THAILAND:
HEALTH MANAGEMENT AND FINANCING STUDY PROJECT
ADB #2997-THA

HEALTH FINANCING IN THAILAND
SUMMARY REVIEW AND PROPOSED REFORMS

Management Sciences for Health
Health Systems Research Institute, Ministry of Public Health

May 1999

Authors for this report are (in alphabetical order): Dayl Donaldson, MPH, MA, ScD; Supasit Pannarunothai, MD, PhD; and Viroj Tangcharoensathien, MD, PhD

ISBN-974-299-015-8

FORWARD

Most of the content of this summary report is taken from a more detailed, technical document: Health Financing in Thailand, Technical Report, May 1999. This detailed report is available upon request from: the Health Reform and Financing Program, Management Sciences for Health, 165 Allendale Road, Boston, Massachusetts, 02130. In this summary report data from the earlier report is summarized and additional material has been added on decentralization of health financing, and universal coverage.

The authors would like to thank the Ministry of Public Health's Working Group on Health Financing, Dr. Anne Mills of the London School of Hygiene and Tropical Medicine, Dr. Aviva Ron of the World Health Organization Regional Office in Manila, and Dr. Indu Bhushan of the Asian Development Bank for their comments on the earlier technical report.

This report reflects the information collected and analyzed by the authors. Remaining errors in fact are the responsibility of the authors. The findings and recommendations in this report do not necessarily reflect those of the reviewers, individuals in the Ministry of Public Health in Thailand, nor of the Asian Development Bank.

TABLE OF CONTENTS

TABLE OF TABLES

TABLE OF FIGURES

CHAPTER I
BACKGROUND INFORMATION ON THE CURRENT SYSTEM OF HEALTH SERVICES FINANCING

A. NATIONAL HEALTH ACCOUNTS

In 1994, a National Health Accounting exercise estimated that 3.6 percent of GDP was spent by the public and private sector for health services. In 1994, this amounted to 128.3 billion baht, or 215 bhat per capita (~US$ 8.50/capita). The same accounting exercise estimated that about 49 percent of health financing came from public sector sources, and that 51 percent came from private sector contributions.

The allocation of public and private expenditure between capital and recurrent expenditure, and to different programs appears in Table 1.1. The MOPH is responsible for 32 percent of total (capital and recurrent) spending for health. The MOPH is responsible for 60 percent of total capital expenditure, but only 27 percent of total recurrent expenditure. The bulk of MOPH recurrent expenditure goes to financing public sector hospitals and health centers. Other Ministries, most notably the Ministry of Finance and Ministry of Labor and Social Welfare that manage insurance programs for civil servants and those employed in private sector firms, finances 14 percent of total (capital and recurrent) spending for health. These Ministries financed a negligible percent of capital expenditure and 16 percent of recurrent expenditure. Two-thirds of recurrent expenditure went to public sector health institutions and one-third to private health institutions. Local government expenditure comprises only 4 percent of total (capital and recurrent) health expenditure, however the bulk of local government recurrent expenditure was used to support public health programs.

Table 1.1: *Allocation of Recurrent and Capital Health Expenditure by Source of Financing, Thailand, FY 1994*

	Consumption Expenditure (%)				Consump-tion Exp. (baht million)	Capital Expendi-Ture (baht million)	TOTAL
Fin. Agency	Admin	Public Inst	Private Ins	Pub Hlth Programs			
MOPH and Other Ministries	15%	58%	0%	27%	29,256	12,263	41,519
Other Central Govt	8%	61%	30%	1%	17,282	136	17,418
Local Govt	16%	3%	0%	82%	5,289	285	5,574
Households	0%	34%	66%	0%	49,676	7,265	56,941
Other Private	18%	20%	55%	7%	6,364	489	6,853
TOTAL	7%	42%	38%	12%	107,867	20,438	128,305

Source: complied from Tangcharoensathien, V. (unpublished table).

Households' expenditures for health account for 44 percent of total (capital and recurrent) health expenditure. Households are responsible for 36 percent of total capital expenditure, and 46 percent of total recurrent expenditure. Approximately two-thirds of recurrent expenditure goes to private sector providers, with the remaining one-third spent for care from public sector health institutions. Private insurance accounts for the remaining expenditures.

Considering only recurrent expenditure, only about 4 percent goes to administration, 42 percent goes to public sector health institutions, 38 percent to private sector health providers, and 12 percent to public health programs.

B. TRENDS IN MOPH EXPENDITURE

Given the importance of the MOPH capital and recurrent expenditures, data are provided in Table 1.2 to trace trends in the allocation of these expenditures over the period from 1990 – 1998.

Table 1.2: *Allocation of MOPH Budget between Capital and Recurrent Inputs (billion baht), Thailand, 1990 –1998*

	1990	1992	1994	1996	1998
Salaries (% of RC)	58.5%	55.6%	55.9%	57.2%	54.2%
Other RC (% of RC)	41.5%	44.4%	44.1%	42.8%	45.8%
Total RC – Nominal	13.279	19.125	28.321	36.470	45.218
% of Total	85.0%	83.0%	78.0%	74.2%	76.9%
Tot. RC – Real '96 B	18.650	23.466	29.741	36.470	41,561
Construction – PH (% of K)	14.7%	24.4%	14.5%	23.4%	39.7%
Construction – DH (% of K)	47.2%	31.8%	20.9%	14.3%	10.3%
Construction – HC (% of K)		12.0%	34.4%	7.0%	11.5%
Equipment (% of K)	38.1%	31.8%	30.2%	55.3%	38.5%
Total K – Nominal	2.348	3.899	7.987	12.699	13.564
% of Total	15.0%	18.0%	22.0%	25.8%	23.1%
Tot. K – Real '96 B	3.298	4.784	8.390	12.699	12.470
TOTAL NOMINAL	15.627	23.024	36.308	49.169	58.782
TOTAL '96 REAL	21.948	28.250	38.139	49.169	54.027

Source: actuals from Bureau of Policy and Planning, MOPH .
Note: Wilbulpolprasert, Tangcharoensathien, and Lertiendumrong estimated that total real expenditures for the MOPH declined slightly in real terms from 1996 to 1998.

The above table shows that the total budget of the MOPH rose in both nominal and real terms over the period 1990 to 1998. The increase in real terms over the period is 153 percent. Real recurrent expenditure increased by 123 percent, and real capital

expenditure by 278 percent. As a consequence of the rapid growth of capital expenditure it took up an increased share of total health expenditure. Salaries comprised from 55 to 59 percent of recurrent expenditure – an appropriate balance between salaries and other recurrent expenditure. Capital expenditures show a leveling off between 1996 and 1998 due to budget cuts following the economic crisis. Capital expenditures during the first part of the decade show priority was given first to construction of district-level facilities (DH and HC), second to equipment, and last to construction of provincial hospitals. However, by 1998, the allocation of capital expenditure shifted to equipment and provincial hospitals – possibly reflecting priority for more high-tech medical care at the expense of health services to rural areas.

Trends can also be analyzed in the MOPH's budgetary allocations to different services and programs (see Table 1.3). The data in this table suggest that the distribution of the health budget to different services and programs has remained quite constant over time. This is rather surprising given the large expansion of health infrastructure during the 7th Plan. It would be assumed that the curative budget share would increase[1]/. The advent of AIDs may be reflected in the increased percentage shares for health promotion and disease control programs. Allocations to HRD and Training both decline, having implications for improvement of HRH distribution to rural areas through improved training opportunities.

Table 1.3:*Percent Allocation of MOPH Budget to Different Services and Programs, Thailand, 5th to 7th Plans*

Type of Expenditure	5th Plan (1982-1986)	6th Plan (1987-1991)	7th Plan (1992-1996)
Administration %	6.65	7.31	5.50
Curative %	58.54	57.91	55.53
Health Promotn %	17.25	16.13	19.29
Disease Control %	10.12	10.97	11.76
Addict Control %	0.52	0.53	0.60
Rehabilitation %	0.24	0.26	0.33
HRD %	3.62	2.93	2.96
Training %	1.15	1.12	0.54
PHC %	0.79	1.70	2.23
Consmr Protectn %	0.89	0.87	0.95
Research %	0.23	0.27	0.33
TOTAL (B million)	44,508.98	74,253.70	223,792.39

Source: adapted from Tangcharoensathien, V. (2541).

[1] / The increase in recurrent expenditure expected from expansion of the capital stock of the MOPH might be financed through higher user fees. *The existence of any link between rapid cost inflation for the CSMBS and SSS programs, as well as in user fee schedules, and the increase in capital investment during the past 15 years, should be investigated.*

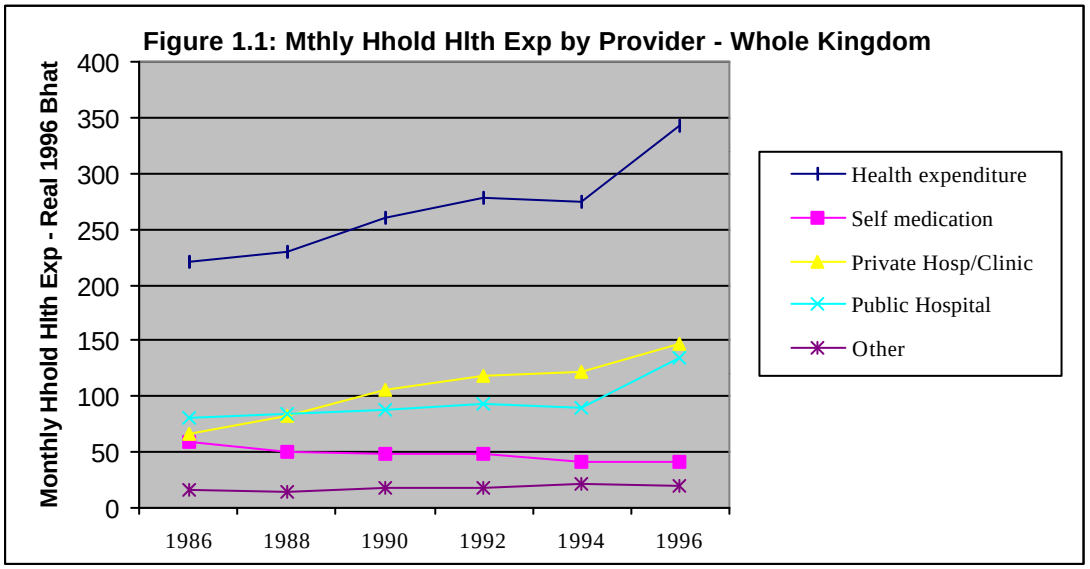
C. TRENDS IN HOUSEHOLD EXPENDITURE FOR HEALTH

Data collected from household income and expenditure surveys carried out by the National Statistics Office (NSO) were collected and reviewed for the more recent period between 1986 to 1998. These data were converted into real 1996 baht and analyzed for each region in two ways: 1) household expenditures by source of care, and 2) household expenditures by employment class of the head of the household.

This type of analysis is useful for several reasons. First, it gives an approximation of the amount of financial resources that households are able and willing to spend for health. Second, it provides a picture of changing patterns of health seeking behaviors from self-care to public sector care to private sector care. Third, comparisons of expenditures from different regions of the country can assist with the targeting of government subsidies. Finally, comparison of expenditures by different employment groups would help in setting the contribution that different households could make for health insurance.

1. Trends in Expenditure by Source of Care

Data for the whole country, and for each of the 5 regions, for the period 1986 to 1996, support the earlier findings that the Thai population is moving away from self-treatment to other sources of care. For the whole country, the real decline in self-treatment expenditure was 30 percent, down to 41 baht per household per month in 1996. On the other hand, expenditure for treatment by public hospitals increased in real terms by 66 percent to 134 baht per household per month in 1996. Expenditure for treatment by private hospitals or clinics increased in real terms by 125 percent to 148 baht per household per month. Expenditures for other sources of care, e.g. doctor's fees, dentist's fees, and eyeglasses, increased by 25 percent in real terms to 20 baht per household per month in 1996. Overall, monthly household health expenditure from all sources increased by 55 percent to 343 baht in 1996 (see Figure 1.1).



2. Trends in Level of Expenditure by Employment Class

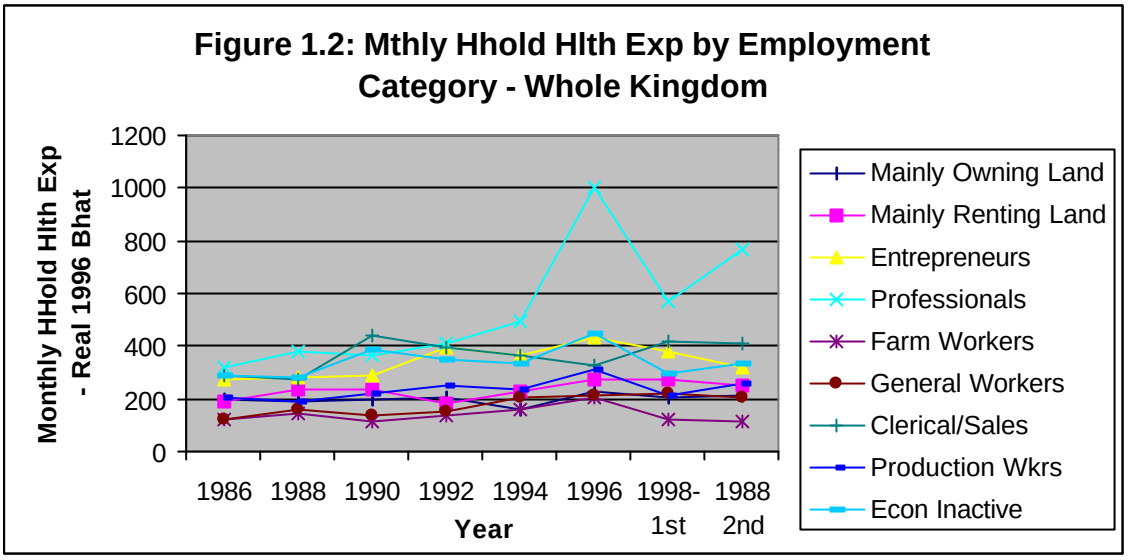
An analysis was carried out of the changes in household expenditure for health by the employment status of the household head between the years 1986 to 1998 (2nd qtr). The employment categories are:

- Households mainly owning land (24 percent of households in 1996)
- Households mainly renting land (4 percent)
- Entrepreneurs (15 percent)
- Professionals (6 percent)
- Farm Workers (6 percent)
- General Workers (3 percent)
- Clerical/Sales Workers (13 percent)
- Production Workers (16 percent)
- Economically Inactive (13 percent) [2]/.

