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THAILAND:
UNIVERSAL HEALTH CARE COVERAGE THROUGH PLURALISTIC APPROACHES

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Universal Health Care Coverage Through Pluralistic Approaches:

Experience from Thailand

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List of abbreviations and acronyms

BoB	Bureau of Budget, Thailand
CGD	Comptroller General's Department, Ministry of Finance, Thailand
CPI	Consumer Price Index
CUP	Contracted unit for primary care
CSMBS	Civil Servants Medical Benefit Scheme, Thailand
DRG	Diagnosis-related Group
GFMIS	Government Financial Management Information System
GDP	Gross domestic product
HCS	Health Card Scheme
HIV	Human immunodeficiency virus
HSRI	Health Systems Research Institute, Thailand
IMF	International Monetary Fund
LIS	Low Income Scheme
MoI	Ministry of Interior
MoPH	Ministry of Public Health, Thailand
MoF	Ministry of Finance, Thailand
MoC	Ministry of Commerce, Thailand
MWS	Medical Welfare Scheme
NESDB	National Economic and Social Development Board, Thailand
NHSO	National Health Security Office, Thailand
NSO	National Statistics Office
PID	Personal identification number
PHC	Primary health care
PHO	Provincial Health Office
P&P	Preventive and health promotion
SES	Socio-economic Survey
SSO	Social Security Office, Ministry of Labour, Thailand
SSS	Social Security Scheme, Thailand
UCS	Universal Coverage Scheme, Thailand

1. **Introduction**

Thailand locates in Southeast Asia. Its territory covers an area of approximately 514,000 square kilometers. The official national language, spoken and written by almost 100 percent of the population, is Thai. Buddhism is the professed faith of 94.6 percent of the population. Islam is embraced by 4.6 percent of the Thai people while the rest of the population practices Christianity, Hinduism and other religions.

Figure 1 Map of Thailand

1.1 Demographic

Thailand can still enjoy the "demographic dividend", phenomenon of lower dependency ratio, for only a decade (Wongboonsin 2003). The overall dependency ratio, which keeps falling until 2010 (Table 1), will reverse to rise due to an increase proportion of the elderly. Population age 60+ will increase to more than 10% in 2010 and reach 20% within 25 years. In 2050 nearly one third of Thailand's population will be age 60 and over. Latest in around 2005, Thailand entered the period of an "ageing society". By the year 2030 the proportion of elderly in the Thai population is expected to increase to 15 percent. The survey of population change 2005 and analysis form administrative database of Bureau of Registration Administration, Ministry of Interior showed the same pattern that total fertility rate decreases rapidly than previous estimation. The total fertility rate of Thailand is far below the replacement level now. It means that Thailand will face the elderly problem earlier. Issues of urbanization make this problem more complicate.

Statistic showed that Thai women marry later than before and more single. Couples also delay to have kid. Life expectancy at birth for males and females are 67.9 and 73.81 respectively, which trend to increase to 76.5 for male and 81.7 for female in period 2045 - 2050. Therefore decrease in population growth rate and increase in life expectancy in both male and female have affected on age structure of the population. The proportion of children population aged 0-14 tends to continuously drop while the working age still increase and proportion of aging population is low.

Table 1 Population projection

	2005	**2010**	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
0-14	16.2	15.2	13.4	12.3	11.7	11.4	10.8	10.0	9.3	8.7
15-59	43.8	46.0	47.8	48.4	47.7	46.1	44.3	42.4	40.3	38.2
60+	6.0	7.1	8.7	10.8	13.3	15.8	18.1	20.1	21.5	22.3
TOTAL	**65.9**	**68.3**	**70.0**	**71.5**	**72.6**	**73.2**	**73.2**	**72.4**	**71.1**	**69.2**

Source UN pop 2000

Average family size will decrease continuously from more than 5 persons per household to 3.9 in 2000, 3.4 in 2010, and 3.1 in 2020. These figures reflect the trend that more and more Thai people will change from extended family to nuclear families in the future. Also data from Urban Development Cooperation Division, National Economic and Social Development (NESDB) showed that there are increase migration from rural area to urban area which will decrease population in rural area from 65.28% in 2000 to 60.01% in 2010.

1.2 Socioeconomic

The base of the Thai economy has rapidly changed from agriculture to services and manufacturing. In 1961, when Thailand started the first five-year National Economic and Social Development Plans, the Thai economy was mainly reliant on the agriculture sector. According to the statistics of the NESDB, the share of agriculture decreased from 40 per cent of gross domestic product (GDP) in 1960 to 10 per cent in 2002, and manufacturing increased from 13 per cent to 37 per cent of GDP. Economic growth has been impressive over more than three decades. From 1987 to 1995, growth averaged about 10 per cent a year. Till 1996-1997, an emergence of an economic crisis drastically hit Thailand's economy. This economic crisis brought a 60 per cent devaluation of the baht and negative growth for a few years. Thailand, therefore, had to enter into a structural reform loan of US$17.2 billion from the International Monetary Fund (IMF). In 1997, the Thai economy had generated a negative growth rate of 1.4 percent, and a greater decline to minus 10.5 percent in 1998. Nonetheless, a resumption of the Thai economic growth revealed since 1999, with a rise of 4.8, 5.3 and 6.3 in 2000, 2002 and 2004 respectively. However, in 2006 growth rate is decline a little bit to 5.1.

However, economic development in Thailand has been criticized for creating greater income disparity rather than narrowing the gap between the rich and the poor, Since the first national economic and social development plan in 1962, the Gini coefficient for income distribution increased from 0.41 in 1962 to a high point of 0 54 in 1992 and then fell slightly when the country faced economic crisis in 1997 (Table 2). The share of income of the poorest 20 per cent (quintile) was 7.9 per cent in 1962 and 4.8 per cent in 2004, while the share of the richest quintile was 49.8 per cent and 51.0 per cent in the same years. During 2001-2004, income distribution did improve significantly during the

time of money-pumping from the populist policies of the government at that time, but reversed beyond its normal trend later on when no new money was injected. Impacts on poverty of these populist policies were largely unclear, with only the universal health care scheme (UCS) has clear benefit to the poor (Siamwala, Jitsuchon 2007).

Table 2 GDP growth and GINI

Year	1962	1969	1975	1981	1986	1988	1990	1992	1994	1996	1998	2000	2002	2004	2006
GDP Growth	7.8%	7.8%	4.9%	5.9%	5.5%	13.3%	11.2%	8.1%	9.0%	5.9%	-10.5%	4.8%	5.3%	6.3%	5.1%
Gini Coefficient (Person)	0.41	0.43	0.45	0.47	0.49	0.49	0.51	0.54	0.53	0.52	0.51	0.53	0.50	0.50	

Source: GDP Growth from NESDB
Gini coeff of 1962-1988 from Panarunothai and Patamasiriwat (2001)
Gini coeff of 2000-2004 from NESDB and National Statistical Office (NSO)

Although there were concerns as early as the drafting of the second national plan (1967-71) for income distribution and poverty reduction, Thailand uses mainly economic policy in tackling poverty through economic growth. The country's economic growth has contributed to a sharp drop in poverty levels. Between 1999 and 2000 poverty rates fell by 2 percent. However, poverty fell between 2004 and 2006 at a relatively slow pace. The poverty headcount ratio fell from 11.2 in 2004 to 9.6 in 2006. There are 6.1 million people living below the national poverty line of 1,386 Baht/person/month (World Bank, 2007). Until now there is no a national economic policy on income distribution in any of the national economic and social development plans. The plans still pay attention to high economic growth, but not more equal income distribution,

