

FINANCIAL WARNING MODELS FOR COMMUNITY HOSPITALS IN THAILAND

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M. Eng. (INDUSTRIAL ENGINEERING)

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ABSTRACT

Community hospitals are healthcare centers for many communities in Thailand, which has more than 10 million households in the country requiring a wide range of healthcare services. More than ten years ago, many community hospitals faced financial problems in different ways and needed to solve these urgent problems many times to remain viable. The purpose of this study is to develop a model which will provide warning signals to distressed community hospitals. Researchers gathered financial data during the period of 2011 - 2015 to evaluate the risk factors which effect a community hospital's financial system. Factor Analysis was used to minimize Multicollinearity. Then models are generated from the techniques of Multiple Discriminant Analysis (MDA) and Multinomial Logistic Regression (MLR) to predict financial crises for community hospitals. Comparisons of both techniques are presented. The models are warning tools for predicting financial distress in community hospitals, which, can help community hospitals, To prevent, or minimise problems.

**KEY WORDS: FINANCIAL WARNING MODEL / COMMUNITY HOSPITALS /
MULTIPLE DISCRIMINANT ANALYSIS / MULTINOMIAL
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