The analysis of health expenditure by employment category for the whole Kingdom found that all categories of employment had real increases in their levels of monthly expenditure to health care over the period from 1986 to 1996. These increases ranged from 11 percent for clerical/sales workers to 212 percent for professionals. Of note is the relatively high percent of increase in expenditure for "economically inactive" households, especially as this group already had a high level of monthly household health expenditure – 445 baht in 1996 (as compared to the national average of 360 baht per household). However, the picture changes when analyzing expenditure patterns between 1996 and the 2nd quarter of 1998. Expenditure dropped in all groups except for clerical/sales workers whose health expenditures increased by 26 percent. The percent reductions for the other groups range from –4 percent for general workers, to –42 percent for farm workers.

Over the entire period from 1986 to 1998 (2nd qtr) the group with the highest percent increase in monthly household expenditure for health were the professionals (140 percent). This occurred even though the group started from a higher base expenditure in 1986. The group with the second highest percent increase in expenditure was general workers (73 percent). However, this group started with the lowest base expenditure in 1986. A group of three employment categories had high increased real levels of expenditure as well: 1) clerical/sales workers (41 percent), 2) households mainly renting land (34 percent), and 3) production workers (23 percent). These categories also started from a low base expenditure in 1986. The rate of increase for the "economically inactive" was only 16 percent, although from the second highest base level in 1986. Household health expenditures by farm workers declined by 5 percent over the period, starting from a low base level in 1986 (see Figure 1.2).

[2] / The category "economically inactive" includes households headed by housewives, by the unemployed, by the elderly, by those with chronic illness, and those who do not wish to work.



D. DESCRIPTION OF PUBLICLY SUBSIDIZED, COMPREHENSIVE HEALTH INSURANCE PROGRAMS

There are five comprehensive subsidized health insurance schemes in Thailand. In addition, there are special insurance programs for work (Workman's Compensation Scheme - WCS) and traffic (Traffic Accident Protection Scheme) related accidents. The five major comprehensive programs are the:

Civil Servants Medical Benefits Scheme (CSMBS)
Social Security Scheme (SSS)
Voluntary Health Card Scheme (VHCS)
Low Income Card Scheme (LICS)
Private Health Insurance

Altogether these schemes are estimated to provide some health insurance coverage to 46 million people, or about 76 percent of Thailand's population. The three following tables summarize the key features of the programs, such as who and how many are the beneficiaries, what benefits are covered, what is the sources and level of premiums, what is the average amount paid for care per insured, what is the provider payment mechanism, and what are average utilization rates of beneficiaries.

Table 1.4 below shows that the schemes vary in terms of whether they are compulsory or voluntary, the sources of funds, and the Ministry managing the insurance program.

Table 1.4: *Characteristics of Health Insurance Schemes, Thailand*

INSURANC PROGRAM	SCHEME NATURE	COVERAGE ('000,000)	(%)	POPULATION CHARACTERISTICS	SOURCE OF FUNDS	FINANCG BODY
CSMBS	Fringe Benefit	6.6	11%	Civil Servants	Gnrl Tax Revenue	MOF
SSS	Compulsory	4.8	8%	Employees in Firms Larger than 10 Persons	1.5% ea. Wages Empr.&Employee, Govt match employee	SSO
VHCS	Voluntary	6.0	10%	Near Poor	MOPH Fund	MOPH
LICS	Social Welfare	27.0	45%	Indigent, Children < 12, Elderly, Veterans, Handicapped, Religious & Political Leaders	MOPH Fund	MOPH
PRIVATE	Voluntary	1.2	2%		Premium	Private Cos.
TOTAL		50.4	76%			

Sources:

Supachutikul (1996).
Songkhla et.al. (June 28, 1997).

Table 1.5 shows the variation in the benefits covered under the different insurance programs. At present, the CSMBS has suspended use of private facilities for CSMBS members, so only those covered by the SSS can opt to register with private hospitals or networks. Some hospitals are quite keen to register SSS patients as this then forms a base of income for their operations.

Table 1.6 provides information comparing the insurance schemes' payment mechanisms, copayment requirements, and utilization rates under each program. The table shows that under fee-for-service reimbursement, patients with CSMBS coverage use many more out-patient and in-patient services than those covered by other schemes. Those covered with SSS or VHCS capitation have roughly equal the number of outpatient visits per capita per year, but the SSS population have lower admissions, although longer lengths of stay. This may reflect the fact that the SSS population are mostly healthy workers. Those who voluntarily select to purchase the VHCS card, rather than pay fee-for-service, may be those who experience more illness, i.e. adverse selection. Those covered under the LICS use fewer services than all other groups. The government provides a lower subsidy for the care of this population, and the lower rate of utilization may reflect non-insurance barriers to care for the low income population, e.g. transportation costs.

Table 1.5: *Benefits of Insurance Packages in Thailand*

INSURNCE PROGRAM	AMBULA-TORY	INPATNT	PROVIDR CHOICE	CASH BENEFIT	INCLUSIVE CONDITION	MATER-NITY	ANNUAL EXAM	PREVNTN PROMOTN	SERVICE NOT COVRD
CSMBS	Public Only	Public & Private	Free	No	All	Yes	Yes	Yes	Special RN
SSS	Public & Private	Public & Private	Contract Hosp/Net-Work	Yes	Non-work related ill-ness	No	No	Hlth Educ. Immunizn	Pvt. Bed Special RN
VHCS	Public	Public	Requires Referral	No	All	Yes	Possible	Possible	Pvt. Bed
LICS	Public	Public	Requires Referral	No	All	Yes	No	Limited	Special RN Pvt. Bed
PRIVATE	Public & Private	Public & Private	Free	Usually No	According to Contract	Varies	Varies	Varies	Varies

Sources:
Pannarunothai, S. and Tangcharoensathien, V. (1993).
Supachutikul, A. (1996)

Table 1.6: *Source of Funds, Insurance Payment Mechanism, and Utilization of Services, Thailand, 1996*

INSURNCE PROGRAM	PAYMENT MECHANSM	COPAYMT	AVE EXP/ CAP/YR [3]/	OP VISITS/ CAPITA	ADMISSN PER 100	ALOS * (days)	SOURCE OF CARE
CSMBS	Fee-for-Service	IP at Private Hospital	>1781	5.5	13.6	11.9 5.1	Public Private
SSS	Capitation	Maternity,	712	1.4	2.6	5.6	Public
		Emergency				4.0	Private
VHCS	Capitation	None	~190	1.7	5.8	4.3	
LICS	Global Budget	None	<225	0.7	3	5.1	
PRIVATE	Fee-for-Service	Almost None	1667	n.a.	n.a.	n.a.	Private
OVERALL	Multiple		n.a.	2	5 to 6	n.a.	
POP. RATE							

Sources:
Supachutikul, A. Gilson, L., and Tangcharoensathien (no date)
Supachutikul, A. (July 1996)
(*) from Songkhla, et.al. (June 28, 1997).

[3] / The actual cost of treatment under each of the schemes is not reported in the literature available in English. The figures given in the table for the CSMBS and SSS reflect charges, not costs, and the figures for the VHCS and LICS are based on the government subsidy paid per capita. Studies of the costs (not charges) of care to these different populations are needed.

CHAPTER II
PROBLEMS WITH THE CURRENT SYSTEM OF FINANCING

The problems with the health financing system in Thailand might be categorized under the following headings:

- Administrative Cost
- Allocation of MOPH Expenditure
- Distribution of Health Facilities and Personnel
- Fee-for-Service vs. Risk Sharing
- Fraud
- Information for Policy Making and Implementation
- Planning and Allocation of Capital Investment
- Provider Incentives
- Quality of Care
- Targeting of Beneficiaries

While there is some overlap between each of these headings, there are some unique aspects to each which will be presented briefly below.

A. ADMINISTRATIVE COST

The presentation in Chapter I suggested that the administrative costs of the MOPH were only 7 percent of total recurrent expenditure. However, this figure measures only the direct costs of administration of the different sources of financing, not the administrative costs of the health providing institutions and programs. The administrative costs to health facilities are higher than necessary given the number of different financing sources from which the facility must manage its costs[4]/.

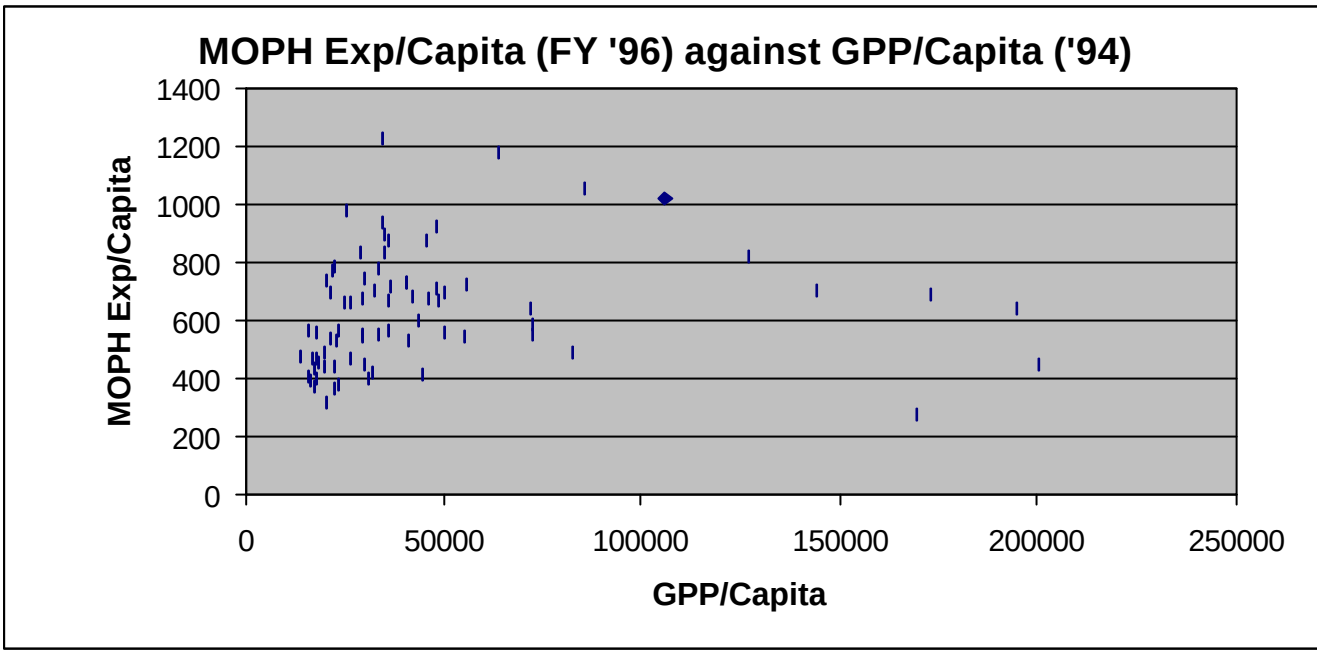
B. ALLOCATION OF MOPH EXPENDITURE

Information was compiled on the allocation of MOPH capital and recurrent health expenditure (actuals) for 1996 by province and plotted against the Gross Provincial Product (GPP) per capita for 1994[5]/. The resulting plot can be seen in Figure 2.1.

[4] / Studies comparing the United States and Canada have attributed some of the differences in the cost of care to the higher administrative costs in the United States associated with multiple payors as compared to Canada's provincial single payor system.

[5] / GPP for 1994 was used as the MOPH would not have access to GPP figures for 1996 during their budget planning.

Figure 2.1:



The figure shows that more than half of all provinces have GPP per capita below 50,000 baht, and receive MOPH expenditures equal to 300 to 600 baht. Above a GPP per capita of 50,000 baht, the MOPH expenditure (capital and recurrent) declines with an increase in provincial income. Nevertheless, more than half of these provinces receive health expenditures above 600 baht per capita. This figure suggests that the allocation of MOPH expenditure allocation does not address the inequality in the distribution of income between provinces, but is based on other criteria than population and income. The distribution of MOPH expenditure most likely reflects the existing distributions of health facilities and manpower which are inequitable.

Evidence of inequality is also found in the average payment made for care under each of the insurance schemes. For example, a CSMBS patient receives a benefit of 2,200 baht/capita, whereas under the VHCS the subsidy is only about 250 baht per capita, and under the LICS the subsidy is only 273 baht/capita.

B. FEE-FOR-SERVICE vs. RISK SHARING

Currently approximately half of any health facility's costs are covered by revenue generated by the hospital. Data on the split between revenue from insurance or paid fee-for-service is not available, and probably varies from area to area. In Khon Kaen, for FY 1998, 32 percent of the provincial revenue came from fees, whereas 42 percent of the

district hospitals' revenue were covered by fees[6]/. It is not known to what extent an inability to pay health providers' charges cause people to defer or forgo essential medical treatment. An example of when this is a problem is patients requiring kidney dialysis. Dialysis is provided only to those with insurance that covers that benefit, or who are wealthy enough to pay. Otherwise little or no dialysis is provided and the patient dies. Increasing the percent of the population covered under comprehensive insurance would lead to an improvement in access to health services for the poor and the chronically ill.

