CHAPTER 1

INTRODUCTION

1.1 Background and Rationale

Thai hospital market has experienced rapid growth during the past decade, particularly in Bangkok. By 1998 there were 5 medical school hospitals, 29 general hospitals, 19 specialized hospital/institutions, three 10-bed community hospitals and 60 public health centers operating in greater Bangkok (Thailand health profile 1997-1998).

In Thailand about 45 per cent of the population (Health Policy (2000)) have some form of medical benefit or health insurance coverage but many of these are covered by scheme granting access solely to public sector providers. Of the schemes allowing access to the private sector, the Civil Servant Medical Benefit scheme (CSMBS) is the most important, covering approximately 11.3 per cent of the population. The social security scheme, which includes a health insurance element, covers a further 4.4 per cent of the population. The coverage of private health insurance is minimal and although employer-based insurance appears to be of some importance, particularly among white-collar workers in Bangkok, there are no reliable estimates of the percentage of the population with this benefit. Bangkokians are more affluent than the rest of the population and insurance coverage in Bangkok is likely to be higher than in the country as a whole. Recent survey of inpatients and outpatients in public, private for profit and private non-profit hospitals in Bangkok suggested that just over 50 per cent of patients had some form of insurance coverage (Tangcharoensathient et al 1996). Most insurance schemes (with the notable exception of the social security schemes) and all uninsured patient pay for care on a fee for service basis. The social security scheme pays for care on a capitation basis.

At Nakornthon hospital, a private hospital located in Bangkhuntien district in Bangkok province. The number of outpatient and inpatient has increasing. Also the total cost of the Nakornthon Hospital was rapidly increased. Especially for Social Security insured which received payment by capitation that very limited budget per head. Both outpatient and inpatient have to serve prompt service. To study revenue and cost is necessary for management not only Social Security insured but also Non-Social Security insured.

According to Declaration of Patient's rights in 1998 and new constitution implementing, all Thai people have basic right to get health care services. So the hospital has a responsibility to provide health care services to all groups of patients with the same standard. For the patient who can not pay, the hospital has to bear the cost. With the trend of increasing patients' utilization under limited resources, the hospital has to evaluate how much and how well resources are allocated and used for providing services, in order to control the costs.

To manage efficiently, the Nakornthon hospital have to analyze the cost, revenue and cost recovery of the hospital in order to have data for decision making, budget allocation and planning for hospital activities and health care service quality improvement.

As the SSS inpatient is a significant burden of costing and trend appear to continue increasing at Nakornthon Hospital. The management of the financial as a SSS providers has to be measured. Such estimation will be helpful for better understanding of providers costs and to re-plan patient services for efficient management social security insured.

In Thailand both public and private health services have been expanded and will continue to improve until the country achieves an acceptable coverage. Thus, there was a rapid growth of public health care facilities especially community hospitals and health centers. Moreover, the private sectors is gradually increasing its role in providing health services (private clinics and private hospitals) and health related products. (see table 1.1)

Table1.1Total Number of Public and Private Health Care Facilities in Thailand

Public Hospital in 1999

Size (No.of bed)	No. of Hospital	% of Total
10	101	12.5
30	422	52.2
60	126	15.6
90	53	6.6
120	12	1.5
121-300	21	2.6
301-500	45	5.6
over 500	28	3.5
Total	808	100.0

Private Hospital in 2000

Size (No. of bed)	No. of Hospital	% of Total
Less 10	14	3.3
10-25	68	15.9
26-50	146	34.1
51-100	86	20.1
101-250	85	19.9
251-500	25	5.8
over 500	4	0.9
Total	428	100.0

Source ; Report of Ministry of Public Health. Nonthaburi, Thailand in 2000

Resulting from the overall development of the country in the previous decade, there is a continuation of rapid economic growth. There is more convenient transportation and communication. The increase in proportion of industrial workers and urban residents is apparent. Rapid industrialization has caused major changes in lifestyles, health status, health behavior and increasing demand for overall health service. Socioeconomic aspect for health sector in Thailand and Population Change in Thailand (The Eighth Five-Year National Health Development Plan (1997-2001)) show as follows:

Population number : In 1996, Thailand had population of approximately 60 millions. The population growth rate declined from 1.4% in 1991 to 1.2% in 1995 and expected to be 1.0% in 2001. Population projection in 2010 would be 68 millions but if adjusted by AIDS, the number will reduce to 67 millions.