1.3 Overview of health care system in Thailand

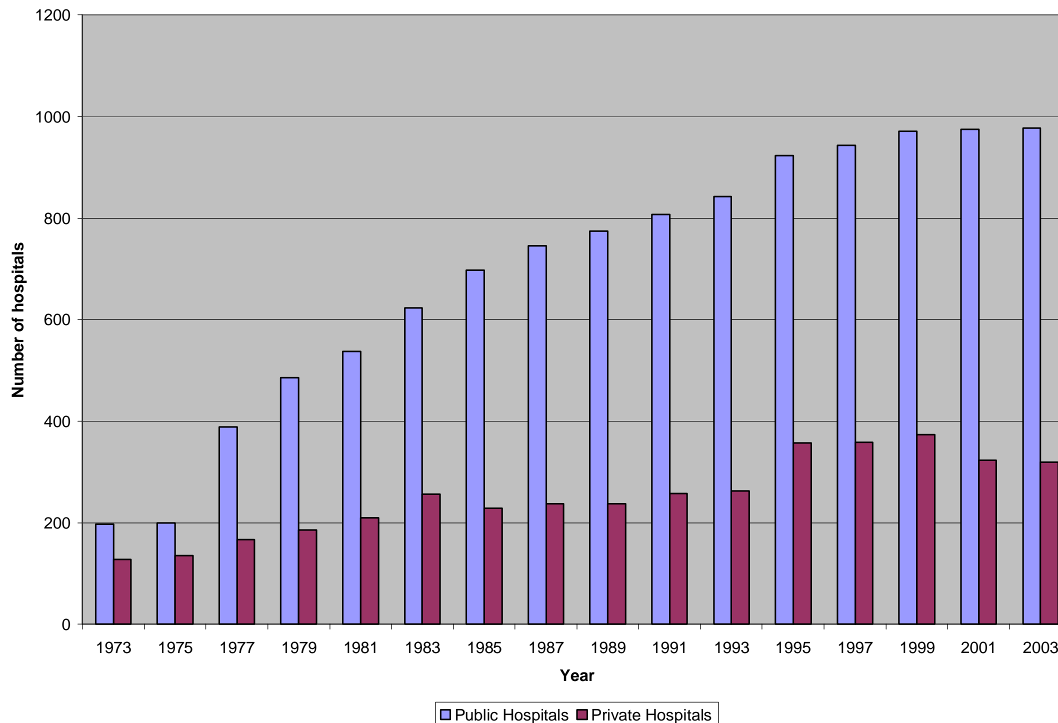
Health care system in Thailand is an entrepreneurial health system with public and private providers. Public health facilities were rapidly expanded nationwide since 1961 when Thailand launched the first five-year National Economic and Social Development Plans (1961-1966). Private hospitals also play role in health services. However, they are mostly in Bangkok and urban area. There are also wide spread of private clinics and polyclinics in urban areas, most of them are owned and running out of hour by public physicians. Since 1994, the numbers of hospitals and beds have been remarkably increasing Bed to population ratio came up to 1:469 in 2004. While the doctor to bed ratio has dropped from 1 : 15.3 in 1991 to 1 : 7 in 2004. Average bed occupancy ratio was 73%, Number of health care personal i.e., Doctors, dentists, pharmacists, and nurses has trended to gradually mount every year due to the strategy to increase emphasis on training of qualified health care personnel in the national plans. Nevertheless the distribution of health personnel still is one of major problems in Thailand. There was significant different between Bangkok, the Capital of Thailand, and other provinces. There are more doctors in Bangkok. The workload was lower for the doctors who worked in other ministry hospitals or private hospitals rather than hospitals of the MoPH.

1.3.1 Health care delivery system

Health Policies for continuous improvements of economic growth and for promoting government during the “cold war” period are major drivers for expansion of public health facilities nationwide. Before 1932, main concerns of the Thai Government were only

prevention services and controlling communicable diseases such as smallpox, cholera. Therefore a few public hospitals were established. The health policy was changed to improve access to modern medical care after Thailand changed from the Absolute monarchy state to a democratic state in 1932. However, the infrastructure of the health care system expanded slowly. In 1942, there were only 15 provincial hospitals and 343 health centers. It was until 1956 that every province had a provincial hospital and there was a regional hospital in each region to act as a referral centre of provincial hospitals. These public health care facilities were financed by government budget which was not enough. For this reason, they were allowed to keep their own revenue for run their own business. Coverage planning for public health care infrastructure was successfully done by using an administrative area approach. There were 217 and 267 grade-I health centers at the end of the first and second plan respectively. Each grade-I health centers had a medical doctor working as a permanent staff member, and took care of people at the district level. In the third plan, grade-I health centers were changed to community hospitals and government set targets to reach "one hospital for every district and one health center for every sub-district (Tambon)". It took time until the fifth plan that Thai government could achieve districts coverage. In 1993 public health centers were close to people that they could access for services within one hour by walking. However, the problem of maldistribution of health care providers among rural and urban areas still exists, and it affected equity in people's access to care.

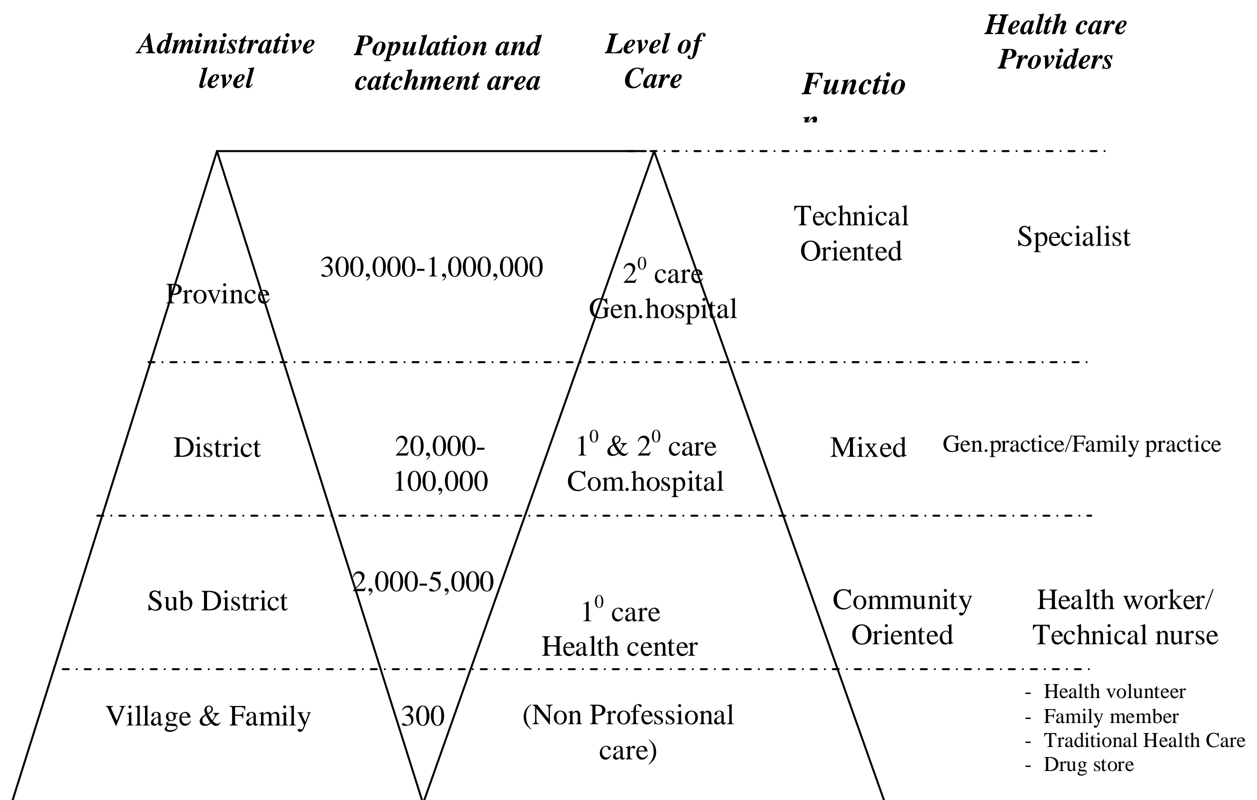
Figure 1 Number of Public and Private Hospitals by year



Source: Health Resource Survey, Bureau of Policy and Strategy, MoPH

In the public sector, the largest agency is the MOPH with two-third of all hospitals and beds across the country. The other public health services are medical school hospitals under the Ministry of University, general hospitals under other ministries (such as Ministry of Interior, Ministry of Defense). In 2004, 68.6 percent of hospitals and 65.4 percent of beds belonged to the MoPH. There are general hospitals (120-500 beds) or regional hospitals (501-1,000 beds) and few special centre/ hospitals in provincial level, community hospitals (10-120 beds) in district level and health centres in sub district areas. Health services in health centers, which mainly concern primary care, are provided by nurses, midwives, and sanitarians. Some of health centers, which are call Community Medical Unit (CMU), now have a doctor work as full time or part time staff. The lowest level is selfcare and primary health care which is provided by health volunteers or people take care themselves. The health care structure under the MoPH can be explained briefly as in Figure 2. It shows the relationship between administrative level, population size level of care function and providers. Currently, MoPH owns 891 hospitals which cover more than 90% of districts; and 9,762 health centers, which cover every sub-district, Tambon(Wibulpolprasert, 2008). Local governments play very limited role in health services now. However, under the decentralization act the MoPH has to transfer most of their health facilities to local government within 2010. Until now there is no concrete action plan for this decentralization.