C. FRAUD

Fraud is possible even under the tightest of controls. However, three of Thailand's insurance schemes are particularly vulnerable to fraud as they reimburse on a fee-for-service basis. These schemes are the CSMBS, the WCS, and the TAPS. Under the CSMBS it has been found that some providers shift unclaimable private sector out-patient services to claimable in-patient services. In general, there is little claims monitoring conducted, and providers are paid what they charge. Retrenched workers under the SSS often return to their home village and the SSO continues to pay their capitation payment to registered hospitals. Thus contractor hospitals are skimming benefits from the SSO but provide no benefit to the laid off workers. Another abuse under the SSS, as well as under the VHCS, is that there is a tendency by providers towards defining cases under diagnoses which are eligible for payment as extra-contractual services, especially the high cost cases. Providers may categorize patients in high cost DRGs in order to obtain additional revenue.

D. INADEQUATE BUDGET FOR VHCS AND LICS

The government with donor assistance provides a subsidy of about 1000 baht for every household enrolled in the VHCS. This is roughly equivalent to 250 baht per person covered under the VHCS. Including the household contribution to the VHCS the amount per person is about 375 baht. The budget for the LICS provides an estimated subsidy of 273 baht per eligible person. Research on the cost per outpatient visit at health centers indicated mean values of 70 to 250 baht per visit. Unit costs for out-patient visits at hospitals range from 100 to 600 baht. Assuming 2 visits per person per year, the total cost for outpatient services would equal from 140 to 1,200 baht depending on where the service is provided. The mean cost per inpatient admission ranges from 4,000 to 8,000 baht. Assuming an admission rate of 5 per 100 persons, then the average cost of inpatient care per person ranges from 200 baht to 400 baht. Thus the expected cost of both inpatient and outpatient care per covered person is 340 to 1,600 baht. Thus, in many cases the contribution of the government and VHCS household and LICS persons does not cover the costs of providing care, and the health institution must collect additional fees, and/or cross-subsidize from collections from patients with more generous insurance payment.

[6] / The Khon Kaen provincial hospital received 53 percent of its revenue from insurance (CSMBS, VHCS, LICS) and 15 percent from the Provincial Hospital Division of the MOPH. The Khon Kaen district hospitals received 40 percent of its revenue from insurance, and 18 percent from MOPH departments.

E. INFORMATION FOR POLICY MAKING AND IMPLEMENTATION

There are two types of information problems related to policy making and implementation . The first is that information exists but is not used by policy makers. This is the case in terms of provincial income and the allocation of MOPH resources to different provinces. As the MOPH moves towards block grant funding to the provinces, information about provincial income and contribution for the health sector will be essential to refer to.

Information which is lacking is related to the cost structure and revenue flows of health facilities. In addition, information which is lacking is with respect to the costs (not charges) of treating various cases, to be used to determine DRG adjusted reimbursement rates. The CSMBS has insufficient information to determine eligibility and entitlement. The SSS does not have a system linking the two databases of the SSO; namely the contribution database (reflecting active contributors, and vice versa the ex-workers) and the registry database (the providers with which contributors are registered).
In theory, the active contributors will be the active beneficiaries in the registry database, but in practice, there is a time lag in updating the registry database. As a result, the number of beneficiaries in the registry database is higher than the number of active contributors. The SSO issues the SSS ID Card which is valid for two years (currently 1997-98). In theory, this means a card holder (both active contributors and ex-workers within six month and those beyond six months) could use services at registered hospitals.

F. PLANNING AND ALLOCATION OF CAPITAL INVESTMENT

Today's investment is tomorrow's recurrent expenditure. The increasing proportion of MOPH expenditure allocated not only to capital expenditure, but in particular to construction of provincial hospitals and purchase of medical equipment, belies the health sector priority of providing health services to all Thais. Thailand's pattern of capital expenditure draws funds away from investment in infrastructure and personnel for rural areas, and from insurance for the poor.

G. PROVIDER AND CONSUMER INCENTIVES

The different financing schemes offer different incentives to providers regarding the provision of health services. For example, the fee-for-service reimbursement of the CSMBS, WCS, and TAPS provides an incentive for providers to maximize the quantity and of profitable services delivered. In theory, the capitation payments for the SSS and VHCS programs encourage providers to provide care more efficiently. To the extent there is competition for SSS beneficiaries, this may lead to the provision of higher quality services. However, providers will also attempt to "cream skim", that is, to select the patients with the best probability of low health costs. In areas without competition, capitation may also lead to provision of services of lower quality, or fewer services. The lump sum payment for LICS patients, which is under-financed, again would provide the incentive to lower quality and quantity of services.

The SSS capitation payment to providers generally encourages provision of curative and hospital treatment, rather than realizing its potential to increase the provision of primary care.

Under insurance, the behavior of consumers is likely to include adverse selection (those who are ill are more likely to purchase insurance) and moral hazard (i.e. those having insurance are more likely to demand more health services than if they were paying fee-for-service) (see Table 2.1). Adverse selection is particularly likely to be occuring in provinces with low coverage of eligibles under the VHCS. Moral hazard exists under all of the insurance programs, and is in part demonstrated by the bypassing behavior of consumers, who want better quality health services.

Table 2.1: *Utilization Rates of Different Population Groups under the VHCS, Thailand, 1991 and 1996*

	VHCS	CSMBS	El-derly	Children	LICS	SSS	PI	None
1991 NSO								
Illness episode/yr	6.9	5.4			7.2			5.7
OP visits/yr	2.8	3.1			2.7			2.0
Public	2.0	1.8			2.1			1.0
Private	0.8	1.3			0.6			1.0
1996 NSO								
Illness episode/yr	5.0	4.5	12.3	4.9	5.9	2.6	4.4	3.3
OP visits/yr	3.3	3.2	8.4	3.7	3.7	1.5	3.2	1.9
Public	2.5	2.0	6.4	2.1	3.0	0.7	0.8	1.1
Private	0.7	1.2	2.1	1.5	0.7	0.8	2.4	0.8
IP admission/yr	0.09	0.08	0.16	0.04	0.09	0.05	0.15	0.05
% Public	92%	74%	79%	80%	93%	52%	28%	79%
% Private	7%	25%	21%	19%	6%	46%	71%	19%

Sources:
1991 and 1966 NSO surveys.

H. QUALITY OF CARE

As has been noted above, the SSS's capitation may lead to an improvement in quality when there is competition for patients, or a reduction in quality when there is not. There is a growing concern in Thailand regarding the quality of care. Private hospitals and the SSS established standards (structure and personnel) for care. The MOPH has drafted requirements for a quality assurance program for those registered with a provider under the SSS. Hospitals are now trying to meet the international standards of the ISO 9000.

I. TARGETING OF BENEFICIARIES

Each province has community committees to scrutize the applications for the LICS cards. Table 2.2 compares the performance of issuing different types of the underprivileged cards as against the targets. The highest performance was achieved by the issuing of the cards to veterans because they already have the cards issued by the veterans' office. The second highest performance was the issuing of the low income card to low income individuals, 89 percent of the specified target. The lowest performance on the list was the issuing of the cards to the monks and religious leaders (36 percent of the target). Twenty-five provinces issued the low income cards higher than the targets (incentives for doing this will be discussed later). Bangkok was the lowest performer on the list, only 38 percent of the target was issued the low income cards.

Table 2.2: *Target and Performance of LIC Issuance (in millions), Thailand, 1998*

Groups	Target	Issued	Percent
Low income	6.48	5.79	89.49
0-12	13.37	6.92	51.86
Student	2.54	1.42	55.9
Handicapped	0.18	0.13	72.0
Veterans	0.11	0.11	100.0
Monks/ religious leaders	0.33	0.12	36.2
Elderly	4.68	3.13	66.8
Temporary	-	0.06	-
Total	27.69	17.67	63.8

Source: The Health Insurance Office, MOPH.

This table suggests that the targeting of the low income card may not be a problem, rather that the low incomes card is distributed to populations that may be covered under other schemes such as the CSMBS and VHCS, and that this leads to inefficiency in the allocation of funds. While there are claims that cards are issued to those with high income, it depends on what is considered the cut-off point for eligibility.

CHAPTER III
CURRENT REFORMS

A. COST CONTAINMENT FOR CSMBS

Prior to the crisis, there were two sets of activities being followed to reform the CSMBS. First were activities in basic research. The Bureau of Health Policy and Planning in the MOPH surveyed the CSMBS charge structure of public and private providers in Bangkok. HSRI conducted a comprehensive morbidity survey in 1995 among CSMBS beneficiaries (current employee + dependents; pensioners + dependents). HSRI also surveyed the charge structure of public and private providers outside Bangkok in 1996.

The second activity was for HSRI to appoint a Task Force made up of representatives from the Ministry of Finance (MOF), Civil Service Commission (CSC), and Budget Bureau. The main tasks of this committee are to:

- Develop a beneficiary database.
- Replace of fee for service reimbursement model by the contract model.
- Develop a Civil Servant Health Fund (CSHF), which would be earmarked for (1) ambulatory care, (2) inpatient services, (3) emergency services sought from a registered hospital, (4) high cost services, (5) health promotion, (6) management, R&D and contingencies.
- Estimate an age-adjusted capitation rate for outpatient services within the budget ceiling. There would be a requirement for beneficiaries to register with free choice to public and private hospitals on an annual basis[7]/. Utilize case-mix information from modified US-DRG weights to determine payment per DRG weight (in each month or quarter) to providers within the inpatient budget ceiling. This would allow for free choice of public or private provider.
- Conduct a financial scenario analysis to determine if it would be feasible within a 14,000 million baht budget per annum to sustain services within this budget limit for 4 to 5 years.

The economic crisis in July 1997 prompted the Finance Minister and Director General of the Comptroller General's Department to embark upon several demand side interventions as short term, interim strategies for FY98, and these were endorsed by the Cabinet in February 1998. The major contents of these strategies are:

- Full copayment for the cost of non-essential drugs with some exceptions.
- Copayment for extra-days for private room and board aiming at improving efficient use of inpatient wards.

---

[7] / Iinitially it was intended to avoid registration with hospitals but to register with primary care providers, but Primary Medical Care (PMC) in Thailand does not widely exist.

- Termination of the use of private inpatient care. This provision required an amendment by Royal Decree. Strong lobbies prevented amendment of the Decree.
- Doctors' fees in evening clinics in public hospitals would not be reimbursed.

In March 1998, HSRI appointed a CSMBS reform committee to discuss and finalize major contents of the CSHF Bill. By October 1998 (FY99) the CSHF was to have been introduced. However, this did not come about as the CGD was reluctant to invest in MIS development (70 to 100 million baht) during FY98. The interim demand side measures are likely to continue through 1999 – 2000.

During the project, a brief assessment was done of the impact of the demand side measures in the Northeastern province of Khon Kaen.

Table 3.1: *Average Monthly Expenditure (million baht) Before and After Copayment Intervention, Khon Kaen, FY1998*

	OP offi-cials	IP public offi-cials	IP priv offi-cials	IP offi-cials	OP pen-sion	IP public pen-sion	IP priv pen-sion	IP pen-sion	Total
Whole country									
Before Intervention: Ave. Oct-Mar	469.1	684.6	175.7	860.3	80.6	75.1	19.5	94.6	1,504.5
After Intervention: Ave. Apr-Aug	361.6	604.6	98.8	703.4	64.1	61.4	11.0	72.4	1,213.8
Changes in Baht	107.5	-80	-76.9	-156.9	-16.5	-13.7	-8.5	-22.2	-290.7
% changes	-22.9	-11.7	-43.8	-18.2	-20.5	-18.3	-52.8	-23.5	-32.8
Khon Kaen									
Before Intervention: Ave. Oct-Mar	11.2	29.2	1.0	30.2	0.7	2.0	0.08	2.079	44.2
After Intervention: Ave. Apr-Aug	7.4	27.0	0.5	27.5	0.6	2.1	0.08	2.175	37.7
Changes in Baht	-3.8	-2.2	-0.5	-2.7	-0.1	+0.1	-0.00	+0.1	-6.5
%changes	-33.8	-7.6	-45.3	-8.9	-15.4	+9.3	-4.5	+4.6	-14.7

Source: MOF-CGD

If there was no demand side intervention, an annual expenditure in 1998 was estimated as 1,504.5 * 12 months = 18,053.7 million baht.
If the demand side intervention was implemented for the whole year, the estimated expenditure would be 1,213.8*12 months = 14,565 million baht.
However, for the whole year the actual expenditure would be around (1,504.5 *6) + (1,213.8 * 6) = 16,307.6 million in 1998 FY.

In Table 3.1, the 1,504.5 million baht per month during the period of October 1997 to March 1998 must be interpreted with care. There was no regular disbursement of claims during that period due to cash flow constraints in CGD and Provincial Finance Office due to a condition in the first Letter of Intent between the RTG and IMF that by the end of December 1997, the government would achieve a public revenue surplus of 1 percent GDP.

After adjustment for the 12 month period during April 1997 to March 1998, the average expenditure per month before the intervention has gone down to 1,427 million baht. Compared with the demand side intervention period of April to August 1998 (1,214 million baht per month) the saving is estimated as **14.95 percent.** When cost saving from copayment and termination of private IP care based on three month moving average technique for the period of 1997-98 were estimated, the saving as a result of the intervention estimated as **12.96 percent.** Thus, it can be concluded that the overall short term (five month period of intervention) cost saving is between 13 to 15 percent[8]/.

The field work in Khon Kaen provided several major impressions:

- There are essentially no payments by beneficiaries for non-essential drugs in MOPH hospitals, and not very substantial ones in non-MOPH public hospitals. The MOPH ruled in February 1998 that items in the hospital drug list would be trimmed down according to size and level of hospital and that the proportion of essential drugs would be increase. Thus, the revised MOPH hospital drug list is the most efficient list, then drugs prescribed within hospital list is essential and *de facto* the MOPH hospital list is reimbursable list.
- Copayment for extra-room and board resulted in significantly shorter LOS and resulted in the discharge of the chronic cases (e.g. stroke) in public hospitals.

---

[8] / Important formulae to assess the impact of copayment interventions:

1. OP visits*baht per visit before - OP visit*baht per visit after = Δ OP expenditures.
2. Admissions*baht per admission before - admissions*baht per case after = Δ IP expenditures.