Family structure : Family size average age dropped from 5 persons in 1980 to 4 persons in 1990. but expected to be 3 persons in 2010. As well as this, the proportion of divorce increased from 8.3% in 1987 to 9.8% in 1993.

Maternal mortality Rate and Infant Mortality Rate : The Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) have been reduced significantly. The MMR declined from 0.6 per 1,000 livebirths in 1983 to 0.23 in 1995 whereas a drop of IMR was 32.0 per 1,000 livebirths in1993 to 25.9 in 1995. MMR in northern and southern regions was higher than that of other regions. However, IMR in Bangkok is the highest in the country while IMR in northern and southern regions was relatively high.

Fertility Rate : Total fertility rate of the country reduces from 2.1 in 1991 to 1.95 in 1996 and expected to be 1.9 in 2001.

Life expectancy at birth : In 1996, life expectancy at birth is 71.1 years in female and 66.6 years in male. Even though this is higher than life expectancy at birth of the world's population, it is still lower than that of countries in the same region such as Malaysia where life expectancy at birth is 70.5 years.

At present, Thai health problems have changed in accordance with socioeconomic complexity of country. Health status of the people in Thailand have changed (Thailand public health1997) as follows:

Morbidity rate, 5 major leading causes of morbidity for outpatients in public and private health facilities in 1997 were

(1) Diseases of the respiratory system

(2) Diseases of the digestive system

(3) Symptoms, signs an abnormal clinical and laboratory findings, not elsewhere classified

(4) Diseases of the musculoskeletal system and connective tissue

(5) Other external causes of morbidity and mortality (e.g. accidents, injuries, intentional self-harm, assault, animals and plants, complications of medical and surgical care and other unspecified causes)

For inpatients, 5 major leading causes of morbidity in public and private health facilities in 1997 were

(1) Single spontaneous delivery

(2) Symptoms, signs an abnormal clinical and laboratory findings, not elsewhere classified

(3) Other intestinal infectious diseases

(4) Complication of pregnancy, labor, delivery, puerperium and other obstertric conditions, not elsewhere classified

(5) Acute upper respiratory infections and other diseases of upper respiratory tract

In this study concentrate on Social Security inpatient insured at Nakornthon Hospital in 2000 which top 5 illness were diarrhea, acute appendicitis, acute tubule-interstitial nephritis, acute tonsillitis and pneumonitis due to solids and liquids.

1.2 Research Questions

Research question of this study is "What are the unit cost of top 5 illness of SSS inpatients at Nakornthon Hospital?'

1.3 Research Objectives :

1.3.1 General objective ;

- To measure and analyze the unit cost of Nakornthon hospital and specific to top 5 illness of social security scheme (SSS) inpatients.

1.3.2 Specific objective ;

- to estimate unit cost of services provided by Nakornthon hospital for Social Security Scheme inpatients in order to analyze the trend of expenditure of these group.
- to determine proportion of labor cost, material cost and capital cost of of Nakornthon Hospital.
- to compare cost and revenue by doing the cost recovery and break even point of Social security insured.

1.4 Scope of Study

This study is a description retrospective study and determine unit cost of top 5 Illness Social Security Scheme inpatients who received service at Nakornthon Hospital in 2000.

1.5 Assumption

In this study, it will consider only the hospital cost in term of provider perspective or hospital tangible cost but not the hospital intangible cost or patient perspective (e.g. food expense, travelling expense, dwelling expense or lost opportunity cost of patients.)

1.6 Expected Benefit

The study is expected to provide information on the unit cost per patient day of top 5 illness Social Security Scheme inpatients. This information could be benefit for patient services planning level and efficient management of these illness under the scarce public resources. Also this information can develop capitation budgets knowledgeably for health economic evaluation in the future.