CHAPTER 2

Overview of Health Insurance Systems

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2.1 Introduction

The policy of charging for drugs and medical services in public health facilities was established in the Thai health systems in 1945. An informal exemption mechanism for the poor, at the discretion of the health worker, was implemented along with user charges. Informal exemption has gradually evolved into a systematic mean-testing scheme based on household income. A Low Income Card was issued every three years since 1981 for households below a defined poverty line.

Government employees and retirees and their dependents including parents, spouse and not more than three children (less than 20 years old) are generously provided with medical care coverage. An employer liability Workmen's Compensation Scheme for work related illness, injury and death compensation was the foundation for the recent development of tripartite Social Insurance for formal sector private employees for non-work related illnesses, maternity, disability and death compensation. Finally, a voluntary community based health insurance scheme has now developed into a publicly subsidized voluntary Health Card Scheme. Voluntary private insurance has long existed in Thailand, providing coverage to the better-off groups.

Various social and health protection schemes developed at different paces resulting in variations in terms of benefit packages, provider payment methods, financing sources, level of government subsidy, efficiency and quality of care. However, by 1996, 30 percent of the population were still uninsured [(1)] (the number of uninsured varies due to different estimation methods). Current policy discussions focus on efficiency improvement, reduction of inequity within the insured population, and the extension of insurance coverage to the entire population.

This chapter provides an overview of insurance systems in Thailand, describing its principle, objective, trends of coverage, key characteristics and weaknesses. Characteristics of the uninsured will be highlighted. Based on these analyses, recommendation on reform was proposed to achieve greater efficiency, equity and universal coverage.

2.2 Overview of the health insurance schemes

Health insurance provides two basic functions: access to effective health care services when needed, and effective protection of family income and assets from the financial costs of expensive medical care [2]. Tax-based welfare schemes are also considered health insurance. Supachutikul [3] classified various health insurance schemes in Thailand into four categories accordingly to their nature and objectives.

2.2.1 Medical Welfare Scheme (MWS)

This scheme provided free medical care for the indigence for example the poor, the elderly and children up to secondary school and the disabled. It also extends to monks, community leaders, health volunteers and their family.

2.2.2 Civil Servant Medical Benefit Scheme (CSMBS)

This is a fringe benefit to government employees and dependents to compensate low public salary.

2.2.3 Compulsory Social Insurance

- Social Security Scheme (SSS) - a tripartite contribution scheme by the employer, the employee and the government ensures health security for formal sector employees.
- Workmen Compensation Scheme (WCS) - an employer liability scheme to protect the employee from work-related injuries, illnesses and funeral grants.
- Traffic Accident Insurance - ensures access to care by traffic accident victims through compulsory premium paid by all car owners to private insurance firms [4].

2.2.4 Voluntary Schemes

- Private Health Insurance - a voluntary risk related premium contribution covers mainly the better off [5].
- Government Health Card Scheme (HCS) - a voluntary alternative for the uninsured, e.g. rural informal sector workers who are not eligible for low income scheme, the self-employed and employee in small firms of less than 10 employees who are not eligible for the social insurance scheme [6].

Several small scale community financing, saving schemes provide limited health benefits to its members. Payments are made retrospectively to members at the end of the year according to the funds available. Self-help funeral grants are more common than health benefits. The chronological events of various scheme developments are summarized in Table 2.1, showing a wide gap of discrepancies.

Table 2.1 Chronological events of the health insurance development in Thailand.

Year	Important event	SW	FB	CI	VI
1929	Private insurance business				✓
1954	First Social Security Act (but not implemented)			✓	
1974	Workmen Compensation Fund			✓	
1975	Free medical care for the Poor	✓			
1978	First private health insurance company				✓
1980	Royal Decree on CSMBS		✓		
1981	First issuance of Low Income Card	✓			
1983	Maternal and Child Health Fund (phase I)				✓
1984	Health Card Project (phase II)				✓
1990	Social Security Act covered enterprises with 20 and more employee			✓	
1991	Health Card Project - insurance based pilot (phase III)				✓
1992	Free medical care for elderly	✓			
1993	Traffic Accident Victim Protection Insurance			✓	
1994	Social Security Act, extension to enterprises with 10 or more employee			✓	
1994	Health Card Scheme (phase IV), equal matching fund provided by government, reinsurance policy and cross-boundary card				✓
1994	Health Card extension to community leader and health volunteer, full government subsidy		✓		
1994	Medical Welfare Scheme, expansion of the free medical care for the poor to cover other indigent groups, elderly and children up to 12 years	✓			
1998	New financial regulation for the Medical Welfare Scheme: management by national and provincial committees, per capita budget allocation to provinces, introduce reinsurance policy for high cost care by using Diagnostic Related Groups and global budget.	✓			
1998	CSMBS: introducing copayments by CSMBS beneficiaries, only drugs quoted as essential drugs are reimbursed, limited hospital stays in private room and board.		✓		
2000	The Social Security Scheme expanding to cover old age pension and child benefits			✓	