Therefore

1. Δ OP visits = Δ OP expenditures / Δ baht per OP visit
2. Δ admissions = Δ IP expenditures / Δ baht per admission
   Changes in number of OP visits and admission are then easily assessed through the above formula,
3. Δ baht per visit = Δ drugs + Δ other medical services
4. Δ baht per admission = Δ room and board + Δ drugs + Δ other medical services
   What determines changes in claim per visit and per admission is assessed through its charge profile (drug, room and board and other medical services).

- There has been a reduction in the occupancy rate of private wards and the average LOS in these wards as well.
- Overall the termination the use of private inpatient benefits has significantly reduced the overall expenditure, however there has been no increase in expenditure for inpatient care in public hospitals (see Table 3.2).

Table 3.2: *Public Hospital IP charge profiles, Khon Kaen, FY 1998*

	Oct97- Feb98 (5 m)	Mar-May98 (3 m)	Jun - Aug 98 (3 m)
I. Current officers			
LOS (days)	7.29	5.00	6.00
Charge profiles			
Room & Board %	19%	19%	19%
Drugs %	25%	27%	26%
Medical Services %	49%	51%	53%
Others %	7%	3%	1%
Charge (Bht per admission)	14,344	9,397	10,704
Claim (Bht per admission)	14,344	9,397	10,704
Copay Room & Board (Bht / adm.)	0	128	8 cases LOS>=13
Copay Drugs (Bht / adm.)	NA	NA	NA
Total Copay (Bht/adm.)	0	128	NA
II. Pensioners			
LOS	10.16	6.00	7.00
Charge profiles			
Room & Board %	20%	19%	18%
Drugs %	30%	26%	32%
Medical Services %	46%	51%	46%
Others %	4%	5%	3%
Charge (Bht per admission)	20,838	14,499	17,241
Claim (Bht per admission)	20,838	14,499	17,241
Copay Room & Board (Bht / adm.)	0	155	8 cases LOS>=13
Copay Drugs (Bht / adm.)	NA	NA	NA
Total Copay (Bht/adm.)	0	155	Na

Table 3.2 shows a significant reduction in ALOS comparing before intervention (7.29 days) and March to May 1998 - 5 days; and June to August 1998 - 6 days for current officers, and pensioners from 10.16 to 6 and 7 days respectively.

Claims per admission also reduced significantly from 14,344 to 9,397 and 10,704 baht among current officers in the three periods and from 20,838 to 14,499 and 17,241 baht among pensioners in these periods. Further evaluation of these interim demand-side measures is planned under the HSRI-TRF- SRS program.

None of the reforms proposed introduce the concept of limiting coverage. However, the introduction of capitation for out-patient services will limit patient choice to some extent to registered providers, and may jeopardize the quality of care if the CSHF does not have a strong monitoring capacity. Registering with a provider will improve the continuity of care. Capitation also has the potential for lowering administrative costs. Separation of paying ambulatory from inpatient care may have incentives for ambulatory care providers to over-refer inpatient care. On the in-patient side, patients will have free access for care from either public or private sources. It was first planned that in-patient care would be reimbursed on a DRG-basis within a global budget. However, use of DRGs might result in "DRG Creep". Subsequent proposals are to reimburse on an all inclusive (IP + OP) capitation basis. Either of the proposed changes in payment mechanisms will held to slow the ever increasing pattern of expenditure. Further, it will help to bring about equity in financing, as CSMBS will halt the growth of the per capita budget subsidy, whereas the government budget subsidies in other health insurance schemes will gradually increase. Technical efficiency will be gained only if the CSHF Office is acting as a proactive purchaser of care.

B. EXTENSION OF THE SSS AND VHCS

Current reforms of the SSS are aimed at adjusting coverage and benefits. Extension of sickness benefit coverage to spouses was suspended due to the recent economic crisis, and the financial implications of reducing the tripartite contribution rate from 1.5 to 1.0 percent of wages. The Thailand Development Research Institute (TDRI) is conducting a feasibility study of the possibilities of extending the SSS package to the self-employed on a voluntary basis. Results are due in a year's time. The introduction of an old age pension benefit and child allowances were due by end of 1998. This requires another 3.0 percent payroll tripartite contribution, a measure which may be difficult to pass in austere times. Sickness, maternity, disability and death benefits are to be extended beyond the grace period as designated in the SS Act for those unemployed due to an economic crisis as required in an amendment of the SS Act. Currently, SS workers lose their benefits after 6 months.

There was a significant layoff of SS workers after the start of the economic crisis in July 1997, estimated at 408,000 persons for the whole year of 1997. In the first half of 1998, there were altogether 161,000 laid off workers, based on calculations from notification of the closing of establishments[9]/.

From October to December 1997 the Social Security Committee considered serveral changes in the SSS due to the economic crisis. First, they considered reducing the

[9] / This methodology underestimates the number of laid-off workers.

contribution rate of the three parties (i.e. employer, employee, and SSO). They referred to the Cabinet Resolution of 7 October 1997, which supported the draft Ministerial Regulation to reduce the contribution rate from 1.5 to 1.0 percent of payroll, equally contributed by the government, employer and employee for the period of three years (1998-2000). Payment of 1.5 percent of payroll will resume in 2001, when it is hoped the economic crisis will have ended. They also considered extension of benefit coverage from 6 to 12 months, and explored the financial implications and feasibility of the extension. A task force found that this extension would cost an additional 741 million baht to extend coverage to the recently unemployed from 6 to 12 months for the four benefits (sickness, maternity, disability and death), during the period of 1998-2000 (see Table 3.3).

Table 3.3: *Financial Scenario of Four Benefit Coverage Extension, Prepared by a Task Force for SSO, Thailand*

Contribution and benefit granted	1998	1999	2000
1. Contribution	10,629	11,372	12,175
2. Benefits	10,405	11,198	12,485
- for current workers	9,990	10,655	11,959
- for ex-SS workers extension 6 months *	415	543	526
3. Benefit as % of contribution	97.9	98.5	102.6
4. Benefits	10,617	11,464	12,748
- for current workers	9,990	10,655	11,959
- for ex-SS workers extension 12 months *	627	809	789
5. Benefit as % of contribution	99.9	100.8	104.7
6. Estimated number of ex-SS workers	400,000	500,000	450,000

Note: (*) based on the estimation of actual benefit per capita multiplied by the number of ex-workers estimated in each year.

Expansion of the VHCS is dependent on the benefits offered by the scheme as compared to its cost to the consumer, as the program is voluntary. In 1993, the Cabinet approved funding for the scheme at 500 baht a card if households purchased the card at a price of 500 baht. The matching budget was calculated under the assumption of full cost-recovery by MOPH service providers at the level of 1000 baht. The level for consumers' contribution has remained at 500 baht per household, while the government budget of 500 baht has been matched by Asian Development Bank loan funds of another 500 baht per household.

The sale of the cards has increased since 1994 to 2.1 million in 1997 and possibly 2.4 million in 1998 (see Table 3.4). However, increasing card sales has the downside that, on average, each card sold resulted in a deficit of 871 baht in 1996 and 1,138 baht in 1997 (Health Insurance Office, 1998). This implies many possibilities: adverse selection, moral hazard, and under-pricing of the card.

Table 3.4: *Coverage of Voluntary Health Card and Revenue Raised at Current Prices, Thailand, 1987 - 1997*

	1987	1988	1991	1992	1993	1994	1995	1996	1997
Card sales (million)	0.66	0.46	0.30	0.29	0.49	0.81	1.46	1.24	2.06
Population covered (mil)	2.69	2.11	1.40	1.32	2.08	3.44	6.21	5.27	8.24
% population covered	4.7	4.5	2.7	2.6	3.7	6.1	10.8	9.1	13.5
Revenue raised, million baht	183.0	119.8	84.02	81.23	244.8	403.0	727.8	622.4	1,003.0
Matching fund, million baht	None	None	None	None	50.0	200.0	655.6	617.1	1,003.0

Source: Pannarunothai et.al. (1999).

C. IMPROVING ALLOCATION OF GOVERNMENT BUDGET FOR LICS

The government has used a number of criteria for allocation the LICS budget to provinces. These criteria have included: population size, number of health facilities, number of card holders, standardized mortality ratios, and workload. As a result of applying different criteria the ratio of per capita budget between regions has changed over time (see Table 3.5).

Table 3.5: *LICS per Capita Budget Allocation by Region (in nominal baht), Thailand, 1992 – 1999*

REGION	1994	1996	1998	1999
Northeast	132	140	205	264
North	194	193	263	306
South	323	160	239	273
Central	539	183	258	316
Central: Northeast	4.08 : 1.00	1.38 : 1.00	1.16 : 1.00	1.20 : 1.00

The equity of low income per capita allocation has improved as the allocation formula has moved more towards a capitation basis, with the number of eligibles determined by income and expenditure surveys.

C. MOVEMENT TOWARDS CAPITATION

Currently the SSS and VHCS operate on a capitation basis. The MOPH plans to change funding for the LICS from a global budget basis to a capitation basis in the year 2000. The MOF initially decided to finance outpatient services on the basis of capitation and inpatient services on DRGs, but are now considering an inclusive capitation basis which would cover both outpatient and inpatient benefits. Thus, all of the significant programs

receiving government funding would be reimbursing providers on a capitation basis. In the short run this may lead to providers discriminating between patients, as the capitation rate is likely to vary from program to program. However, in the longer run, measures can be taken to shift government funding from direct budgets to facilities, to financing which follows the patient – particularly the poor and those with chronic or otherwise require expensive health care.

1. Linkages between Current Reform Efforts and Health Sector Financing Problems

The government's current approach to improvement of the financing of the health sector addresses some of the problems identified in Chapter II such as changing provider and consumer incentives, and improvement of the allocation of the government budget and beneficiary targeting through reform of payment for the LICS. However, in general, the government's current approach doesn't address certain issues such as the allocation of facilities and personnel, shifting the payment mechanism from fee-for-service to risk-sharing, improvement of data bases and information systems for policy-making and implementation. The coordination of current policy efforts is minimal, especially as the control over the different sources of insurance financing is under different Ministries. Recommendations of the team aim to increase the number of areas addressed by reform, as well as the coordination of the reform (see Table 3.6).

Table 3.6: Problems w/Health Sector Financing Addressed by Current Policy Reforms

Problem> Policy V	Administrative Cost	MOPH Allocation	Hlth Facilities & Personnel Distribution	FFS vs. Risk-Sharing	Fraud	Information for Policy & Implemt	Planning % Alloc Capital	Provider Consumer Incentives	Quality of Care	Beneficiary Targeting
Cost Containment for CSMBS Demand-side Measures								X		
Extension of SSS and VHCS Ext. SSS to Laid-off Workers Increase Paymt for VHCS Card								X	X	
Improving Allocation of Governmt Budget for LICS Change in Allocation Formula		X								X
Movement Towards Capitation SSS and VHCS Already CSMBS and LICS Proposed	X				X			X	?	

CHAPTER IV
RECOMMENDATIONS FOR FURTHER REFORM

Recommendations regarding health financing reform are grouped according to two phases of health sector reform outlined in the Final Integrated Report for this project. During the first phase (the next 2-3 years) most of the recommendations focus on how the schemes operate, however there are recommendations on changes in the flow of funds to the provinces. During the second phase (5 to 10 years), more emphasis is given to a more radical restructuring of health financing in all its dimensions to move towards universal coverage.

A. RECOMMENDATIONS FOR THE SHORT TERM

In the short run, 2 to 3 years, the team believes that the current health insurance programs will continue, but that some modifications can be made which will improve insurance coverage, and increase efficiency thereby allowing for control over cost inflation. Given that changes will probably occur within the current structure of the insurance programs, the recommendations for the short run are discussed individually. Some short term measures for achieving movement towards universal coverage are also presented.

1. Civil Servants' Medical Benefits Scheme (CSMBS)

An inter-ministerial working group exists to discuss and debate changes in the CSMBS program. As was mentioned in the previous chapter, demand-side measures they introduced in 1998 resulted in cost savings estimated between 13 to 15 percent over the previous year. HSRI, and others, have proposed that even greater cost savings can be achieved by introducing supply-side measures, i.e. change provider payment from fee-for-service to another mechanism. During the project, members of the inter-ministerial group met to discuss the options for provider payment, their strengths and weaknesses, and the consequences of adopting them. Different mechanisms were considered for inpatient and outpatient reimbursement. Through several rounds using the Delphi technique the group decided that global budgets based on DRGs case mix weights should be adopted for payment for inpatient services, and that capitation would be the preferred method of paying for outpatient services. The team estimated that the expense per inpatient case would be 11,681 baht – close to the 1996 survey figure for average hospital (either public or private) charges per admission (see Table 4.1).

Table 4.1: *In-patient Expense, baht/ case*

IP cases	Baht per case
0.05 admission/ person/ year	23,362
0.1 admission/ person/ year	11,681
0.159 admission/ person/ year	7,321
Public hospital in 1996 for CSMBS	10,061
Private hospital in 1996 for CSMBS	11,996

Source: CSMBS charge surveys in 5 provinces, 1996; and 1995 morbidity survey.

Implementation problems of using case mix indicators in allocating budget among hospitals are expected, such as DRG creeping, false claims, and other technical problems. Regarding outpatient capitation, the following age-adjusted capitation rates were estimated (see Table 4.2).

Table 4.2: *Proposed Age-Adjusted Capitation Rates, CSMBS, Thailand, 1999*

AGE GROUP	CAPITATION RATE (baht/person/year)
0 – 5	337
6 – 19	337
20 – 44	571
45 – 60	753
> 60	859
All Age Groups	615

The total CSMBS expenditure for 1998 was set at 14,400 million baht and then earmarked for four small funds as appears in 4.3 below.

Table 4.3: *Budget Ceiling for Four Types of Expenditure,CSMBS, 1998*

Expenditure	Payment methods	%	Million Bht	Bht per capita beneficiary *
OP	age adjusted capitation	30	4,320	615
IP	Global budget + DRG.	57	8,200	1,167
A&E	Price list	3	432	62
High cost cases	Price list	10	1,440	205
Total		100	14,400	2,050

* calculated based on 7.024 million beneficiaries

One important measure which would have to be undertaken to actualize the proposed changes would be the development of a beneficiary database. This has been planned in

the past, but, to date not realized. In addition, since payment for OP and IP are separated, we expect high referral from OP to IP among contractor hospitals for OP. Thus, strong auditing mechanisms and punishment measures should be developed.