Figure 2: Health care structure in public sector



For private institutional care, economic expansion during 1992-1997 and the decision of Thai government to promote private sector to involve in health services through allowing tax incentives to investment in private hospitals, lead to increase the number of private hospitals from 218 hospitals in 1986 to 491 hospitals in 1997. There are 199 hospitals were established using this tax incentive between 1987 and 1997 (Board of Investment of Thailand 2004). Twelve private hospitals are listed in the Stock Exchange of Thailand. After economic crisis, all private hospital faced many problems; decline of customer, increasing price of medical supplies include drugs and burden from foreign loan and interest. In 2004 there were only 298 private hospitals left.

Some private hospitals started new marketing strategies and targeted more towards foreign patients. The relatively competitive price, high quality services and excellent hospitality contribute to increase number of foreign patients. In June 2004, the cabinet approved a strategic plan for developing Thailand as a medical hub of Asia. The Government believes that the project will enable Thailand to earn substantial incomes from medical treatment and other related services.

1.3.2 Health manpower

Number of Doctors, dentists, pharmacists, and nurses has trended to gradually increase every year and ratios of health care personnel to population were better. Regarding to education system and qualification for medical care personnel, dentists, pharmacists, nurses, and midwifery must be licensed pursuant to regulations of dental Council,

Pharmacist Council, and Nursing council respectively; physicians are required to complete their degrees from medical institutions accredited by Medical Council of Thailand. Furthermore, medical care obtainers can complain to government or non-government institutions like Consumer Foundation, MoPH, and etc., for unsatisfied services of medical care personnel. Additionally, qualification of medical care personnel shall be regulated by several laws and regulations, Medical Profession Act of B.E. 2525, Dental professions Act of B.E. 2537, Pharmaceutical Profession Act of B.E. 2537, Nursing and Midwifery Professions Act, the Amendment No.2 of B.E. 2540 and Medical Registration of B.E. 2542.

Table 3

Health care personnel	1994	2004
Doctor to population ratio	1:4,165	1: 3305
Dentist to population ratio	1:19,677	1: 15,143
Pharmacist to population ratio	1:10,532	1: 8,432
Registered nurse to population ratio	1:1,150	1: 652
Average bed occupancy rate		73%

Source: Health Resource Survey, MoPH

The distribution of health personnel is different among Bangkok and regions (North, Northeast, central and South); there are more doctors in Bangkok; number of population per doctors is highest in Northeastern region, which is the poorest region. Workload was lower for the doctors who worked in other ministry hospitals or private hospitals rather than the Ministry of Public Health (MoPH) hospitals. However, the workload does not vary much in term of the nursing distribution. There have been a long history and a lot of measures to overcome this inappropriate distribution of health care personnel among rural and urban area since the first national socioeconomic plan. These personnel preferred to stay in urban area. Increasing on training of qualified health care personnel alone was not an answer. The MoPH started its effort to get more doctors to its 1st class health center by providing voluntary grant for medical student and financial incentive. Nevertheless the situation was worst, during 60's decade; professionally-qualified Thai medical personnel migrated overseas. People resented and called government to manage this problem of "brain drain". In 1968 government launched a new very high medical education fee and a compulsory measure that all medical students have to work for government for three years. Otherwise they have to repay government for 60,000 Baht. This fee now increases to 400,000 Baht (Chokewiwat, 1999). Finally, it applied to other health care professional i.e. dentist, pharmacist, nurse, and other paramedical personnel. The MoPH also established its own nurse collages and other paramedical personal schools which graduated student have to work for government in rural area for years depend on each professionals.

2. Current status of social health protection in Thailand

2.1.Background

Health care financing in Thailand has a long history of evolution for nearly half of decade until Thailand reaches the universal coverage for health care in 2002. It started from user fee with exemption, and gradually moved from this out-of-pocket payment to prepayment system (Figure 3). Various forms of prepayment systems were introduced and tested in Thailand. These implementations are huge differences in terms of contribution, public subsidy, benefits and quality of services. Anyway, Thailand could reach the coverage of social protection in health around 70% with these pluralistic approaches, and there were weakness in terms of efficiency, quality and equity.

Figure 3: chronological development of the health insurance system in Thailand

Year	Private formal sector employee		Government employee	Population covered by Universal Coverage Scheme (UCS)			
				Poor people		Near poor	Uninsured
Before 1974					Fee Exemption System		
1974	WCF						
1975				LIS			
1978			CSMBS				
1981					Type B fee exemption		
1983						HCS	
						I II	
1990		SSS					
1991						III	
1994				MWS		IV	
1999				SIP in 6 provinces		V	
Apr. 2001				UCS in pilot 6 provinces			
Apr. 2002				UCS implemented nationwide			

Regarding movement of technocrats and civil societies, then Universal coverage for health care was stated as a national strategic policy. In 2001, regarding the commitment to rapidly raise the coverage of health care to all Thai citizens under the slogan “30 Baht to cure every disease” as one of key campaign promises, the government at that time provide Thai citizen the universal coverage for health care . As a matter of fact, the design to reach the universal coverage for health care is more comprehensive than the slogan. For the Transition State, there are two action plans. First is the expansion of the coverage with the Social Security Scheme. Second is the reform of the existing welfare scheme for indigent people and voluntary health insurance for self-employed people to the new compulsory scheme, “the 30 Baht scheme”. After the Universal Coverage Policy

was totally introduced in April 2002, the social health protection can be divided in to three groups, schemes for public employees, schemes for private employees and scheme for the rest of Thai (informal sector).

Currently, Public health protection schemes Cover all Thai citizen, 7% of population are covered by public employee benefit schemes, The SSS covers 15% of population, and the rest (76%) are in the UCS. It should be noted that private health insurance companies play very limited additional role in Thailand due to their high premium rate and very strict under-write policies.

Table 4 Characteristics of Public Health Protection Schemes

Characteristics	Public Employees (CSMBS as a prototype)	Private Employees		The rest of Thai (UCS)
		II. SSS	III. WCS	
I. Scheme nature	Fringe benefit	Compulsory	Compulsory	Social welfare
Model	Public reimbursement model	Public contracted model	Public reimburse-ment model	Public integrated model
II. Population coverage 2006	Civil servant of the central government , pensioners and their dependants (parents, spouse, children)	Formal sector private employee, >1 worker establishments	Formal sector private employee, >1 worker establish-ments	The rest Thai population, who are not qualified to previous columns.
No. of Beneficiaries (million)	4.2	9.1	Same as SSS[*1]	47
% coverage			Same as SSS	
• Ambulatory services	Public only	Public & Private	Public & Private	Public & Private
• Inpatient services	Public & Private (emergency only)	Public & Private	Public & Private	Public & Private
• Choice of provider	Free choice	Contracted hospitals or its network with referral line, registration required	Free choice	Contracted hospitals or its network with referral line, registration required
• Cash benefit	No	Yes	Yes	No
• Conditions included	Comprehensive package	Non-work related illness, injuries	Work related illness, injuries	Comprehensive Package
• Maternity benefits	Yes	Yes	No	Yes

*1. Employees of "Not-for-profit" associations are excluded from this scheme.

Table 4 Characteristics of Public Health Protection Schemes (Cont.)