Source: Adapted from Supachutikul A, 1995 [3].
SW = Social Welfare FB = Fringe Benefit CI = Compulsary Insurance VI = Voluntary Insurance

2.3 Trend of coverage

The Health and Welfare Survey conducted by the Office of the National Statistics [1, 7, 8] showed an increasing trend of insurance coverage from 33.5 percent in 1991 to 60 percent in 1999. When adjusted for coverage by children under 12 and the elderly, the insured figures were higher (Table 2.2).

Rapid MWS expansion was due to extension to the elderly and children under 12. This accounts for 71 percent of the total increase in coverage during 1991-1995. Expansion of the Health Card Scheme was in its fourth phase (1993-1998) due to extensive TV and radio advertising and sales promotion campaigns. This could pave the way towards universal coverage. During the 1997 economic crisis, the demand for health cards increased significantly among the uninsured who could not afford out of pocket for health care and the laid off social security workers who also lost social security protection.

Table 2.2 Percent population coverage and trends, 1991, 1996 and 1999.

Schemes	1991	1996	1999	1996*	1999*
1. Medical Welfare Schemes	12.7	12.3	12.4	29.5	22.5 (32.1)
2. Government employee scheme					
● CSMBS	13.2	11.3	7.8	11.3	7.8
● State enterprise	2.1	1.4	1.1	1.4	1.1
3. Social Security including WCS and employer welfare	0	5.5	7.1	5.5	7.1
4. Voluntary insurance					
● Voluntary Health Card	1.4	13.2	28.2	13.2	28.2 (18.6)
● Private insurance	3.1	1.2	1.4	1.2	1.4
5. Others	0.9	1.1	1.7	1.1	1.7
Insured	***33.5***	***46***	***59.8***	***63.2***	***69.9***
Uninsured	***66.5***	***54***	***40.2***	***36.8***	***30.1***
Total	100	100	100	100	100

Source: Office of the National Statistics, Health and Welfare Survey 1991, 1996, and 1999 [1, 7, 8].

* Adjusted figure of NSO by including children and the elderly who reported as uninsured in the Medical Welfare Scheme. Figure in parenthesis shows the coverage when removing all children and elderly to the MWS.

2.4 The uninsured characteristics

In this part, we describe characteristics of the uninsured at great length using the MoPH provincial health survey [9]. In 1996, between 26 percent and 31 percent of households in each income bracket were uninsured; 28 percent of the poorest households (monthly income less than 2,000 Baht), who should have been covered by MWS, but were actually not insured [9]. Among the 16,659 uninsured persons sampled by the survey, 27 percent were in the lowest monthly income bracket of less than 2,000 Baht (Table 2.3).

Table 2.3 Household monthly income for insured and uninsured, 1996.

Monthly income (Baht)	Uninsured		Insured		Total		% uninsured
	Number	%	Number	%	Number	%	
1. ≤ 2,000	4,451	27	11,672	32	16,123	30	28
2. 2,001-8,000	9,847	59	18,446	51	28,293	53	35
3. 8,001-15,000	1,333	8	3,693	10	5,026	9	27
4. 15,001-20,000	197	1	565	2	762	1	26
5. 20,001 +	340	2	859	2	1,199	2	28
6. unknown	491	3	1,093	3	1,584	3	31
Total	16,659	100	36,328	100	52,987	100	31

Source: Ministry of Public Health, 1997 [9].

Among the 16,659 uninsured persons, 80 percent of heads of households had a primary school education (Table 2.4). Only 13 percent of university graduate household heads were uninsured, compared to 33 percent of primary school educated. Table 2.5 gives a breakdown of the uninsured population by occupation of the household heads. Farmers took the greatest share of the total uninsured. Civil servants were least likely to be uninsured (5 percent), whereas transport operators and traders had

Table 2.4 Education level of head of household for insured and uninsured, 1996.

