. Forty-four percent changed the hospital they usually visited for care, which was most in the cases from the Phol district hospital to the Waengnoi district hospital.<sup>17)</sup> People stated that in 10 cases of a minor illness, they would perform less self-medication (here, including “doing nothing”) after obtaining the 30 Baht card, from 4.6 times to 3.7 times.

The data above highlights the positive impact of the 30 Baht Scheme in improving the ability of patients to access medical care and the confidence in the quality of care provided. At the same time, it raises a concern about care over-utilisation by patients at health facilities, which may have emerged as a result of negligence in taking care of their personal health and too much dependency upon the health system, even for minor illnesses.

**Table 6** Behavior Changes among Those Insured by the 30 Baht Scheme (n=62)

Health Care Utilisation Behavior	Percentage of Respondents	
Utilise health care more often at formal facilities	78.7 %	
Changed the hospital used for care	44.3 %	
Self-medication (Reported)	Before	After
Of 10 illness episodes (minor illness)	4.61	3.36

Note: Only people insured by the 30 Baht Scheme

↙ respondents ranked by household income, starting from the poorest (x-axis), versus the cumulative percentage of medical expenses corresponding to each cumulative percentage on the x-axis (y-axis). If everyone bears exactly the same proportion of medical expenses, irrespective of socioeconomic status or income level, the concentration curve will be a 45° line, which is referred to as the “line of equality.” Conventionally, if the burden of medical expenses (or income) is heavier among the poor, the concentration curve will lie above the line of equality, and vice versa [World Bank *Quantitative Techniques for Health Equity Analysis: Technical Note 6*].

- 16) According to the concept of “equitability,” this is a situation in which “the share (or percentage) of medical expenses” of the total medical expenses for each socioeconomic individual (or strata) is not more than “the share of income” that the individual shares of the total income of the whole population. When medical expenses are absolutely “equitable,” the CC for medical expenses will be the same line as the CC for the income (or income distribution line). When it is “pro-poor equitable,” the curve will be lower than the income distribution line. When it is “weakly-inequitable,” the curve will be higher than the income distribution line but lower than the line of equality or diagonal line. (The income distribution line is usually located lower than diagonal line due to income inequalities). When it is “strongly-inequitable,” the curve will be higher than both the income distribution line and the line of equality.
- 17) Those who obtained their 30 Baht Card in the village are required to receive health care at designated health facilities, which are the Thangkwan Health Centre and Waengnoi District Hospital.



## V Summary and Conclusions

This paper examines people's views of the implementation of Thailand's Universal Coverage (UC) through the introduction of a public-assistance health scheme called "the 30 Baht Scheme." Field research using questionnaire and interview methods was conducted with 80 household representative respondents residing in Suntisuk village, a small village in a remote (Waengnoi) district of Khonkaen, in March 2005. Among the respondents, more than 75 percent were covered by the 30 Baht Scheme, while 22 percent were covered by the CSMBS and one percent by the SSS. Generally, even though the village is considered to be located in a rural area of the province, its people are quite well informed about the features and distinctions between the existing health schemes, especially the 30 Baht Scheme and the CSMBS. Most of them realise which health scheme they are covered by and have utilised health care by exercising the right to which they are entitled.

Most of the respondents had a very positive attitude toward the 30 Baht Scheme, especially in how it curtails medical expenses and improves health care quality. When they compared the 30 Baht Scheme to the health scheme previously used during the pre-UC period, a majority of more than 80 percent reportedly agreed that the 30 Baht Scheme is generally better. On a scale of 1 to 10, the average score for the performance of the scheme was 8.46. More than 30 percent of those who were covered by either the CSMBS or the SSS expressed a preference to switch to the 30 Baht Scheme if it were allowed. As for the fixed 30 baht co-payment per episode, about 80 percent of the sample group agreed that it is reasonably affordable and need not be revised.

In response to questions concerning satisfaction with care utilisation, the scores indicate satisfactory impressions about all aspects of the system, including the co-payment amount, waiting time, doctors, nurses and health staffs, medical instruments, medicine and transportation costs to health facilities. The co-payment amount and transportation costs scored the highest and lowest, respectively.

Individual respondent reports show that patterns of care-seeking behaviour for health care changed significantly after UC was implemented. A larger proportion of people seeking both OP and IP care preferred to visit public hospitals — either the Waengnoi district hospital or the Khonkaen provincial hospital, rather than private facilities — private clinics and private hospitals. With respect to medical expenses, the findings reveal inequitable burdens on people across income strata. Those less well-off still shoulder larger financial burdens from medical expenses compared to those who are better off.

People covered by the 30 Baht Scheme appear to be utilising health care more often and, consequently, practise less self-medication (including negligence) when they experience a minor illness. People seem more concerned about their health, and they access medical care more easily at formal health facilities when care is needed. This brings us to a concern about care over-utilisation that may emerge and cause problems such as increased workloads for health care providers and financial deficiencies among health facilities con-

tracted with the 30 Baht Scheme.

The budget for the 30 Baht Scheme is allocated to contracted health facilities on a capitation basis. The total amount each facility receives is based upon the number of people registered at the facility and the “capitation amount” calculated by the MOPH (1,396.3 baht in 2005). The capitation method is considered to be a “close-ended” payment method, requiring health facilities to carefully manage their budgets in order to cope with their expenditures. Since the cost of health curatives are obviously much higher than the cost of health promotion and prevention (PP), health facilities are more encouraged to promote better health PP than they were in the pre-UC period. At the national level, this has also been declared as one of the UC’s strategies, called the “Sarng-Nam-Sorm” strategy (health promotion and prevention ahead curative health) of the “Healthy Thailand” project, in order to improve health conditions for the Thai people and reduce the number of patients at health facilities, with the hope of cutting down national as well as personal health expenditures. In addition, the Sarng-Nam-Sorm strategy will hopefully help to relieve the problem of care over-utilisation at health facilities if it is successfully done to motivate people to be more concerned about their health and learn how to practice self-primary care for minor illnesses before going for care at health facilities.

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