Characteristics	Public Employees (CSMBS as a prototype)	Private Employees		The rest of Thai (UCS)
		II. SSS	III. WCS	
• Annual physical check-up	Yes	No	No	Yes
• Prevention, Health promotion	No	Health education, immuni-Sation	No	Yes
• Services not covered	Special nurse	Private bed, special nurse	No	Private bed, special nurse, eye glasses
• Source of funds	General tax	Tri-parties 1.5% of payroll each, (reduce to 1% since 1999)	Employer, 0.2-2% of payroll with experience rating	General tax
• Financing body	Comptroller General Department, MoF	SSO	SSO	NHSO
• Payment mechanism	Fee for service for OP DRG for IP (July 2007)	Capitation*2	Fee for service	Capitation*3
• Copayment	Yes: IP at private hospitals	Maternity, emergency services	Yes if beyond the ceiling of 30,000 -200,000 Baht (depend on severity of patient)	No
• Expenditure per capita 2006 (Baht)	8,785	1,738*4	211	1,659
• Per capita tax subsidy 2002 (Baht)	8,785 plus administrative cost	579 plus administrative cost	Administrative cost	1,659 plus administrative cost

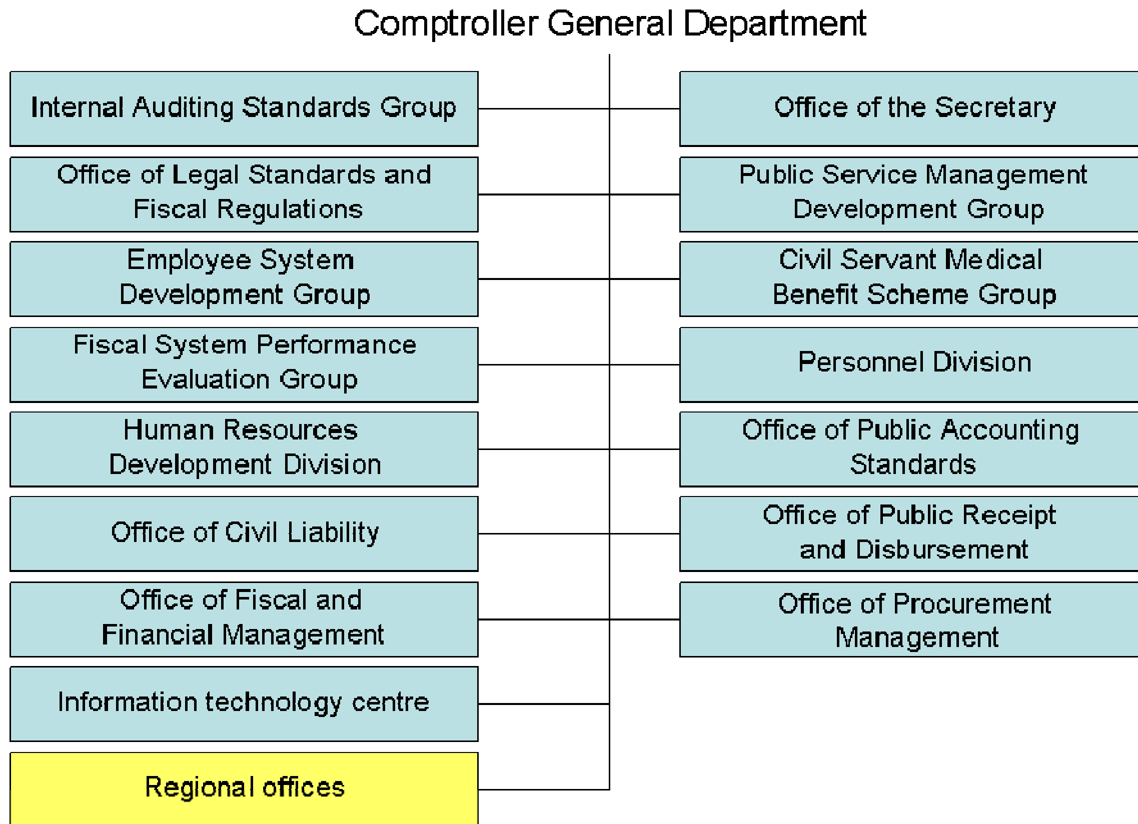
*2 some medical and dental services are reimbursed by Fee for service.
*3 some medical and dental services are reimbursed by Fee for service.
*4 Calculated from total spending on health both by capitation and fee for services such as dental care package, cardiac surgery, chronic hemodialysis etc.

2.2 Public employee schemes

The largest public employee scheme is the Civil Servant Medical Benefit Scheme (CSMBS), which has member around 4.5 million. Actually, local governments, public autonomous agencies and state enterprises have their own employee health care benefit. However their detail benefit packages are similar to the CSMBS, and their members are quite small compare to the CSMBS.

Historically, medical benefit cover for government officer was granted as part of fringe benefits without contribution in compensation a generally low-salary scale. The legal basis of the CSMBS rests on the ‘Royal Decree on the Disbursement of Medical Benefits for Civil Servants, B.E. 2523’ (1989), which its last amendment is in 2007 (B.E. 2550). This scheme is financed solely through the government budget for population coverage about 4.2 million persons in 2006. The Civil Servant Medical Benefit Scheme group of the Comptroller General Department (CGD), Ministry of Finance is responsible to manage the CSMBS. Its organization is shown in Figure 4

Figure 4 Organization chart if the CGD

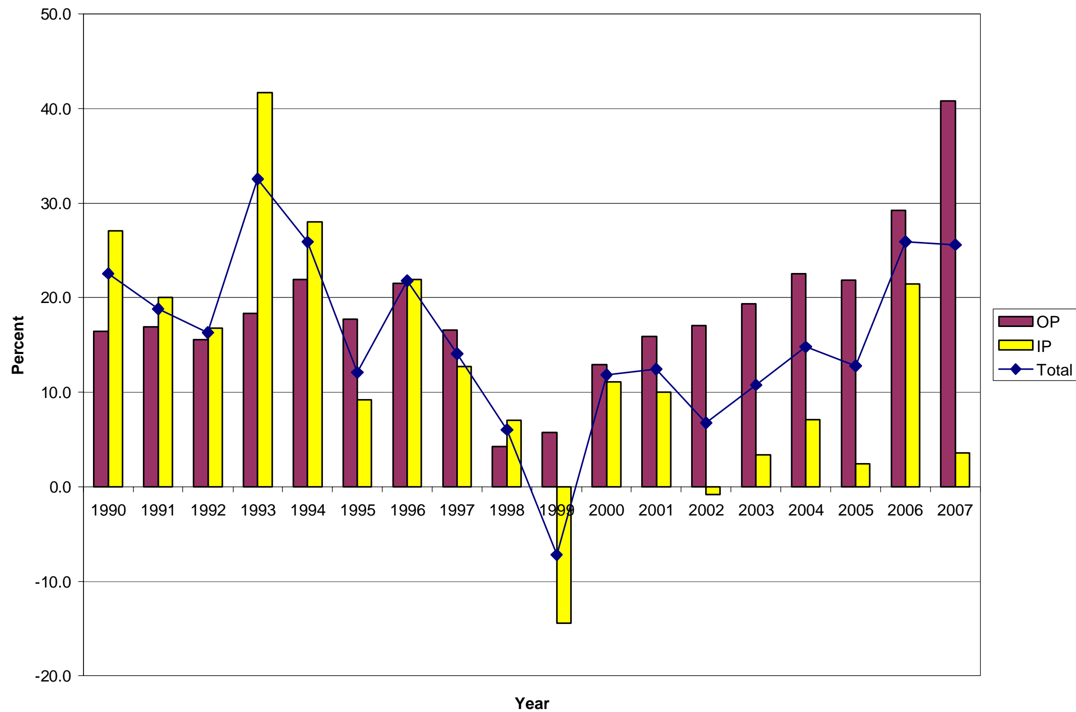


Benefits package of the CSMBS is shown in table 4. It is a very comprehensive package. Expenditure of the CSMBS has been increasing rapidly due to its payment mechanism, retrospective fee-for-service without fee-schedule payment, lacking of effective information and auditing system. In 1998, the Cabinet approved payment reform plan of the CSMBS, which the CGD is responsible for the implementation of this Cabinet Resolution. An age-adjusted capitation formula for ambulatory care and global budget based on relative weights of Diagnostic Related Groups (DRG) for inpatient care (Tangcharoensathien,1997) was planned. The CGD had to launch demand side interventions to cope with the economic recession in 1997. These interventions include limited items of reimbursed drugs in the National Essential Drug List, cancellation of reimbursement for private hospital admission except emergency cases in addition to physical checkup in private hospital and doctor fee in public hospital evening clinics, and limitation of hospital days. The demand side manipulation had impact to expenditure growth rate in a very short period during 1998 -1999. After member of the CSMBS and health care providers were familiar with these measures, the expenditure increased rapidly again (Figure 5).