Education of household head	Uninsured		Insured		Total		% uninsured
	Number	%	Number	%	Number	%	
1. Primary level	13,332	80	27,336	75	40,668	77	33
2. Secondary level	1,644	10	3,666	10	5,310	10	31
3. Vocation	403	2	1,324	4	1,727	3	23
4. University	203	1	1,301	4	1,504	3	13
5. Uneducated	958	6	2,415	7	3,373	6	28
6. Unknown	119	1	196	1	315	1	38
Total	16,659	100	36,238	100	52,897	100	31

Source: Ministry of Public Health, 1997 [9].

Table 2.5 Occupation of head of household for uninsured and insured, 1996.

Occupation	Uninsured		Insured		% of workforce uninsured
	Number	% of uninsured	Number	% of insured	
1. Farmer	7,896	49	18,654	51	30
2. Civil servant	198	1	3,658	10	5
3. Transport operator	564	3	716	2	44
4. Worker	904	6	2,000	6	31
5. Traders	2,849	18	3,632	10	44
6. Other	3,063	19	4,789	13	39
7. Unemployed	613	4	2,804	8	18
8. Unknown	33	0	75	0	31
Total	16,120	100	36,328	100	31

Source: Ministry of Public Health, 1997 [9].

the highest proportion of uninsured (44 percent).

The uninsured is required to pay all medical bills in full in both public and private hospitals. In public hospitals, an exemption mechanism through social workers is available for those unable to pay. An uninsured patient who cannot afford a bill of 7,622 Baht per admission could damage the household financial security [10], this accounts for 18.6 percent of the household annual income. They coped with medical bills by borrowing from either inside or outside the family network and could easily fall into debt traps. Another study showed that poverty (defined as household income eligibility for Low Income Card) and uninsured status were the major factors inhibiting access to antenatal care [11] (Table 2.6).

A self-explanatory Table 2.7 describes characteristics of insurance schemes in regard to scheme nature, population coverage, benefit package, and financing.

Table 2.6 Insurance status and maternal and child health profiles.

	Urban						Rural						All group
	Uninsured			Insured			Uninsured			Insured			
	Poor	Non-poor	Total	Poor	Non-poor	Total	Poor	Non-poor	Total	Poor	Non-poor	Total	
1. % without ANC	9	4	5	1	1	1	3	0	1	1	1	1	1
2. % < 4 ANC visits	43	28	32	12	13	13	41	34	36	18	17	17	21
3. % prenatal risk	34	23	26	29	27	27	26	19	21	22	20	21	23
4. % low birth weight	18	10	12	14	8	9	12	9	10	9	6	7	9
Number of sample	68	208	276	149	499	648	125	253	378	377	564	941	2,240

Source: modified from Wongkongkathep S. A three-day census of all deliveries in April 1999.

Table 2.7 Characteristics of health insurance and welfare schemes in Thailand, 1999.

Characteristics	I. Medical Welfare	II. CSMBS	III. SSS	IV. WCS	V. Health Card	VI. Private insurance	The Uninsured
I. Scheme nature	Social welfare	Fringe benefit	Compulsory	Compulsory	Voluntary	Voluntary	Na
Model	Public integrated model	Public reimbursement model	Public contracted model	Public reimbursement model	Voluntary integrated model	Voluntary reimbursement model	Voluntary out of pocket model
II. Population coverage, 1999 HWS	The poor, elderly and children under 12 years old, secondary school student, the disabled, veteran, monks.	Government employee, pensioners and their dependants (parents, spouse, children)	Private formal sector employee, > 10 worker establishment	Private formal sector employee, > 10 worker establishments	Non-poor households not eligible for Medical Welfare Scheme, community leader and health volunteer family.	Better off individuals	The urban, rural marginal poor, traders, self employed, employee in non-formal sectors.
Population 1999 HWS, million	19.8	5.5	4.36		11.50	0.83	18.58
% coverage	32.1%	8.9%	7.1%	Same as SSS	18.6%	1.1%	30.1%
III. Benefit Package							
● Ambulatory services	Only public designated	Public only	Public & Private	Public & Private	Public (MoPH)	Generally not covered	-
● Inpatient services	Public only	Public & Private (emergency only)	Public & Private	Public & Private	Public (MoPH)	Mainly private hospitals chosen	-
● Choice of provider	Referral line	Free choice	Contracted hospital or its network, registration required.	Free choice	Referral line	Free choice	Free choice
● Cash benefit	No	No	Yes	Yes	No	±	No

Table 2.7 Characteristics of health insurance and welfare schemes in Thailand, 1999. (cont.)

