## **ABSTRACT**

Abstract of thesis submitted to the Graduate School of Maejo University in partial fulfillment of the requirements for the degree of Master of Science in Cooperative Economics

## AN ANALYSIS OF OPERATING COSTS OF DOKKHAMTAI HOSPITAL, PAYAO PROVINCE FOR THE 1999 FISCAL YEAR

By

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In general, the resources planning of a hospital for the provision of health care services can be based on the estimates of operating costs. The estimated costs can help keep the expenditures in the following year close to the actual needs, they also serve as administrative and management tools for a more efficient operation. The present study is aimed at two objectives, as follows.

(1) To make an analysis of the operating costs of providing health care services of the Dokkhamtai Hospital, Payao, for the 1999 fiscal year. The analysis was based on the records of financial expenditures on labour, material and capital costs. For this purpose, the total expenditure was divided into 3 categories according to the major sections of hospital operation, namely: (1) non-revenue producing section, (2) revenue-producing section and (3) patient services section. The methodology involves the estimation of direct and indirect costs of sections (1) and (2). The simultaneous equation technique was used to calculate the break-down costs of sections (1) and (2). The results obtained were divided by the number of patients treated giving the average cost per patient of each of the sections.

Results of the analysis show that the percentage proportions of labour costs: material costs: capital costs were 48:34:15. The unit cost per visit of out-patient was 180 baht and this consisted of 88 baht for general services and 92 baht for medical treatment. For the hospitalized

patient, the average cost per hospital day was 810 baht, consisting of 505 baht of general service charge and 305 baht for treatment. The unit cost of a dental visit was 271 baht per patient and this consisted of 261 baht for general services and 10 baht for treatment. For the treatment of AIDS patients, drug addicts and mental patients, and the promotion of public health and hygienes, the unit costs were 405, 185 and 81 baht respectively. The costs of out-of-hospital visit of the Family Practice Unit to target groups of individuals was 519 baht per person.

Results of the estimates also show that the labour component of the total costs of operation of the non - revenue producing section and the out - patient services unit accounted for 20.06 and 67.58 percent respectively. The revenue - producing section, on the other hand, shows high percentage of material costs of 65.30 percent while the capital cost component of the non-revenue producing section, the revenue - producing section and the patient services unit were 32.80, 31.47 and 35.73 percent respectively.

(2) The second objective of the study is to assess the level of satisfaction of those who came to the hospital for the health care services in order to provide guidelines for improvement in the quality of services. The data for the analysis of this part of the study were derived from a questionnaire survey on a sample of 394 persons that included out - patients and hospitalized patients who received treatment during the preceding year. The data were subsequently processed through an SPSS program to estimate frequencies and percentage distribution as well as to perform the F-test and t-test on the results. It was found that there were proportionately more females than males and the majority were in the 41-45 years age group. Most of the patients have primary education, come from farming families and have an average income of 3,000 baht per month. High degree of satisfaction was given to the public relations, general services, medical treatment and environment of the hospital. However, a further break down according to gender, level of education and occupation of the patients showed that female patients, patient of less than average level of education and patients with farming backgrounds expressed stronger degree of satisfaction. The male patients, patients with higher than average education and patients with urban occupations showed less satisfaction.

Results of the present study had been submitted to the hospital administration so that they may serve as a guideline for improvement in the operation and stimulate further studies.