The CGD started to collect individual admission data and medical audit system for in-patient services. In 2007 the CSMBS announce to start using DRG for reimbursement of in-patient services. However, there is no implementation of reform plan for out-patient services until now. The CDG has just finished implementation of its online registration

and electronic out-patient reimbursement using the old fee-for-service system. The reform measures for out-patient services are being considered.

Figure 5: Annual growth rate of expenditure of the CSMBS



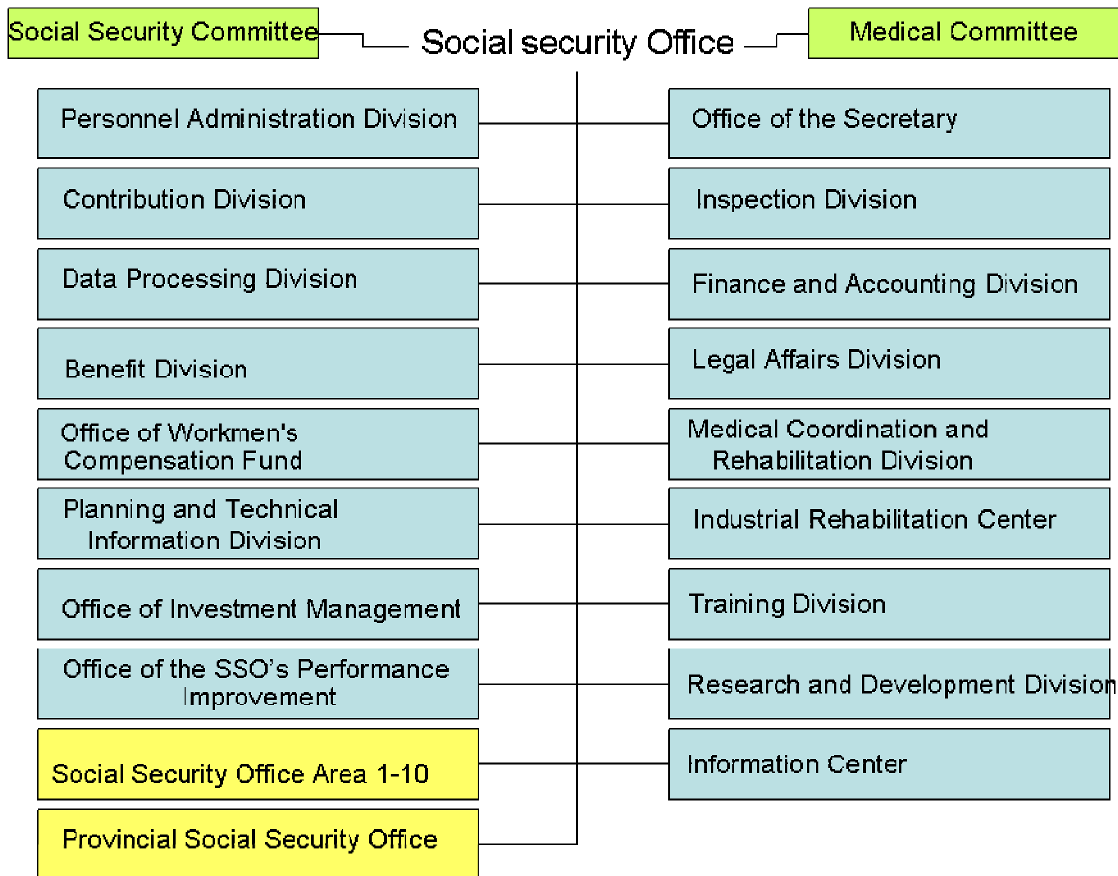
Source: the CGD

2.3 Private employee

There are 2 public schemes which provide health protection for private employees (Table 4). The Worker Compensation Scheme (WCS) aims to cover their work-related injuries or illnesses. On the other hand, the Social Security Scheme (SSS) is responsible to their non-work related injuries or illnesses. Actually, the first Social Security act was introduced in 1954 in Thailand. But it was not implemented. It did not work out because no prior situation analysis was carried out, the Act was too broad, without defining workers' benefits, and no effective and efficient communication system was put in place to inform the public about the Act (Chantaravitul, 1985).

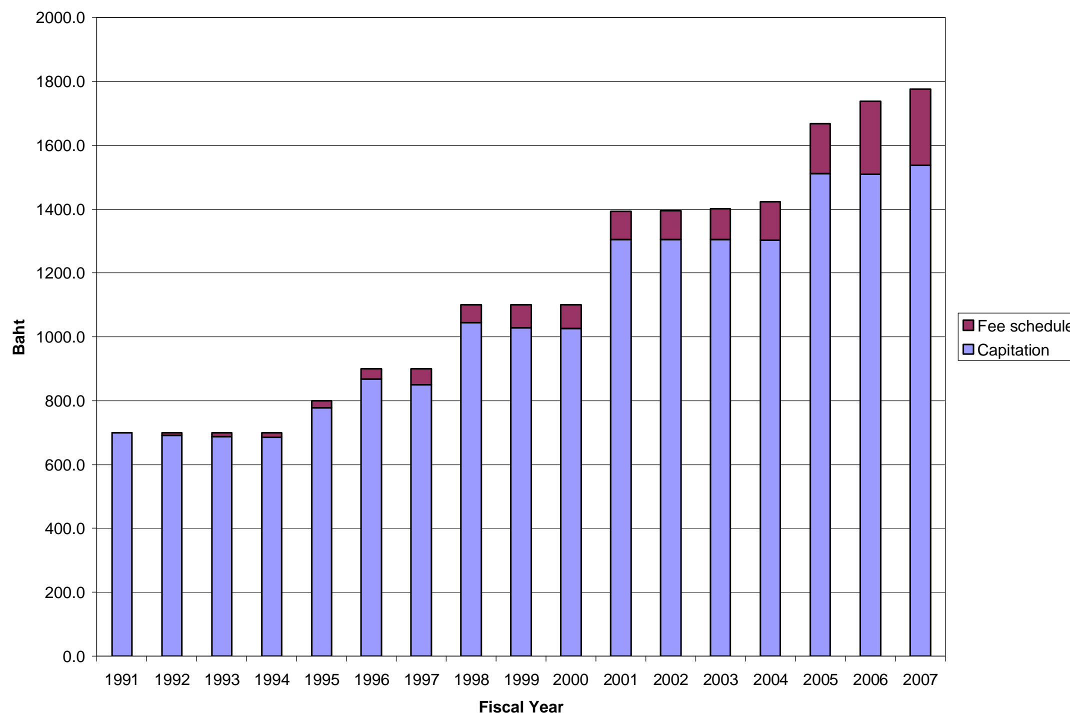
Regarding the WCS, Employers in the private sector were supposed to contribute to the scheme to pay for their employees' medical bills incurred from their work-related injuries or illnesses by 1988. The WCS has used fee for service since the beginning of the scheme and reimburses medical services for not more than 35,000 Baht. However, Employers have to pay health facilities for the rest up to 200,000 Baht for some illness conditions. Employees are responsible for the expenditure, which are not covered by the fund and employers.

Figure 6 Organization structure of the SSO



The legal basis of the Social Security Fund rests on the Social Security Act (1990), which established the Social Security Fund and its administrative body, the Social Security Office (SSO). Its organization is shown in Figure 6. The SSS originally applied to workers in establishments with 20 or more workers. The SSO has since expanded its coverage to include smaller establishments. In 1993, the SSO scheme extended its coverage to employees in establishments with ten or more employees and in 2002, the coverage extended to establishments with one or more workers. Regarding payment mechanism, the SSS decided to use capitation as a main payment mechanism to health care providers. The reasons are their experiences on the difficulty to contain cost and moral hazard in the WCS which use fee-for-service reimbursement, and lower administrative costs under capitation (Tangcharoensathien, Walee-Ittikul 1991).Actually, the SSO still pay some services or durable equipments using fee schedule on top the capitation for selected services. Single rate capitation covers both ambulatory and inpatient services. An initial 700 Baht (28 US$) capitation rate was applied to all contractor hospitals both public and private ones.