Characteristics	I. Medical Welfare	II. CSMBS	III. SSS	IV. WCS	V. Health Card	VI. Private insurance	The Uninsured
● Conditions included	Comprehen-sive package	Comprehen-sive package illness, injuries	Non-work related injuries	Work related illness, injuries	Comprehen-sive package	Depends on premium	-
● Conditions excluded	15 conditions	No	15 conditions	No	15 conditions	Severe illness, pre-existing conditions, depends on policy	-
● Maternity benefits	Yes	Yes	Yes	No	Yes	Possible	-
● Annual physical check-up	No	Yes	No	No	Yes	Possible	-
● Prevention, health promotion	Very limited	No	Health education, immunization	No	Yes	No	-
● Services not covered	Private bed, special nurse, eye glasses	Special nurse	Private bed, special nurse	No	Private bed, special nurse, eye glasses	Depends on policy and premiums	-
IV. Financing							
● Source of funds	General tax	General tax	Tripartite 1.5% of payroll each (reduce to 1% since 1999)	Employer, 0.2-2% of payroll with experience rating	Household 500 Baht + tax 1,000 Baht	Household, or employer in addition to social insurance	Households
● Financing body	MoPH	MOF	SSO	SSO	MoPH	Private companies	-
● Payment mechanism	Global budget	Fee for service	Capitation	Fee for service	Proportional reimbursement among 1ry, 2ry, 3ry care levels	Fee for service with ceiling	Fee for service
● Copayments	No	Yes: IP at private hospitals, IP private limits only life for threatening care	Maternity, emergency services, if beyond ceiling	Yes if beyond the ceiling of 30,000 Baht	No	Yes if beyond the ceiling, depends on policy and premium	-
● Expenditure per capita 1999 (Baht)	> 363 + additional cross subsidy by public hospitals	2,106	1,558	182	534 + additional subsidy by public hospitals	Na	Na

Table 2.7 Characteristics of health insurance and welfare schemes in Thailand, 1999. (cont.)

Characteristics	I. Medical Welfare	II. CSMBS	III. SSS	IV. WCS	V. Health Card	VI. Private insurance	The Uninsured
● Per capita tax subsidy 1999	363 + additional subsidy	2,106	519	Administrative cost of WCS office	250	Through income tax exemption for private insurance premium, magnitude unknown	Through public hospital subsidized prices. Magnitude unknown

2.5 Problems of the health insurance

The health insurance system, characterized by fragmentation, duplication and inadequate coverage in some schemes, cannot achieve health systems goals of efficiency and equity. It does not allow collective financing to exert its monopsonistic purchasing power and send the right signals to health care providers towards efficiency. Fee for service, a dominant mode of provider payment, exacerbates cost containment problems, as seen by faster health expenditure growth than GDP growth, even during recession periods [12]. With the lack of effective primary care, most of the poor are taken care of by hospitals which are expensive, have long waiting lines and unsatisfactory services.

Inequity was demonstrated by inequitable per capita tax subsidy, favoring CSMBS against Low Income Scheme, and the gap in the benefit package. However, the cross subsidy mechanism in public hospitals results in a smaller gap of net resources consumption by CSMBS and low income patients.

2.5.1 Medical Welfare Scheme

Targeting the poor is the main problem [13, 14] due to seasonal variation and difficulty of income assessment. Exemption through the hospital social work mechanism might not function well and could be stigmatized. Allowing the community [15] to identify the poor has gradually improved the situation. The community themselves have the ability to filter the poor and specify families who are not poor. MWS suffers from a comparatively stringent budget and hospitals are not accountable or willing to provide prompt and decent care [16].

2.5.2 CSMBS

The scheme has three inherited problems of inefficiency (reflected by unnecessary admission and longer hospital stay), cost escalation (real term increase of 14 percent per annum during 1988-1997) and inequity of per capita budget subsidy [17]. All players have no cost concerns; public hospitals have incentives to over-charge in order to cross subsidize their MWS patients, for profit private hospitals had motives to overcharge the scheme. When beneficiaries were faced with no price tag, they were not cost conscious and took it for granted. Problems were compounded by the fact that the Department of Comptroller General was neither capable to counter-act overcharging nor able to introduce a reasonable policy intervention [18].