The discussions regarding the reform of the CSMBS are not yet complete. Near the end of the project, the Ministry of Finance indicated it was also considering inclusive capitation (i.e. for both inpatient and outpatient care) as the mode of payment, with possibly the SSS managing the program given their experience with capitation. An additional important emerging issue is that all 20 public universities will have an autonomous status by 2002. Staff members and dependents number between 0.7-1.0 million persons. There is a strong trend that each autonomous university will have its own medical benefit scheme with private insurance + employer provided benefit + SSS contribution. As a result, there will be inefficiencies and the divergence in inequity among universities, and between universities and the rest of civil servants will increase. Unfortunately, the Ministry of University Affairs has no leadership to govern the direction of this transition.

2. Social Security (SSS) and Workman's Compensation (WCS) Schemes

There are essentially three areas for future policy reform. The first is extension of SSS benefits to dependents (non-working spouses and up to two children under 18 years of age), to retirees with an appropriate age-adjusted contribution rate, to the self-employed and their dependents, and finally to recently retrenched workers. The estimated additional costs to the SSS program are estimated at 3.2 billion baht, and the assumptions used in the estimation appear in Table 4.4[10/].

[10] / Estimation of the additional costs to the SSS to extend coverage to spouses and dependents, self-employed persons, and those recently retrenched appears in Table 4.4. The total financial requirement for the government in 1999 of 3.2 billion baht was calculated as follows. Information on real expenditure of the SSS for the years 1991-96 for the three types of sickness benefits was collected. Basic care based on capitation was 97.7 percent of total expenditure on sickness benefits, high cost for expensive cases was 0.4 percent, and accident and emergency sought care from non-registered hospitals was 2 percent. These relative proportions were used to estimate total expenditure for sickness benefits to the four new population groups (excluding cash compensation for sick leave and maternity-related benefits).

Table 4.4: *Financial Estimation for SSS Sickness Benefit Coverage Extension, Thailand, 1999*

	COVERAGE EXTENSION TO TARGET BENEFICIARY			
Type of expenses on sickness benefit	1. Non-working spouse of current SS workers	2. Dependants <18 yr., (not more than 2 persons)	3. Self employed in urban area *	4. Recently retrenched
1. Estimate number of target population (million)	~30% of 5 mil current workers, 1.5 million	~50% of 5 mil x 1.5 persons = 3.75 mil	0.98 mil.	Approximately 1 mil.
2. Sickness coverage for basic care, at 1000 Baht capitation rate (million baht)	1,000 Bht/capita x 1.5 mil = 1,500 mil Bht.	1,000 Bht/capita x 3.75 mil = 3,750 Bht.	0.98 x 1,000 = 980 mil Bht	1 x 1,000 = 1,000 mil Bht
3. Additional payment for high cost care (million baht)	=1,500x0.4/97.7 = 6.1 mil Bht	=3,750 x 0.4/97.7 = 15.4 mil Bht.	=980 x 0.4/97.7 = 4.0 mil. Bht	=1,000 x 0.4/97.7 = 4.1 mil. Bht
4. A&E in non-registered hospitals (million baht)	=1,500 x 2/97.7 = 30.7 mil Bht	=3,750 x 2/97.7 = 76.8 mil Bht	=980 x 2/97.7 = 20.1 mil Bht	=1,000 x 2/97.7 = 20.5 mil Bht
5. Total expenditure (million baht)	1,536.8	3,842.2	1,004.1	1,024.6
6. Government contribution to Social Security Fund (million baht)	1/3 of 1,536.8 = 512.3 mil Bht	1/3 of 3,842.2 = 1,280.7 mil Bht	1/3 of 1,004.1 =334.7 mil Bht	1/1 of 1,024.6 = 1,024.6 mil Bht
Total Government contribution	**3,152.3 million Baht**			

Note:
* it is unlikely that the SSO can introduce a voluntary self employed scheme in rural areas, thus the total number of urban self-employed was only 4.34 million in 1996.

About one-third of the additional required government contribution to extend SSS benefits would be to pay for coverage of the recently retrenched. Aside from adding funds to cover care for this group, the team recommends:

- Publicizing and increasing awareness among the currently unemployed of their rights to the four SS benefits for a twelve month extension after losing employment.
- Development of an effective re-registration system and a means for new choice of providers for laid-off workers according to their need and domicile.
- Improvement of the two databases - the active contributor and registry, so that SSO effectively pays hospitals for sickness benefits according to current effective numbers of beneficiaries and users.
- Ensuring compliance of employer registration and payment of contributions especially in the economic downturn whereby enterprises are likely to violate the law.

A review of the SSS also provides other recommendations with which the team concurs [11]/. These are:.

- Development of a stronger quality assurance mechanism which goes beyond use of structural indicators to more process orientation indications based on site visits and medical records' audit.
- Development of stronger punishment and sanction mechanisms for contractor hospitals that provide inadequate care.
- Institution of special incentives to promote Primary Medical Care.
- Regular indexation of the capitation rate using the health consumer price index.
- Differential capitation to stimulate provision of Primary Medical Care.
- Careful extension of high cost cases and payment outside capitation rate.

The second area for policy reform is regarding the WCS. Team recommendations are to modify the provider payment mechanism for WCS. This would require development of differential capitation rates by the ratio of registered workers to providers (higher rates for higher risk and vice versa) based on realistic empirical data.

Otherwise, in the short run, the WCS should maintain the status quo. Specifically, the Workmans' Compensation Fund (WCF) should retain its current legal status, maintaining the employer liability scheme, solely contributed by employers. The basic contribution rate should stay the same as the loss ratio and experience rate adjustment for basic rate contribution will be based on other compensations such as cash compensation and death benefit. Experience rating will exclude sickness expenditure, as sickness expenditure will be equal among all employers.

In the medium term, the team recommends that it would be more efficient to integrate work and non-work related conditions to be financed through SSF and WCF to a single payment system, i.e. inclusive capitation, at the rate of not more than 1,162 baht per capita per year, based on the previous year expenditure. As the WCS and SSS cover the

[11] / ILO (1997). Thailand, review of the social security scheme, part I: summary and recommendations. Geneva: International Labor Organisation.

identical target population, this would simplify the requirement of routine annual registration to preferred contractor hospital by each employee. To respond to concerns about emergency cases which are taken to non-registered hospitals, a portion of the Social Security and Workman's Compensation Funds would be set aside to pay for this care. Finally, rather than penalize the companies with high risk of work safety measures, a percentage of collections would be set aside to introduce safety measures in these firms.

2. Voluntary Health Care Scheme (VHCS)

The recommendations for the voluntary health care scheme are relatively straight-forward.

- Raise the price of the card to cover costs.

  The estimated cost of care covered under the card is about 2,000 baht per card per year. If the subsidy from the government is fixed at 1,000 baht a card, then the price per card should be raised to 1,000 baht. To reflect differences in incomes and costs, the price in urban areas might be raised to 1,500 baht, or 2,000 baht for Bangkok to cover the cost of the urban health card and reduce cross subsidy from the rural health card.

- Collect premiums more frequently during the year to allow the card to be more affordable.

  Raising the price will affect sales of the card and make it unaffordable to the borderline poor. To mitigate the effect of facing a single high out-of-pocket payment, an alternative mechanism is to spread premium collection throughout the year.

- Require patients to follow a referral line from the district level to the provincial level through the setting of differential copayments.

  Copayments have to be introduced to curb unnecessary use of hospital facilities. The introduction can be phased in, so that the urban facilities are introduced first and rural facilities later. The information system should identify those who cannot pay the copayments and this information sent to the responsible local governments.

- Decentralize the sale of the card to local governments, which should be encouraged to add their own resources.

  Consultation with the local government regarding their available resources should be undertaken. This move has to be in line with the issuing of the low-income card and the ultimate goal of moving toward universal coverage.

- Encourage a qualifying period to reduce adverse selection.

Enrollment to the SSS requires 3 months to be effective as an insured person. Buying a health card requires only 15 days to be effective. It is advisable to have similar qualifying periods among programs to avoid patient dumping (e.g. the chronically ill) into more lenient insurance schemes.

4. Low Income Card Scheme (LICS)

Under-funding is the main problem of the LICS. Policies on the LICS have been expanded rapidly to cover both the poor and the underprivileged. Though the budget per capita also increased, the under-funding still exists as compared to other public insurance schemes. The following are recommended short term policies are recommended to counteract this underfunding:

- Increase effectiveness of coverage by applying the new poverty lines as a means test for distribution of the card.

  This policy recommendation is already undergoing field testing. It is worth evaluating how effective the differential poverty lines are in picking out the poor. The list size of the poor could be smaller or bigger, but the government will be more willing to allocate adequate budget for the poor.

- The cards should be distributed by local communities based on their information about indigency.

  Trimming the target of the LICS by focusing on only the poor is a strategy to limit public subsidy to the needy. This will complement efforts to have local governments contribute to pay for health services for the indigent among their populations.

- Link the card issuance with financing.

  When the local government becomes the distributor of the low-income card, card issuance should be linked to the financing of the LICS. This will make the issuer accountable to the system. It should be mentioned again that financing the scheme here is only for a part of the total. Whether the local contribution covers only the copayments for the indigents, or a percentage of the capitation rate, should be further studied.

- Those eligible for the LICS should register with a primary care provider, and referral patterns from the district to the provincial level should be reinforced.

  To be in line with other capitation schemes, the LICS card holder should be required to register with a primary care provider, and the referral line followed. Hogher copayments should be charged if the card holder bypasses the district facilities.

- The MOPH should finance the LICS on a weighted capitation basis, and a good information system should be set up to facilitate resource allocation.

  When the allocation of the LICS budget has reached the full capitation, the capitation rate must be weighted to reflect health needs, e.g. age, sex characteristics. The information systems now being set up will be a good basis for resource allocation for both demand and supply sides.

- Set up a budget line for catastrophic illness for those who are excluded from the LICS.

  When the non-poor groups have been excluded from the LICS, a catastrophic budget has to be in place to provide protection for the rest of the population. In the long run, this population group will be taken up by the universal coverage policy.

- Control expansion of the LICS, through restricting benefits to the poor.

  Expanding the targets of the LICS to cover other underprivileged groups is being debated. It is recommended that people should be identified by their personal characteristics, not their membership within a family. For example, the elderly from the poor families should be counted as the poor, and only the poor elderly should be the target of the LICS. The same principle should be applied for children under 12, students, the handicapped, and religious leaders. This principle will trim down the target groups of the LICS by at least a third.

5. Linkages between Proposed Shorter Term Policy Reforms and Health Sector Financing Problems

The shorter-term (2-3 years) recommendations of the team concerning health financing are summarized in Table 4.5. The reforms listed address issues of administrative cost, increasing risk sharing as a form of payment, improvement of information systems, changing provider and consumer incentives to be more efficient, efforts to improve the quality of care, and efforts to improve beneficiary targeting. The policy reforms proposed however are minimal regarding the issues of the allocation of the MOPH budget, the distribution of health facilities and personnel, improvement in the allocation of capital expenditure, and reduction of fraud. The longer-term policy recommendations address to a greater extent issues related to the allocation of public resources.

Table 4.5: *Problems w/Health Sector Financing Addressed by Future Policy Reforms (Short-term)*

Problem> Policy V	Administrative Cost	MOPH Allocation	Hlth Facilities & Personnel Distribution	FFS vs. Risk-Sharing	Fraud	Information for Policy & Implemt	Planning % Alloc Capital	Provider Consumer Incentives	Quality of Care	Beneficiary Targeting
SHORT-TERM MEASURES										
Cost Containment for CSMBS										
Supply-side Measures								X		
Develmt of Beneficary Data Base						X				
Reform of the SSS and WCS										
Ext. SSS to Dependents				X						X
Ext. SSS to Self-Employed				X						X
Ext. SSS to Laid-off Workers				X						X
Index capitation to Health CPI										
Improve contrib. registry data bases						X				
Strengthen quality assurance									X	
Institute incentives for PMC										
Integrate SSS and WCS	X									
Set aside SSS/WCS funds for:										
Emergency Care								X		
High Cost Care								X		
Improvemt of Wkplace Safety										X
Reform of the VHCS										
Raise the Cost of Cards								X		X
Collect premiums more frequently		X		X				X		
Require Patients to Follow Referral										
Decentralize Sales to Local Govt	X									
Encourage a Qualifying Period								X		X
Reform of the LICS										
Apply New Poverty Lines				X						X
Restrict Eligibility to Poor				X						X
Decentralize Distrib to Local Govt	X									
Register Patients w/ PHC Provider								X	X	
Finance LICS by Capitation										
Improve Information System						X				
Provide Coverage for Catastrophic								X	X	

B. RECOMMENDATIONS TOWARDS UNIVERSAL COVERAGE

There are at least six dimensions along which Thailand must make decisions in order to achieve universal coverage [12]/. These six dimensions relate to choices about the:

- Beneficiaries.
- Benefit package.
- Institution that provides services.
- Provider payment mechanism.
- Financing sources.
- Institution that pays providers.

1. Beneficiaries and the Benefit Package

Currently in Thailand, the policy aims to provide full benefits for the entire population, however care is rationed by virtue of the inequities in the distribution of personnel and facilities, and in the public subsidies allocated for those covered by different insurance programs.

An appropriate question to ask is: whether universal coverage, with a complete benefit package (all preventive, and health promotive and curative services), is financially feasible for Thailand? One can start to answer this question by referring to the calculations in the annex of the Referral Report prepared for this study project. The calculations in this annex estimate that the annual per capita cost of a basic essential package of services (preventive, promotive, and basic curative services) woud cost 835 baht. If added to this is the estimated annual per capita cost for coverage for catastrophic illness of 205 baht, the total annual per capita cost comes to 1040 baht. Multiplying by a population of 60 million, the total annual cost is estimated to be 62.4 billion baht.