Figure 7 Expenditure per capita of the SSS



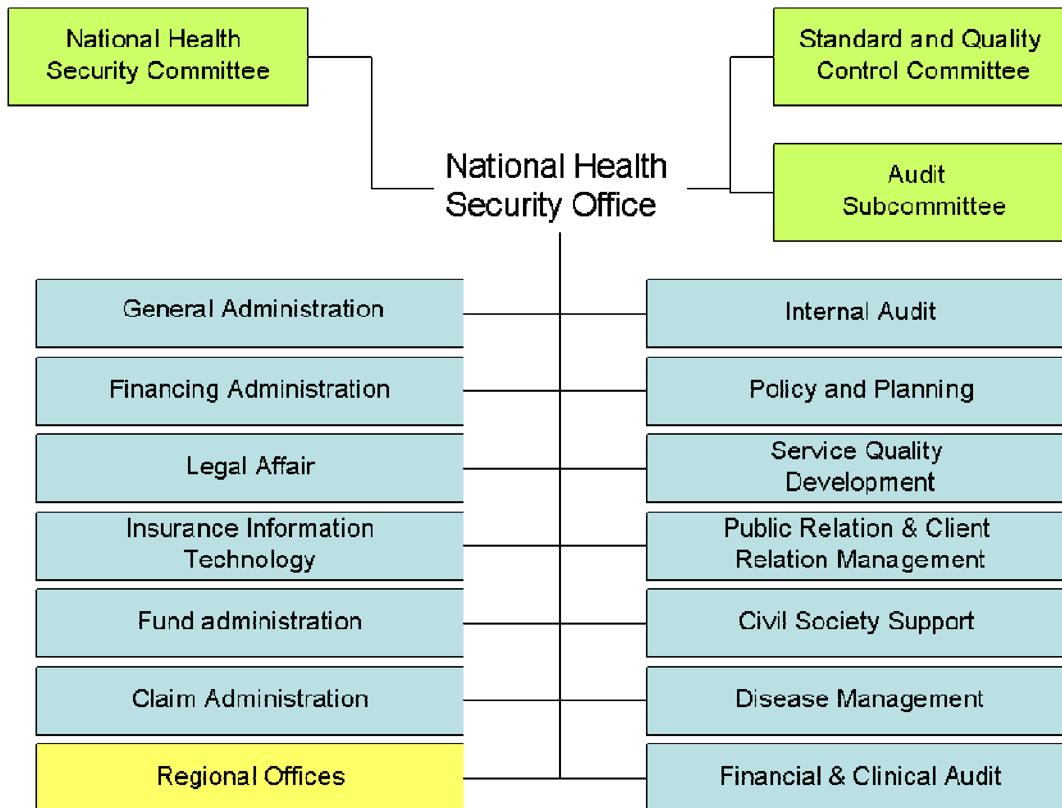
Source: SSO

2.4 Informal sector

The Universal Coverage Scheme (UCS) is only one public health protection scheme, which provides health care coverage to all Thai citizens who are not covered by any other public health protection scheme. This scheme was a result of the reform of the Medical Welfare Scheme (MWS), a medical welfare scheme for indigent people, and the Health Card Scheme (HCS), a government subsidized voluntary health insurance for self-employed people. The UCS charged beneficiaries a co-payment of 30 baht visits, however this co-payment was abolished at the end of 2006. This scheme is administered by the National Health Security Office (NHSO) which has 13 regional offices nationwide. There are about 47 million people were registered under the scheme in 2006. According to the Health and Welfare Survey of the National Statistic Office in 2003, 34% of beneficiaries of this scheme are in the poorest quintiles (Q1) and 26% are in Q2. In contrast 39% and 43% of members of the SSS and CSMBS are in the richest quintile (Q5) respectively, only 7% of members of the UCS are in Q5.

The National Health Security Act B.E. 2545 (2002) is the legal basis for the UCS. The Act stipulates the establishment of the National Health Security Office (NHSO) and the National Health Security Fund. Actually, this act stipulates that every Thai citizen has entitlement to medical care under a public health protection scheme. However, Thai citizens who already have entitlement to use any existing social health protection scheme have to use those schemes

Figure 8 Organization structure of the NHSO



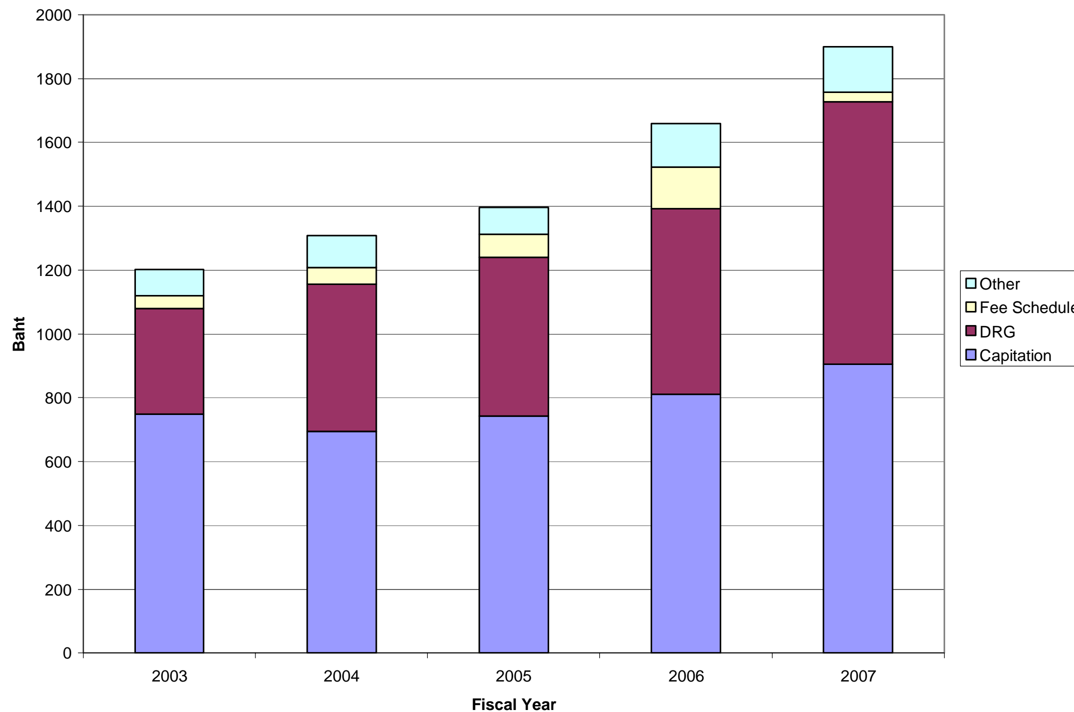
The UCS provides comprehensive benefit package cover both personal prevention and personal health services (Table 4). It provides benefits include curative services, health promotion and disease prevention services, rehabilitation services, and services provided according to Thai traditional or other alternative medical schools. The scheme applies a similar exclusion list than the Social Security Scheme. It should be noted that the UCS also provides personal prevention services and health promotion services targeting the whole Thai population.

Health facilities have to register to the scheme. The register providers will be classified as primary medical care unit; secondary medical care unit or tertiary medical care unit depends on their performances. But it is policy of this scheme to contract the primary medical care unit to provide ambulatory services for the beneficiaries, and is the first contact point for the beneficiaries to receive medical services. The beneficiaries are not allowed to go directly to secondary or tertiary care facilities without referral from the primary medical care unit except accidental or emergency situations.

The total health budget for UCS in 2002 was 51billion Baht (1,202 Baht per capita). In 2007, the government spent up to 91 billion Baht (1,988 Baht per capita) using general taxation (Figure 9). Different payment mechanisms are used for specific type of services. Capitation is used for most of prevention services and ambulatory care. In-patient services are reimbursed using case-mixed system, DRG. However, the UCS approach is different from "original" DRG payment system that the global budget for in-patient is calculated, and total Relative Weight of DRG is used to allocate the amount of money paid to hospitals. Other expenditure of the scheme are capital replacement cost, which relates to the expenditure incurred by contracted hospitals for capital replacement (e.g. hospital facilities, medical instruments, equipment, etc.); and no fault liability which

relates to the compensation monies paid by NHSO to settle patient claims regarding problems from medical practice

Figure 9 Expenditure of the UCS



Source NHSO

3. Lessons learned

After implementation of universal coverage for health care in 2001, the coverage of all health security systems increased from 92.48% in FY 2002 to 97% in FY 2007. This achievement resulted from expansion of the SSS and the UCS. Health care utilization increased both outpatient and inpatient services. Series of satisfaction surveys which conducted by third party research institutes showed that most of the eligible people were satisfied with the services. Nevertheless, some people showed some unconfident in the service standard and quality of drug qualities. Health and welfare survey and socioeconomic survey which are conducted by the National statistic office together with other academic research showed that the poorest segment of the population had much higher uptake medical services than the richer ones. This at least supported that the universal coverage for health care was improving protection of the poor and increase equity and redistribution of income.

