



CHAPTER 1 INTRODUCTION

Background And Rationale

During the past two decades, advanced in information and technology have brought about rapid globalization, and this dictates a need for the formulation of new world economic and social orders and for the re-evaluation of international relations. All of these factors give rise both of opportunities and challenges for sustainable development of Thailand.

Thailand, like other developing countries, has limited sources of funds and resources in various areas, especially in health care. Health care budget is increasing every year (Table 1.1)⁽¹⁾ but it is still not enough. New technology in medical science such as new equipment or new treatment is developed very fast and is very expensive. These are factors affecting health expenditure. Thus, it is worthwhile for the country to look for the ways in which those scarce resources must be utilized as efficiently as possible.

Table 1.1 Health care budgeting 1992-1995 (Unit in Million baht)

Fiscal year	Total Thailand Budgeting	Health care Budgeting	
		Amount	%
1992	460,400	26,249.8	5.70
1993	560,000	34,963.5	6.24
1994	625,000	42,245.9	6.76
1995	715,000	49,635.4	6.94

source : National Budgeting Report , Budgeting Department

Khon Kaen Hospital is a government hospital. The number of patients is increasing every year (Table1.2) so that more financial support is needed. Budgeting provided from the government is not enough for the hospital expenditure therefore the hospital system has to be planned to utilize the budget for quality and efficiency in the health service.

Table1.2 Number of out-patients and in-patients visited at Khon Kaen Hospital in fiscal year 1994-1996

Fiscal year	1994	1995	1996
No. of out-patients (visits)	295,027	325,093	348,671
No. of in-patients (cases)	36,735	43,121	43,381

source : Khon Kaen Hospital annual report (1994-1996)

The hospital has limited resources but patients must receive efficiency and quality service. Administrators should have a good budgeting , allocating , controlling and evaluating financial system. Good data help them to manage resources. It is necessary to know unit cost of out patient and in patient services. Unit cost of services and number of patients can provide the hospital expenditure. Administrators can use that data to find sources of financial support , allocate and use resources effectively. The hospital can survive by itself.

One reason is to be compatible with The Eighth National Economic and Social Development Plan of Thailand (1997-2001). One guideline for health development is reform of the public health administration. For instance, budgeting regulations and procedures must be amended to be less obstructive to efficient management; a private sector-type approach to management is to be implemented; along with adequate delegation of authority and expanded use of the subcontracting approach where this is appropriate. Monitor and control spending on public health, through a monetary and fiscal policy aimed at reducing "luxurious" expenditures, particularly on imports of expensive brand-name drugs and non-essential sophisticated technologies.⁽²⁾

In order to realize the long-term vision of Khon Kaen Hospital becoming a fully developed tertiary health care facility of Khon Kaen Province, the health care economic evaluation is set for development. This unit cost analysis is the first step of financial system analysis of Khon Kaen Hospital.

Objectives

General Objectives

- To determine unit cost of out-patient and in-patient services of Khon Kaen Hospital during October 1, 1995 to September 30, 1996 .(the fiscal year 1996)
- To determine proportion of labor cost , material cost and capital cost of Khon Kaen Hospital.

Specific Objectives

- To determine total cost of Khon Kaen Hospital.
- To determine total direct cost of each department of Khon Kaen Hospital.
- To determine the appropriate cost allocation criteria.
- To determine indirect cost of out-patient and in-patient service that is allocated from non revenue and revenue producing cost centers.
- To determine full cost of each department of out-patient and in-patient service.

Research Questions

Primary Questions

How much is the unit cost of out-patient and in-patient services of Khon Kaen Hospital during October 1, 1995 to September 30, 1996 (the fiscal year 1996) ?

What is the proportion of labor cost, material cost and capital cost of Khon Kaen Hospital ?

Secondary Questions

How much is total cost of Khon Kaen Hospital ?

How much is total direct cost of each department of Khon Kaen Hospital ?

What are the appropriate allocation criteria ?

How much is indirect cost and full cost of each patient service department ?

Scope of This Study

This study is a descriptive study. Unit cost of out-patients and in-patients, who receive service at Khon Kaen Hospital in the fiscal year 1996 (October 1, 1995 to September 30, 1996) is determined. Unit cost of out-patient and in-patient service is analyzed in health care facilities.

Assumption

Hospital cost in this study is considered only from provider perspective or hospital tangible cost but not considered hospital intangible cost or patient perspective (e.g. food expense , traveling expense , dwelling expense or lost opportunity cost of patient).

Expected Benefit

- 1.This study shows the full cost and component of cost of Khon Kaen Hospital.
- 2.To provide full cost information as a basis for establishing rates for services and for assessing the adequacy of existing and proposed rates
- 3.To provide information for use in managerial decision making in areas other than rate setting
- 4.This result will be used as a basic data for health economic evaluation in the future such as unit cost study, cost benefit analysis, cost effective analysis or cost minimization analysis.

Operation Definition

There are many important definitions in this study as follows :

Cost is considered in accounting definition what is the total expenditure required to achieve something.⁽³⁾

Non revenue producing cost center is the department which is responsible for management or supportive function to other departments and does not make revenue to the hospital.

Revenue producing cost center is a supportive department and responsible for giving medical service to patient and make revenue to hospital by charge fee from patient.

Patient service area is responsible for giving direct service to patient.

Non patient service area is responsible for giving health promotion, prevention and disease control to patients and non-patients.

Transient cost centers (TCCs) in this study compose of non revenue and revenue producing cost center. Their costs are allocated to absorbing cost centers.

Absorbing Cost Centers (ACCs) are the departments receiving indirect cost allocated from transient cost centers. Absorbing cost centers in this study compose of patient service areas and non patient service areas.

Labor cost is all expenses paid for personnel working.

Material cost is the cost of all materials that all departments request in requisition form.

Capital cost is the depreciation cost of all buildings and all equipment.

Total direct cost is the sum of labor cost, material cost and capital cost.

Indirect cost is the allocated cost of transient cost center to absorbing cost center.

Full cost is the sum of total direct cost and indirect cost.

Unit cost is the total cost of an activity divided by the number of units of output produced⁽³⁾ (i.e. unit cost per 1 visit of out-patient, unit cost per 1 case of in-patient or unit cost per 1 hospital day).