Another approach is to take the highest estimated cost to the government and households under an approach called the SST (see Annex B) of 56.5 billion baht. Add to this the cost of providing care to CSMBS beneficiaries of 16.3 billion baht, the cost of providing care to SSS beneficiaries of 3.9 billion baht, and 3.2 billion baht for the purchase of drugs by patients, for a total of estimated direct patient care costs of 79.5 billion baht. Then add to this an estimated expenditure for administration of 3.2 billion baht (4%), and for preventive and promotive care of 9.5 billion baht (12%) for a estimated full cost to provide health services to the Thai population of 92.2 billion baht. This is only 85 percent of the total public and private health expenditure of 107.9 billion baht estimated in the 1994 national health accounts. The above analysis suggests that between public and private sector health expenditure that *enough resources exist to provide everyone with a*

[12] / A table summarizing the pros and cons of different choices along each dimension, the current position of the Thailand's health financing system, and the new positions of the system after Phase I and Phase II reforms, appears in Annex A. Phase I and Phase II reforms refer to a set of integrated reforms proposed for the short run (2-3 years) and the longer run (5-10 years). These phases are described in complete detail in the Final Integrated Report for this study project. Only the financing related reforms are discussed here.

rather comprehensive health benefit package. Thus the challenge is to improve the efficiency of health expenditures, and the equitable distribution of financial resources.

2. Institution that Provides Services

Both the public and private sectors provide health services in Thailand. Private sector services are principally located in the urban areas, while public services dominate in rural areas. Competition between the two providers for patients, particularly under a system of capitation, is healthy, in that the providers cannot compete on price, so they must compete on the quality of the services they provide[13]/. On the other hand, the public and private sectors might collaborate in the provision of services, sharing personnel and technology in efficient ways. The degree of competition or collaboration will depend on the rules and regulations guiding the use of public and private funds, and the incentives to form partnerships.

3. Provider Payment Mechanism

There are many provider payment mechanisms currently in use in Thailand. MOPH facilities receive government budget paid out of general tax revenue, and also collect fee-for-services. The CSMBS and WCS pay on a fee-for-service basis. The SSS and VHCS pay on a capitated basis and DRGs are used to determine the reimbursement for high cost cases. Provinces receive a lump sum budget for the LICS. Each payment mechanism has advantages and disadvantages in terms of its affect on consumer, and particularly provider behavior. In general, the health insurance programs in Thailand are moving to reimburse based on weighted capitation. The team recommends that the determination of the budget subsidy for government health facilities take the form of a block grant, which would be based on criteria such as capitation. In addition, small tiered user fees are recommended to provide some deterrent to moral hazard. Should a household be unable to pay the user fees because of the size of the household, its low-income, or a household member with chronic illness, the household will be exempted from the fees over a certain maximal threshold, which will be paid by the local government,

4. Financing Sources

Financing sources can include central government and local taxes, insurance premia, and fees-for-service. When the VHCS and LICS are merged, this will form a compulsory insurance scheme (apart from the rest of the population covered by the CSMBS and SSS). The team proposes that the main sources of financing for this compulsory scheme be general taxes raised at the national level, and property-linked taxes raised by local governments. It is estimated that the nominal user fees will raise 20 percent of the needed revenue for this compulsory program – thus the remaining 80 percent must come from taxes.

---

[13] / This assumes that the private sector cannot "cream skim" – that is select the best health risks and therefore maximuze profits by minimizing costs. If all providers were required to have open enrollment periods, during which they could not refuse to enroll anyone who selected them as provider, then "cream ckimming" would be minimized.

5. Institution that Pays Providers

Currently Thailand has many "payors", each with their own set of prices. As the country moves towards a more unified set of prices through capitation, it is also possible to move towards a single payor – a National Health Financing Authority (NHFA). Advantages of this move are that it provides monopsony power to the financing agent to give it greater power in negotiating with provider organizations over benefit package and payment, ability to more equitably distribute financial resources, and reduce administrative costs. Disadvantages are that there will be the need to delineate the funds that go to the single payor, apart from those that go to the central MOPH; and that the single payor might be subjected to intense political pressure to allocate funds in ways that are not efficient nor equitable.

6. The SST Model

The Swedish-Singapore-Thai (SST) model is a proposed future health financing model for Thailand which draws on aspects of the Swedish and Singapore systems, but also retains some elements of the current Thai system. Under the SST model there would be 3 major populations: the CSMBS beneficiaries, the SSS beneficiaries, and all of the remaining population (or the SST population). Key features of the proposed system are that it is primarily tax-financed, with minimal copayments and a maximal household liability to protect those with high cost illnesses. If a household is too poor to pay the copayment, then the local government will make funds available to cover these costs. A schedule of proposed copayment charges is provided in Table 4.6. Consumers however will have a choice of their health care provider, and can pay more for amenities if they should want them. In this way, the scheme reflects the Singaporean system. It is estimated that approximately 80 percent of the total costs will come from tax revenue, with 20 percent made up from the copayments.

Table 4.6: *Suggested Charge Schedule for Accredited Service Providers under SST*

	Average Cost	Copayment
Ambulatory visit at registered PHC	150 baht	50 baht
Ambulatory visit at accredited hospitals	300 baht	150 baht
Admission in Ward A (luxury) per day*	800 baht*	1000 baht*
Admission in Ward B (semi-private)/day	1200 baht	900 baht
Admission in Ward C (common)	800 baht	200 baht

* Only routine service costs and payment shown above. Ward A patients must pay all additional charges for room, board, and clinical services at full cost.

Another aspect of the system is that all public and private hospitals can apply to be accredited. Once accredited, the hospitals must report on services provided in order to get payment on a contractual basis.

7. New Health Financing Institutions

The Health Financing working group has been studying how the government financing of district and provincial health facilities might be altered to achieve a number of objectives. These objectives include:

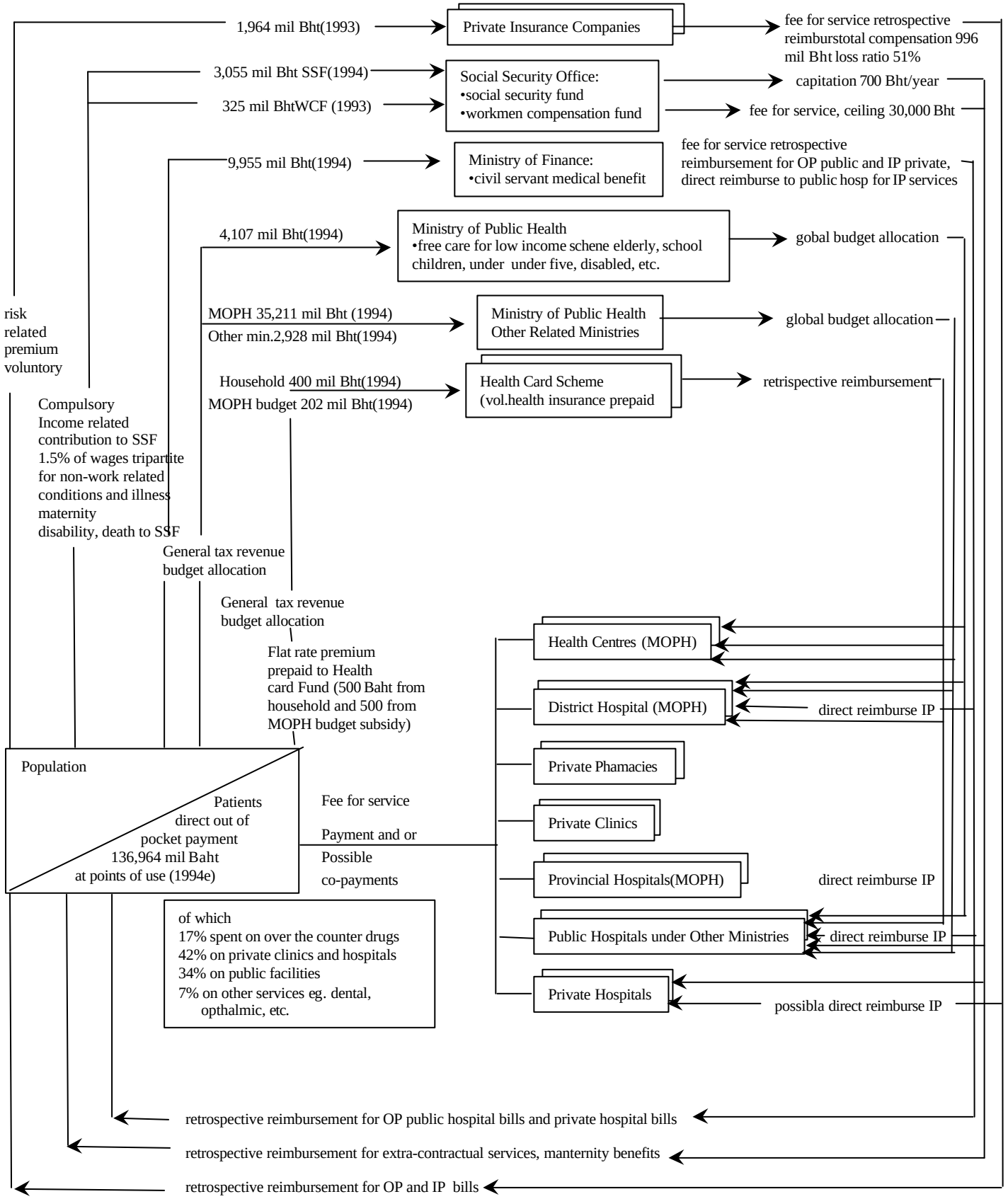
- Improved efficiency in resources use, value for money, and health outcome.
- Reduced duplication in use of budgetary resources, and increased synergy between programs.
- Prompt response to health needs in a specific locality and increased social accountability.
- Equitable allocation of government financial resources to provinces based on health needs and considerations of other available financial resources for health.

The strategies for achieving these objectives is as follows:

- Greater decentralization to Provincial Health Boards (PHB, to be defined below) regarding health planning, budget preparation, program implementation, and budget execution in response to local health needs.
- Increased civil participation in health matters.
- Increased role in performance auditing by the central MOPH, the Budget Bureau, and the Auditor General.
- Unification of recurrent budget from MOPH in the short run into block grants to the provincial level. In the longer run, unification of all payor organizations into a National Health Financing Authority (NHFA).

The point of departure is an understanding of the current health service delivery structures at the provincial level and their financing (see Figure 4.1). The figure shows that funding for public sector health facilities flows through the Provincial Health Office (PHO), which provides financing for the facilities by means of global budgets (by line item) and fee-for-service (under the VHCS). Financing for public and private sector health facilities can come from the SSS and CSMBS/WCS on a capitation and fee-for-service basis respectively. Private insurance pays for services on a fee-for-service basis. Patients pay a significant level of the revenue of the facilities and to pharmacies through user fees/charges.

Figure 3.1 Current Health Financing System, Thailand, 1994



It is proposed that in the future the PHO be transformed from a conduit for separate budgetary line items for facilities and programs into a purchaser of services. This new entity [14]/ would be called a Provincial Health Board (PHB) [15]/. While many of its current functions would remain the same, new functions other than purchasing services include: raising additional financing from local sources, and increasing local participation in decision-making (see Table 4.7).

Table 4.7: *Comparison of the Roles of the PHO with those Proposed for a PHB*

CURRENT ROLES OF THE PHO	**PROPOSED ROLES OF A PHB**
Health Promotion (1)	Public Health Functions (1)
Disease Control (1)	Health Services Purchasing and Allocation of Financing (2)
Health Care Reform & Health Insurance (2)	Legal Enforcement [16]/
Pharmacy (3)	Planning, Monitoring, & Evaluation (4)
Planning and Evaluation (4)	Administration (5)
Administration (5)	Raising Additional Financing from Local Sources
PCMO and Deputy (5)	Including Local Participation in Decision-Making

Funds from all MOPH sources for non-capital, recurrent expenses would be allocated through a block grant formula to the PHBs, which would then contract with providers in the public or private sector to provide services on a capitated basis. Depending on the outcome of current studies, district hospitals could be given the role of fund holders and purchase services at the provincial hospital on a fee-for-service basis for the patients registered with them. In addition, the district hospitals would form local health delivery systems by integrating with the nearby health centers. The PHB would finance public health services through program budgets administered by the DHOs (see Figure 4.2). Patients would pay small copayments for services provided by hospitals, with the copayment set at a higher level for the services provided at a provincial hospital.