Thailand has been a success in term of providing universal, coverage for health care using pluralistic approaches. It took time for many decades. Therefore, a strong commitment on health policy is a very crucial important. Infrastructure for health care, adequacy of qualify health care personal and technocrats, capacity building on health care financial issues are also the must for successful planning and implementation of universal coverage strategy. Movement of qualify personal to private providers which do not join

the social health protection schemes is a big hurdle in Thailand now. It is better to elaborate more in detail for each issue.

3.1 Development of the universal coverage policy: State responsibility for health

It can be said that one of the main reasons, which Thailand can reach universal coverage for health care, comes from continuous and strong commitment of public policy. This public policy for population health care had history of evolution. From the ideology of using health care to strengthen State power in 19 century toward considering health care as an important part of long-term investment for economic growth. Finally, health is considered as an entitlement of Thai citizens. Every steps pushed the Thai health system forward to universal access to care and to protect the rights of the people.

Table 5: Cause and effect of health policy in Thailand

<table>
<tr><th></th><th>Health Policy</th><th>Implementation</th></tr>
<tr><td>Before 1961,</td><td>health care was used to strengthen State power</td><td rowspan="2">Expansion of public health facilities and health protection scheme employee e.g. CSMBS, SSS</td></tr>
<tr><td>National Socioeconomic Plan</td><td>health is an important part of long-term investment for economic growth</td></tr>
<tr><td>1973 Constitution</td><td>health services for the poor should be provided free of charge</td><td>Low income scheme</td></tr>
<tr><td>1977 Constitution</td><td>health is considered as an entitlement of Thai citizens and equal access to basic health services should be guaranteed</td><td>Universal coverage for health care</td></tr>
</table>

3.2 Successful centralized health care coverage plan

Distribution of health care infrastructure nationwide is the must for universal coverage for health. It was difficult for Thailand to encourage private health facilities to provide services in rural area. Therefore, expansion of the public health facilities to cover the entire population is crucial to overcome physical barriers. With limited budget, The MoPH decided to establish a “hierarchy” health service system using administrative areas as the main approach for investment in the health care infrastructure. Initially, general hospitals were built in Bangkok and the extended to every other province. After achieving provincial coverage, the coverage plans to build small hospitals for districts and health centers for sub-districts were accordingly carried out using the same approach.

3.3 Coordination of planning and utilization of human resource

Health man power planning has to consider both providing health services (demand) and training qualify health care personnel (supply) together. Most of training institutes in Thailand are public institutes, and graduated students have to work in government health facilities for certain period which depends on professional. One strategy is selection students from rural area to be trained, and send them back to work in their hometown. This strategy is suitable for Thailand which people still adhere to a sense of kinship.

It should be noted that the non-financial incentive also contribute a lot to the distribution of health care personnel to rural area. There were many activities, which promote health care professional students to work in health facilities in rural area or in villages, occurred after the compulsory measure of the government. Some activities were initiated by universities and training institutes. Some activities were initiated by students themselves to learn from their "role models", who work successfully in rural area.

3.4 Capacity building on health care financing issues

Thailand gradually moved from out of pocket payment to prepayment system. Different financing method for health protection scheme and different payment mechanism were implemented. Thai technocrats have continuous learning from previous implementation and other countries. This approach has all the hallmarks of an effective long-term cost containment strategy which should simultaneously force the system into a higher degree of allocative efficiency.

3.4.1 User fees and targeting the poor

Thailand had used this user fees model since 1945. This financial model has a potential to raise revenue into health care system. In Thailand, revenues collected from all sources accounted for 10-25% in health center, 25 - 40 % in public hospitals before UC era. However, patients might go bankrupt according to paying medical bills, or it could be financial barrier for people to access to care. Therefore poor people should have financial safety net. Thailand had a long experience on using mean test in the MWS that it was difficult and consumed a lot of resource to targeting the poor due to dynamic of poverty status of household and under-reporting by households especially non-financial assets. The Bureau of Policy Planning of the MoPH evaluated that validity of providing the entitlement for medical welfare for the poor in 1998 was only 35%. Panel data survey in 4 provinces from 1997 to 2003, which was conducted by Prof. Townsend showed a high social mobility. Only one forth of population remained in the same income class during study period. 72% of the household in poorest quintile moved upward, and a lot of households in higher income quintiles moved downward at the same time (Siamwala and Jitsuchon, 2007).

In conclusion, this financial model is not a mean to universal coverage. However, if there is limitation of government budget. First priority should be expansion of the coverage of health care infrastructure to provide public health and prevention services. Regarding curative services, user fee model with appropriate measures to decrease financial catastrophic could be used.

3.4.2 Community financing

Community financing is another way to raise fund for health system in addition to government budget. It can also serve other social objectives especially in community level. The MoPH used this model for the HCS phase I to III during 1983-1992, then change financial model to voluntary health insurance. Since this financial model is also not a mean to universal coverage from its limited risk pooling and its voluntary basis. Financial management skill was another problem for community financing.

As a matter of fact, there are many community funds alive in Thailand and they provide series of medical and welfare benefits for their member. However, benefit in cash and in kind which they provide are only small amount of money. Therefore this financial model can be considered as a supplementary measure for moving toward universal coverage

3.4.3 Voluntary health insurance

Selection bias is the main problem which prevents this financial model to be a tool for universal coverage. The MoPH used this model for the HCS phase IV to V during 1993-2001. The community rate premium was calculated, whereby the household contributed 500 Baht to cover care for four members for a year. The government subsidized another 500 Baht through general tax revenue. The MoPH hoped that this new initiative will be the entry point towards universal coverage. Subsequent evidence showed that its potential for expansion was limited and its financial viability questionable, especially because of adverse selection. High risk household preferred to buy this insurance, however the low risk group was reluctant to join. The government had to increase subsidy to 1,000 Baht when the country went into economic recession to compensate low cost recovery and increase of demand for the card.

3.4.4 Social heath insurance

This financial model is suitable for implementation of universal coverage, however, in country like Thailand, which have more than half of population in informal sector and a lot of very small establishments, collection contribution is the main problem. Experience in the SSS showed that it works well in private establishments. However, it is difficult to implement and it is too expensive to collect contribution at very small establishments such as small shops which have a few employee.

As the SSS was design to used scale-premium method, contribution rate should be increased step by step. In fact, encouraging stake holders i.e. employee, employer and government to increase contribution and adjust indexation for insurable earning seem to be mission impossible. The SSO has never success to increase contribution or indexation.

3.4.5 Tax-based system

Although it has a lot of arguments for financial sustainability to implement this financial model for universal coverage for health care, Thailand shows clearly that this financial model can be possible to implement. The difficulty is the uncertainty which occur during government budget preparation. A well design health care financial model to project future development of total health care expenditure is an appropriate tool for agreement between Ministry of Finance and social protection schemes.

3.5 Empowerment of civil society

After that political revolution in 1932 the country was ruled by military governments most of the time. Civil societies were only financial contributions for building up health facilities. The role of civil society in policy development and advocacy increased from economic growth and more middle class in Thailand especially after the military junta fell in 1973. Prof. Dr. Prawase Wasi proposed the concept of “Triangle that moves the mountain”. The Triangle consists of: Creation of relevant knowledge through research,

Social movement or social learning and Political involvement. This concept was applied successfully during the agenda setting, policy formulation and policy implementation of the universal coverage for health care.

Brain drain: inadequate medical personnels

Working harder without enough incentive together with increasing demand and more financial incentives in the private sector have resulted in the outflow of human resources, particularly physicians, from the rural public facilities under the Ministry of Public Health to the urban private hospitals. The migration flows fluctuate with the economic situation. It improved during the period of economic recession (1980-1988), but worsened during the economic boom (1988-1997) due to rapid expansion of private hospitals. After the economic crisis in 1997, the situation improved again. Since 2001, because of improving economy and the influx of foreign patients, human resources distribution becomes worsened.