2.5.3 Social Security Scheme

The strength of capitation is cost containment capacity [19, 20]. However, the cost quality trade-off has subsequently become a significant problem, especially when workers have not exercised their right to choose the provider with whom they registered [21]. In addition, they are unlikely to have full information on clinical quality of care when they exert rights to choose contractor hospitals. In fact they do not know which hospitals to choose. Health benefit is linked with employment and terminated when employment ceases, although a six month grace period is granted (extended to one year after the 1997 crisis). The provision on voluntary enrollment by ex-social security workers was not fully implemented by the Social Security Office, for fear of adverse selection and the financially non-viable.

2.5.4 Health Card Scheme

If the sick and potentially sick over-represent membership, adverse results are foreseeable [22]. This increases the average cost per enrolled person. The average cost per card (2,700 Baht) per annum does not match the revenue from the card sale (500 Baht) and subsidy (1,000 Baht). Half of the costs incurred are outside the district health system. If the benefit package covered only district health services, the revenue could cover the cost.

In summary, the poor are more or less protected by MWS even though targeting problems still exist. The marginally poor are not entitled to free health care cards but would generally be partially or totally exempted from large inpatient bills in public hospitals. They could easily fall into a debt trap through borrowing before presenting themselves to the social workers, especially in the case of catastrophic illness.

The CSMBS consumed more resources than any other group. With its fee-for-service reimbursement model, neither CSMBS beneficiaries, nor public or private providers are concerned with costs or efficiency. The capitation payment system in SSS admirably contained costs, but cost-quality trade off needs further scrutiny. Social Security has a high potential for coverage extension to dependents, non-formal workers and the self- employed. The voluntary Health Card Scheme has a limited capacity for coverage extension due to its voluntary nature and financial non-viability.

2.6 Recent reform

The Ministry of Finance and the Ministry of Public Health started reforming the **MWS** in 1998 by setting up a regulatory framework, improving accountability, decentralizing funds management, making the budget setting transparent and equitable and strengthening the primary care network. The budget is allocated to provinces according to the number of registered beneficiaries, weighted by health need factors. A re-insurance premium of 2.5 percent of the budget is deducted by the MoPH, and earmarked to pay for high cost care[1] and some special services [16, 23].

Assessments of the **CSMBS** copayment (introduced in 1998 [24]) found significant cost savings of 8 percent for an effective seven months of the interventions in 1998. In 1999, when the intervention took full effect, a cost saving of 21.7

[1] The criteria for high cost care is patient whose DRG relative weight greater than 2.5

percent was observed, mainly due to decreased inpatient expenditure. There was a 50 percent reduction in expenditure after the termination of private inpatient care [25].

The **SSS** has the highest potential for coverage extension of health benefits, especially to spouses and dependents, with a minimal additional contribution requirement. In addition, the scheme has the potential to extend coverage to the self-employed on a compulsory basis whereas voluntary membership suffers from significant adverse selection problems. This brings the uninsured to a cost-effective scheme, and boosts the cost containment ability in the long term. Other reform initiatives that have been planned or recently introduced include the improvement of the Scheme quality monitoring capacity, improving the information available to workers for their choice of contractor hospitals, and developing primary medical care.

After the reform in 1994, there were minor changes in the Voluntary Health Card [26]. The MoPH improved the targeting by eligibility termination for those who preferred to use private room and board. To combat adverse selection, a qualifying period before eligibility for services was extended from 15 to 30 days. In addition, reimbursements for cross-boundary care were paid by the provincial fund to prevent misuse of the cross-boundary card.

2.7 Future reform direction

Increasingly, evidence and intensive dialogues among key stakeholders guided reform decisions. There is a general consensus on health systems goals of efficiency, quality and equity and reforms direction towards universal coverage for the whole population. Different provider payment methods sent distinct signals to hospitals and physicians who are resource commanders for efficiency and quality. Lessons from the ongoing reforms in various schemes [27] could serve as a solid platform for future direction. The content of reform and the process to incorporate participation from civic societies and concerned parties are equally important for a successful, acceptable and sustainable reform.

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