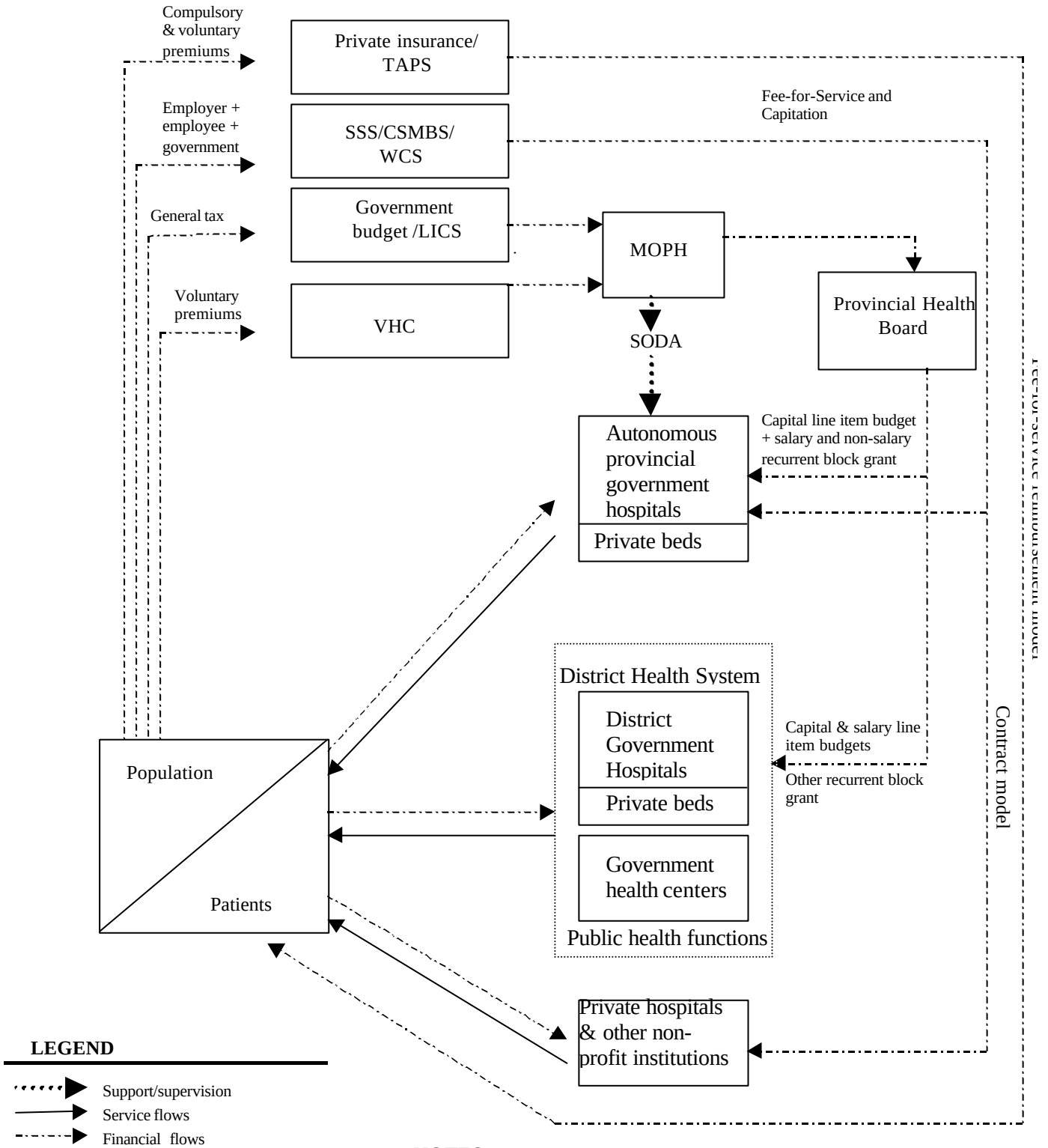
[14] / The reformation of the PHO into a PHB would leave many of the same functions with the orgranization and in that sense it is not "new".

[15] / In addition to its purchasing function, the PHB would have the following responsibilities: a) public health functions, b) legal enforcement (e.g. of drug policy), c) planning, monitoring and evaluation, and d) administration.

[16] Special legislation would have to be written to allow the PHB to enforce health legislation, e.g. consumer protection laws.

Figure 4.2: Proposed Health Financing System, Phase I

(draft 11.3.99)



FFS = fee for service
CSMBS = Civil Service Medical Benefit Scheme
SSS = Social Security Scheme
VHC = Voluntary Health Card
LICS = Low-income Card Scheme
TAPS = Traffic Accident Protection Scheme
WCS = Workmen's Compensation Scheme

NOTES:
Co-payments between patients & providers.
Full cost recovery in private beds/hospitals.
District Health Office is part of District Coordinated System
Urban & rural districts treated the same
No decentralization to municipalities

In the longer run, to bring more coherence to the financing of health services in Thailand, the team recommends that a National Health Financing Authority (NHFA) be created which will have a role somewhere along the following continuum. At one extreme the NHFA would coordinate the flows of health funds from the CSMBS, SSS, and to the MOPH (including the VHCS and LICS) to the provincial level. At the other extreme, the funds from all of these sources would be pooled for distribution to the provinces (see Figure 4.3). Advantages to moving towards a single payor include the potential for improving the efficiency with which funds are used, as the payor will be able to use its monopsony power to negotiate fair rates for payment, and will reduce the costs of administrative overlap. In addition, with a single payor there is more opportunity for equitable distribution of resources as the total picture regarding health financing is in one organization. Among the problems with trying to move towards a single payor are the entrenched interests of current payors and their beneficiaries, and the possibility that the agency would come under tremendous political pressure to distribute according to political agendas.

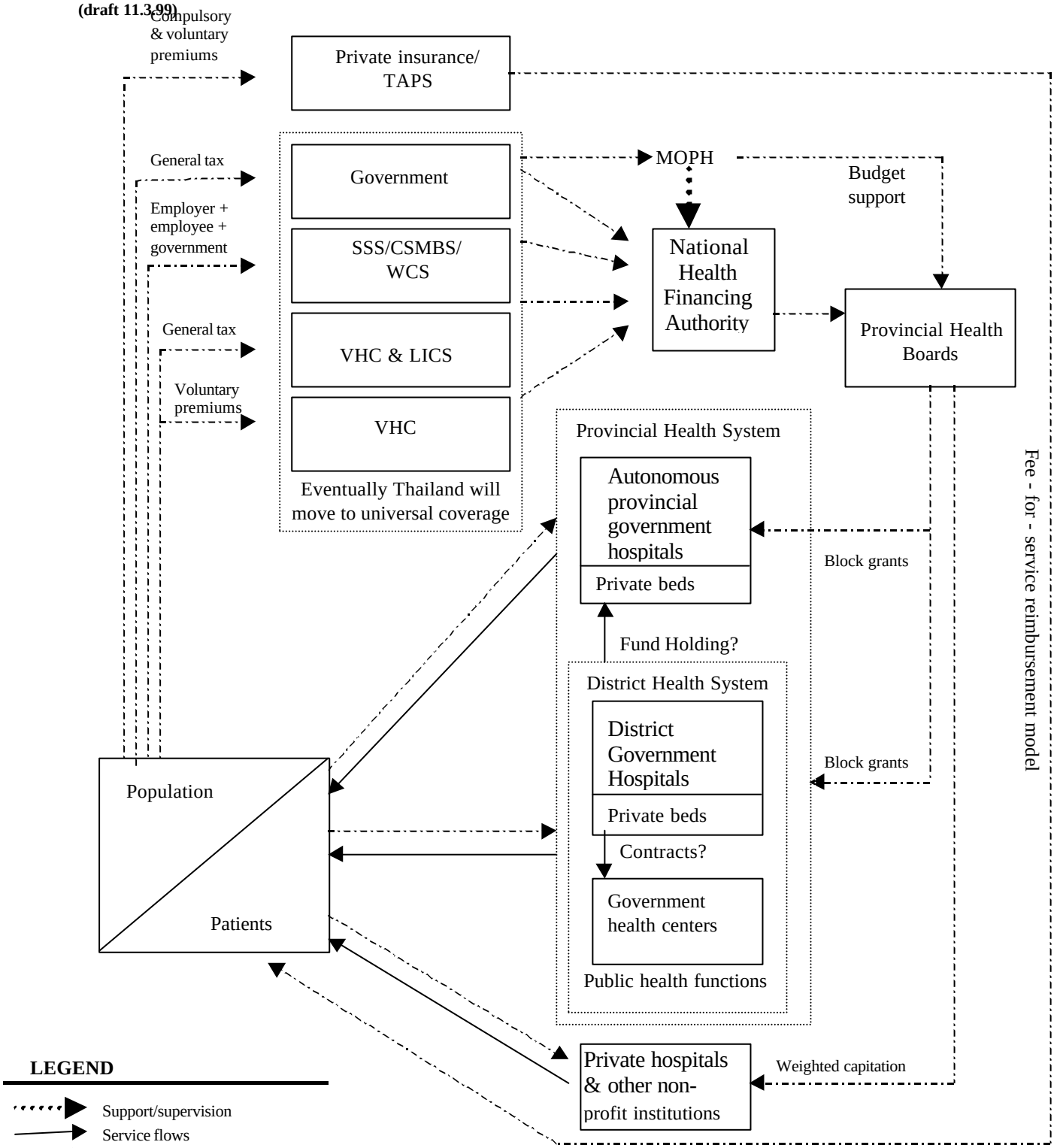
It is also important to consider what mechanism(s) is necessary to bring about changes in health financing policy and strategy. An inter-ministerial committee might be developed to address these broad issues. Current efforts to draft a National Health Insurance Law should be given more emphasis by the political parties as well as the bureaucracy. Given the experience in other countries (e.g. Colombia, Philippines), there is much to be said for development of policy and legislation by a small technical group working under a committed and dynamic leader within the MOPH, with "champions" in the political arena.

8. Linkages between Proposed Longer Term Policy Reforms and Health Sector Financing Problems

The team's longer term policy recommendations are focused significantly on the reduction of administrative costs, the more equitable allocation of MOPH expenditure, the improvement of the distribution of health facilities and personnel, and changing provider and consumer incentives to achieve a more efficient and effective health care delivery system. The area which none of the financing recommendations addresses is that of capital planning and allocation. This is clearly an area for additional analysis and policy development, particularly since the MOPH is the most significant financier of capital investment (see Table 4.8).

Figure 4.3: Proposed Health Financing System, Phase II

(draft 11.3.99)



FFS = fee for service
CSMBS = Civil Service Medical Benefit Scheme
SSS = Social Security Scheme
VHC = Voluntary Health Card
LICS = Low-income Card Scheme
TAPS = Traffic Accident Protection Scheme
WCS = Workmen's Compensation Scheme

NOTES:
Co-payments between patients & providers.
Full cost recovery in private beds/hospitals.
Provincial & District Health Office is part of Provincial Coordinated System
Urban and rural provinces & districts treated the same
Need for law to authorize and give authority for this model to be implemented

Table 4.8: *Problems w/Health Sector Financing Addressed by Future Policy Reforms (Longer-term)*

Problem> Policy V	Administrative Cost	MOPH Allocation	Hlth Facilities & Personnel Distribution	FFS vs. Risk-Sharing	Fraud	Information for Policy & Implemt	Planning % Alloc Capital	Provider Consumer Incentives	Quality of Care	Beneficiary Targeting
LONGER-TERM MEASURES										
Complete shift to Capitation	X				X			X		
Create District Health Systems	X		X					X		
Create Provider Health Networks	X		X					X		
Create Provincial Health Boards (PHB)	X									
Finance PHBs through Block Grants		X						X		
Finance Netwks through Block Grants		X								
Create a Natl Hlth Financing Authority	X	X								

LIST OF REFERENCES

Bennett, S. and Tangcharoensathien, V. (1993) "Health Insurance and Private Providers: A Study of the Civil Servants' Medical Benefit Scheme in Bangkok, Thailand", International Journal of Health Planning and Management, 8:137-152.

Bennett, S. and Tangcharoensathien, V. (1994) "A Shrinking State – Politics, Economics and Private Health Care in Thailand", Public Administration and Development, 14(1): 1-17.

Brooker Group (March 13, 1998) Final Report: Impact of Thailand's Economic Crisis on the Social Sector, Health Care – 20 pp. (xerox).

Chunharas, S. (----) Exempting the Poor: Experience of Thailand, Boston: Harvard School of Public Health, (xerox).

Donaldson, D. (June 3, 1997) Background for Thailand Health Sector Assessment, background paper for World Bank Flagship Course on Health Sector Reform, 23 pp. plus tables.

Denduang, S. and Denduang, N. (1999) The development and evaluation of market in the voluntary health card. Nakornpathom: Faculty of Social Science and Humanities, Mahidol University.

Enthoven, A.C. (1994) "On the Ideal Market Structure for Third-Party Purchasing of Health Care", Social Science and Medicine, 39(10): 1413-1424.

Enthoven, A.C. and Singer, S.J. (Spring 1995) "Market-based Reform: What to Regulate and by Whom?", Health Affairs, pp. 105-119.

Glaser, W.A. (Summer 1984) "Juggling Multiple Payers: American Problems and Foreign Solutions", Inquiry 21: 178-188.

Green, A. (November 1997) Health Sector Reform: Policy Formulation and Implementation – Country Report on Thailand, Leeds: Nuffield Institute for Health, 38 pp. plus annexes (xerox).

Griffin, C. (1992) Health Care in Asia: A Comparative Study of Costs and Financing, Washington, DC: World Bank, 226 pp.

Heller, P.S. (June 1998) "Aging in the Asian Tiger Economies", Finance and Development, pp. 26-29.

Hsiao, W.C. (1993) Health Care Financing in Thailand: Challenges for the Future, paper presented at the Leadership Workshop on Health Care Financing in Thailand, Phetburi, Thailand, November 12-13, 1993.

Hsiao, W.C. (Summer 1995) “Medical Savings Accounts: Lessons from Singapore”, Health Affairs, pp, 260-266.

Hunter, D.J. and Stockford, D. (1997) “Health Care Reform in the United Kingdom”, in Nittayarumphong, S. ed. Health Care Reform, at the Frontier of Research and Policy Decisions, Nonthaburi: MOPH, pp. 71-100.

Kanchonham, Y. and Chunharas, S. (1993) “At the Crossroads – Challenges for Thailand Health Development”, Health Policy and Planning, 8(3): 208-216.

Kiranandana, T. (October 1993) Voluntary Health Insurance in Thailand, paper presented at the Health Financing in Thailand, a National Workshop, Phetburi, Thailand, November 12-13, 1993, 72 pp.

Massaro, T.A. and Wong, Y. (Summer 1995) “Positive Experiences with Medical Savings Accounts in Singapore”, Health Affairs, pp. 267-272.

Mills (1991) “Exempting the Poor: the Experience of Thailand”, Asian Survey, 28(4): 451-470.

Mills, A. (1997) “Current Policy Issues in Health Care Reform from an International Perspective: the Battle between the Bureaucrats and Marketeers”, in Nittayarumphong, S. ed. Health Care Reform, at the Frontier of Research and Policy Decisions, Nonthaburi: MOPH, pp.17-46.

Mongkolsmai, D. (1993) The Social Welfare for Health Care, paper presented at the Health Financing in Thailand, a National Workshop, Phetburi, Thailand, November 12-13, 1993.