Evidently, there is the competition for limited human resources for health between public health care facilities, private hospital for Thai citizen and foreigner, so as the trend of internal brain drain especially from public ones. This situation has adverse effect to public health protection schemes. Because they use mainly public health care facilities to service their beneficiaries. For short term measurement, the government still enforce a three-year compulsory public service for new medical graduates and many financial incentives for rural doctors, including hardship allowances, no-private practice allowances, overtime payments, and non-official hours special service allowances. These financial incentives have been allowed to increase up to 20 percent after the implementation of the universal coverage scheme. Measurement to hire retired physicians is also implemented. For long term measurement, the government approved a project to accept additional 10,678 medical students from 2005-2014 (The Secretariat of the Cabinet 2004). In order to ensure equity of education, longer rural retention, and local acquaintance, the additional new medical students will be recruited from the rural provinces/districts and trained in provincial hospitals.

4. Future challenges and strategies

4.1 Aligning pluralistic public health protection system

Although there was consensus among every steak holders that Thailand should have Universal coverage for health care. But in detail each group had some different opinion. There were hot debates from existed public health purchasers during the reading of the National Health Security bill, is aimed to harmonize all the existing public health security schemes. As stated in Articles 9, 10 and 11, it was expected that beneficiaries of SSS and CSMBS would utilize health services, according to benefit packages specified by their own schemes, under the system managed and supervised by the NHSO. However, the labor union leaders were worried that the transfer of health service part of the SSS and the WCS to the NHSO could affect their benefits. Civil Servants also worried that management under the National Health Security Bill would affect their benefits, too. Finally, the National Health Security Bill was shaped to compromised every steak holder during the reading process in Senate before enact on November 2002 that these transfer

of duties can be happened only when there is mutual agreement between the concerned parties .

Instead of enforcing the Law, the NHSO attempted to create a collaborative atmosphere among three main public health protection schemes, CGD, NHSO and SSS. A memorandum of understanding (MOU) among the NHSO, the SSO and the CGD was signed on January 17, 2004 to set up a committee and subcommittees to collaborate and coordinate the development of each health care financing scheme. The developments of management information system, standard of health services and health facilities, claim and audit system were the main areas of collaboration. This committee meeting was held every 4 month to plan and monitor the cooperation. One of concrete output was the synchronization of member registration database. Database of the three schemes and personal ID database of the Ministry of interior are linked together and are synchronized twice a month. Thai citizen and health care providers can check entitlement of all Thai citizens from website. Health care financial model, resource allocation and payment mechanism are other areas which the three schemes are actively work together.

4.2 Appropriate payment mechanism

Experience in Thailand shows clearly that public health care providers are also response to different payment mechanism in similar way with private ones. It should be noted that public hospital in Thailand have been allowed to keep their revenue for purchasing goods and services include salary for temporary staffs, and they still get salary for permanent staffs from government.

Currently, public health protection schemes face different problems according to their payment mechanism. The CSMBS still face the problem of moral hazard. Currently, hospitals use their own services fee schedules for reimbursement to CSMBS. There are quit different prices for the same treatment between hospitals. The standard fee schedule and systematic medical auditing system are needed to solve these problems for outpatient services.
The WBS still has positive balance for its fund. Nevertheless, there were complains from members and private hospitals that the ceiling for reimbursement was too low and process was very slow. The WCS is going to increase reimbursement from the fund up to 45,000 Baht. This measure will create more cost pressure to the Workmen Compensation Fund and might need to increase contribution.

The UCS and SSS have adopted capitation as a main provider payment mechanism. The capitation contract model is an effective long-term cost containment strategy. But the flat rate capitation payment is an incentive for providers to give limited services to those needing expensive care services, like senior citizens, and patients with chronic conditions. Age and other risk factors should be taken into account in calculating the capitation rate, to prevent selecting low risk beneficiaries for hospital registration, and their bias in service provision. Also, some selected high-cost, low-volume medical services and equipment should be paid by other payment mechanism which more performance-based approach than capitation. In addition, keeping and close monitoring of their quality of care must be diligently enforced.

4.3 Long-term financial sustainability

The UCS now depends on general revenue financing through annual budgeting process, and remains vulnerable to receive budgets below actual cost of services from budgetary competition among Ministries. Researches were conducted to establish new sources of finance for UC scheme such as increasing co-payment, direct premium collection or earmarking general tax.

Although the SSS does not have financial problem now, Expansion of coverage of Social Security Scheme to non-working spouses and dependants (estimated at 6 million beneficiaries who have been currently covered by UC scheme) without raising the contribution rate, by 2005, the UC Fund will save the budget at least 9 billion baht.

4.4 Manage the care: linkage prevention service to curative services

Provision of medical services under the universal coverage has been changed from fragmented service to the new integrated "Continuum of Care" design. The NHSO introduce an active manage approach to both providers and beneficiaries. Therefore the NHSO together with the SSS and the CGD have already implement the new periodic health examination as a risk stratification tools. The goal of this screening and evaluation program is to prevent the onset of disease or the warning of an existing disease. For example, measurement of blood pressure is intended to detect hypertension so as to initiate treatment and prevent subsequent morbidity (e.g., stroke or renal failure) or mortality. A further goal of the periodic health examination is to educate patients about behavioral patterns or environmental exposures that pose risks for future diseases. Then risked group will be informed and encourage them to join the risk modification program and appropriate treatment under standard care map.

4.5 Prepare for aging society

The survey of population change 2005 and analysis form administrative database of Bureau of Registration Administration, Ministry of Interior showed the same pattern that total fertility rate decreases rapidly than previous estimation. It means that Thailand will face the elderly problem earlier. Not only the total fertility rate, which is below the replacement level; but also longer life expectancy rate is another factor of the aging society in Thailand. Therefore, strategies to ensure healthy and productivity elders are needed. Social health protection schemes have to not only guarantees access for everyone especially elderly people, but also actively improve health service benefits in such a way to encourage people to change their behavior to healthy life style.

Long term care for elderly who finally loss their physical capability and need both health care and long term care is another issue. Thailand is very weak in term of long term care preparation. Quality of care either home care or institutional care are needed to improve. Anyway, prevention and rehabilitation come before nursing care. Home-care should come before institutional care. And the traditional pattern of care within the family has to encourage as far as possible.

4.6 Improve equity, quality and efficiency

Thailand still retains a fragmented health insurance system and single fund management is not politically feasible at the moment. Fragmented social health protection schemes are

very likely to be inequitable and not likely to work in the interests of the poor. For example, government subsidies for different schemes were quite different (table 4).

Regarding quality of services, quality of care provision at health centers and district hospitals in rural areas are still different from urban areas where there was greater use of higher-level hospitals. Capitation payment in the SSS and the UCS has been associated with giving fewer medicines for chronic conditions. And moral hazard was found in the CSMBS which use the fee-for-service system.

Primary care and appropriate referral system is a key strategy for overall systems efficiency and better quality. Unfortunately, implementation is much more difficult. There is no real primary care system in Thailand before the universal coverage era. Thai people were familiar with freedom of choices to visit any health facilities and contact directly to specialist. Therefore one of the main strategies is to strengthen near home primary care services. Creating a new look of primary care center, establishment of some public primary care centers operated with full-time physicians (community medical centers-CMC), increasing competency of health personnel at primary care center are on going now, This effort was successful in term of quantity that the proportion of patients visiting health centers. However, it still too early to say that primary care is established in Thailand.

5. Conclusions and recommendations

Experience in Thailand showed that universal coverage can be done using pluralistic approaches. However, it cannot be happen by change or political party agenda. It needs long term plan and continuous effort to go further step by step when windows of opportunities exist at points along the route of policy development. Health care infrastructure should be the first step before arrangement of health care financing for universal coverage. There is no single payment mechanism which is the best for every service. In Thailand there is a trend that the three large scheme move toward to similar payment mechanisms for similar services. They use fee-for-service method for specific services or equipments i.e. prosthetic heart value, which they would like to promote more usage. On the other hand, they use casemixed method i.e. to control inpatient cost. Quality improvement program and measurements to improve equity are the next step after achievement of the universal coverage.

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