Mongkolsmai, D. (1997) “Private Sector Growth and Social Security Insurance in Thailand”, in Newbrander, W. ed. Private Health Sector Growth in Asia: Issues and Implications, New York: John Wiley and Sons, pp. 83-107.

MOPH (----) Ministry of Public Health, Its Administrative System and some Salient Background Information, Nonthaburi: MOPH, 60 pp.

MOPH and Parliamentary Health Committee (----) National Health Insurance Act, B.E. …, 25 pp. (draft, xerox).

Nittayaramphong, S. and Tangcharoensathien, V. (1994) “Thailand: Private Health Care Out of Control”, Health Policy and Planning, 9(1):31-40.

Nittayaramphong, S. and Panarunothai, S. (1997) “ Thailand at the Crossroads: Challenges for Health Sector Reform”, in Nittayaramphong, S. ed. Health Care Reform, at the Frontier of Research and Policy Decisions, Nonthaburi: MOPH, pp. 141-165.

Nittayaramphong. S. et.al. (1993) Payroll Tax Financed Health Insurance Schemes in Thailand: A Policy Analysis, paper presented at the Health Financing in Thailand, a National Workshop, Phetburi, Thailand, November 12-13, 1993, 30 pp.

OECD (1992) The Reform of Health Care, A Comparative Analysis of Seven OECD Countries, Paris: OECD, 152 pp.

Panarunothai, S. and Tangcharoensathien, S. (1993) Health Financing Reforms in Thailand: A Blue Print, paper presented at the Health Financing in Thailand Workshop, 12-13 November, 1993, Petchaburi, Thailand, 12 pp.

Panarunothai, S. and Rehnberg, C. (June 1998) Equity in the Delivery of Health Care in Thailand, Nonthaburi: HSRI, 25 pp.

Pothisiri, P. et.al. (1998) Funding Priorities for HIV/AIDS Crisis in Thailand, paper presented at the "Funding and Policy" session of the 1998 World AIDS Conference in Geneva, (xerox).

Prescott, N. (1997) "A Script – How to Manage Rising Health Care Costs in East Asia", Healthcare Asia, pp. 10-21.

Reich, M. (June 1994) Political Mapping of Health Policy, Boston: DDM/HSPH, 32 pp. (draft).

Roemer, M.I. (1991) National Health Systems of the World,, New York: Oxford University Press, pp. 271-298.

Rojvanit, A. (January 1993) Pricing Policy in Public Hospitals, Bangkok: Thammasat University (Economics), 51 pp.

Rojvanit, A. (1993) The Civil Servant Medical Benefits Scheme, paper presented at the Health Financing in Thailand, a National Workshop, Phetburi, Thailand, November 12-13, 1993.

Smutharaks, B. (April 10, 1993) An Overview of Issues in Thailand's Health Care Financing System, 20 pp. (draft, xerox).

Songkhla, M.N.et.al. (June 28, 1997) Equity on Health and Health Care in Thailand, Nonthaburi: HSRI, 44 pp.

Srivanichakorn, S. and van Dormael, M. (1998) "Conditions, Constraints, and Strategies for Increased Contribution of General Practitioners to the Health System in Thailand", Human Resources for Development Journal 2(1): 48-59.

Supachutikul, A. (July 1996) Situation Analysis in Health Insurance and Future Development, Bangkok: THRI, 110 pp.

Tangcharoensathien, V., Nittayaramphong, S. (October 30, 1992) The Public Private Mix in Thailand: Country Background Paper, Bangkok: Health Planning Division, MOPH (xerox).

Tangcharoensathien, V. and Supachutikul, A. (1997) Compulsory Health Insurance Development in Thailand, paper presented at the International Conference on "Economics of Health Insurance in Low and Middle Income Countries". Antwerp, Belgium.

Tangcharoensathien, V., Supachutikul, A., and Nittayaramphong, S. (March 19, 1992) "Cost Recovery of Hospitals under the Ministry of Health", Chulalongkorn Medical Journal, August; 36(8): 593-599.

Tangcharoensathien, V. et.al. (1998) The Social Security Scheme in Thailand: What Lessons Can be Drawn?, Nonthaburi: HSRI, 20 pp. (xerox).

Tangcharoensathien, V. et.al. (----) National Health Account Development: Lesson from Thailand, Nonthaburi: HSRI (xerox).

Tangcharoensathien, V. et.al. (----) Pattern of Public Sector Health Expenditure during the Fifth, Sixth, and Seventh National Health Development Plans (1982-1996), 68 pp. (in Thai – xerox).

Taylor Associates International (January 17, 1997) Private Hospital Investment Opportunities, Country Profiles, Annapolis: Taylor Associates International, pp. 37-42.

Wilbulpolpresert, S. (1991) "Community Financing: Thailand's Experience", Health Policy and Planning, 6(4): 354-360.

Wilbulpolprasert, S. et.al. (January 19, 1998) Future Scenarios of the Thai Health Care System, Health Futures Study, Nonthaburi: MOPH, 21 pp. (xerox).

Wilbulpolprasert, S., Tangcharoensathien, V., and Lertiendumrong, J. (15 April 1998) The Economic Crisis and Responses by the Health Sector in Thailand, 1997-98, paper presented at the Regional Consultation on the Health Implications of the Economic Crisis in the South-East Asian Region, 23-25 March 1998, Bangkok, Thailand, 25 pages (xerox).

World Bank (November 30, 1997) Thailand: Public Finance in Adjustment, Bangkok: World Bank, 23 pp. (xerox).

---- (1997) Cost and Revenue Analysis of Khon Kaen Hospital in the Fiscal Year 1997, (in Thai).

---- (1997) Unit Cost Analysis on Health Care Centers in Tak Province, Fiscal Year 1997, (in Thai).
---- (May 1997) Exempting the Poor: A Review and Evaluation of the Low-income Care (Medical Welfare) Scheme in Thailand, Nonthaburi: HSRI, 73 pp. (xerox).

---- (----) Public Hospital Financing in Thailand (in Thai).

ANNEX A
DIMENSIONS OF HEALTH SERVICES FINANCING AND DELIVERY, THAILAND'S CURRENT POSITION AND PROPOSALS

Table A.1: *DIMENSIONS OF HEALTH SERVICES FINANCING AND DELIVERY. THAILAND'S CURRENT POSITION AND PROPOSALS*

BENEFICIARIES	Civil Servants	Employees-Pvt Sector	Rural Population	Indigent Population
Advantages	Fringe benefit makes public srvc attractive	Population easy to identify & collect from	Higher Productivity	Reduce delay in seeking treatment
Disadvantages	Paid for w/before tax income, over insure	Paid for w/before tax income, over insure	Difficult to identify & collect from	Difficult to identify & hard to raise finance for
Current Position	Covered	Covered	Partially covered	Partially covered
Phase I	Covered	Covered	Partially covered	Partially covered
Phase II	Covered	Covered	Covered	Covered

BENEFITS	Catastrophic (insurance cover)	Max. Liability (ability to pay)	Essential Pkg.	Comprehensive Pkg.
Advantages	Affordable w/Public Funds	Limits Financial Risks to Households	Meets Basic Needs	Provides Health Security
Disadvantages	Emphasis on Curative	Administrative Costs Moral Hazard	Insufficient Public Funds	Insufficient Public Funds
Current Position		Uninsured Poor		CSMBS, SSS/WCS, VHCS, LICS
Phase I		Uninsured Poor		CSMBS, SSS/WCS, VHCS, LICS
Phase II				Total Population

FINANCING SOURCE	Tax	Compulsory Insurnc	Voluntary Insurnc	Fee-for-Service/Copay
Advantages	Progressive	Universal Coverage		Control Adverse Sltn Control Moral Hazard
Disadvantages	Lack of UC	Moral Hazard	Lack of UC Adverse Selection	Lack of UC
Current Position	MOPH Gnrl. Budget LICS	SSS/WCS	VHCS	Uninsured
Phase I	MOPH Gnrl. Budget LICS	CSMBS SSS - expand WCS - Combine w/SSS	VHCS - expand	Tiered Low Fees
Phase II	MOPH Gnrl. Budget LICS	CSMBS SSS - expand WCS - Combine w/SSS	VHCS - expand	Tiered Low Fees

PROVIDER PAYMENT	Line Item Budget	Global Budget (no contract)	Block Grant (contract)	Capitation	DRGs	Fee-for-Service
Advantages	Budget Control Known, easy	Allocative Efficiency Decentralized Control	Allocative Efficiency Link w/ Productivity Distributional Control	Allocative Efficiency Technical Efficiency	Cost Recovery Technical Efficiency	Cost Recovery
Disadvantages	Allocative Inefficiency	No Nat'l Progm Control No Nat'l Prodcty Contrl Quality Control		Quality Control	DRG Creep Hard to Apply	Induced Demand
Current Position	MOPH Gnrl Budget		LICS	SSS, VHCS	SSS - high cost	CSMBS, WCS, Uninsured
Phase I	Capital Salary		LICS Other Recurrent to Provinces	SSS, VHCS, CSMBS/WCS	SSS - high cost	Uninsured
Phase II	Capital		All Nat'l Recurrent Pooled to Provinces	Provinces Pay Providers via Capitated Contracts		Copay based on Level of Service

INSTITUTION THAT PAYS	Multiple Payor	Single Payor	Employer/Employee	Patients (MSAs/FFS/ Copay)
Advantages	Maximize Revenue	Low Administrative Costs	Build Substantial Reserves	Control Adverse Sltn Control Moral Hazard
Disadvantages	High Administrative Costs	Open to Political Manipulation	High Administrative Costs	Limited Resources and Financial Sustainability
Current Position	Govt, Employmt, Patients			
Phase I	Maintain Status Quo			
Phase II		Autonomous Public Organizations (Nat'l & Provincial)		Patients' Fees

ANNEX B
DESCRIPTION AND DETAILED COST ESTIMATES FOR THE SST MODEL

The main features of the SST (Swedish, Singaporean, Thai) model of payment for health services are a mix between the tax financing for UC of the rest of the population with a fixed maximal annual liability per household as described by the Swedish system. However, users have choice to pay for their health care according to their ability to pay as one main feature of the Singaporean system. As Thailand's trend moves toward decentralization, the local government will share a supplementary source of finance for the indigent and the underprivileged. Advantages of this model over the other presented above are the shared responsibilities, the payment as choice and simplicity. More details on the financial scenarios with the SST Model are presented below.

These estimations are based on the analyses made on the 1996 Health and Welfare Survey (HWS) of the National Statistical Office (NSO).

The objective is to forecast financial requirements to operate the SST model for achieving universal coverage.

Assumptions:
Assumptions are simply based on:
- the reporting of illness and uses of health services by the NSO-HWS
- unit costs of health services at health centre (HC), community hospital (CH) and provincial hospital (PH).

Target populations:
Households not covered by the CSMBS and SSS by area of residence (from the HWS, see Table B.1).

Copayment level:
Determine differently according to level of care:
- OP services at HC 30, CH 50 and PH 100 baht a visit.
- IP services at CH 50 and PH 100 baht/day, or CH 100 and PH 200 baht/day.
- Assume that no households are exempted from copayment; ie very few households exceed the threshold level set as an annual liability, and for the indigent –the local governments will help them pay the copayment.

Financial requirements:
Applying the illness rates, seeking behaviors (see Table B.2) and hospitalization experiences (see Table B.3) of the general population to the SST covered group, and multiplying with the cost of each level of care (see Table B.4), it is estimated that the cost to the government would be 34.2 billion baht (scenario 1) or 40.9 billion (scenario2). If there is a shift of services from private services to public (both OP and IP), the cost would increase to 56.5 billion baht (scenario 3). Because the CSMBS and SSS households may not be all family members, so scenario 4 and 5 show how the size of the

SST group may expand with the consequences of costs to the government. The range will be from 39 to 47 billion baht.

User charges will be substituted with a fixed schedule of copayments, however, copayment will constitute about 16 to 20% of the total government expenditure.

This estimation is somewhat lower than what had been estimated before. Pannarunothai and Wongkanaratnakul (1996)[17]/ estimated that the universal coverage policy will cost the government about 70 billion baht. The differences are from different approach in estimating illness rates. The pervious study approached by age group while this study approach through residence area.

Table B.1: *Proportion of Households Covered by the CSMBS and SSS and the rest for SST*

	All hh	CSMBS	SSS	SST
Urban	3,875,800	0.217	0.035	2,899,098
Suburb	1,738,600	0.166	0.015	1,423,913
Rural	10,814,000	0.076	0.004	9,948,880

Table B.2: *Illness Experiences and Proportion of Uses for OP Services*

	Households	Member	Ill	HC	CH	PH	Priv
Urban	2,899,098	3.66	3.224	0.026	0.034	0.211	0.361
Suburb	1,423,913	3.71	3.952	0.097	0.168	0.135	0.252
Rural	9,948,880	4.00	4.498	0.239	0.143	0.117	0.160
	14,271,892						

Table B.3: *Admission rates and Proportion of Use for Different Types of Hospitals*

	Admission	CH	PH	Priv
Urban	0.051	0.078	0.68	0.334
Suburb	0.068	0.351	0.448	0.189
Rural	0.063	0.433	0.43	0.127

[17]/ Pannarunothai S and Wongkanaratanakul P (1996) Estimation of the cost of basic essential health package for Thailand by using current health expenditure for the low-income and other underprivileged groups. An HSRI research report.

Table B.4: *The Cost to the Government for SST Policy*

Scene	HC	CH	PH	CH	PH	Cost
1	70	200	500	2,000	5,000	34,204,623,959
2	80	240	600	2,400	6,000	40,924,478,650
3						56,500,758,751
4	70	200	500	2,000	5,000	39,097,948,367
5	80	240	600	2,400	6,000	47,119,500,072

Table B.5: *Copayment Raised in Relation to Cost*

Scene	Cost	Copay	%
1	34,204,623,959	6,973,766,320	20.39
2	40,924,478,650	7,965,334,443	19.46
3	56,500,758,751	9,428,052,973	16.69
4	39,097,948,367	7,387,784,648	18.90
5	47,119,500,072	8,002,134,804	16.98