醫療體系經營效率之研究-資料包絡法之應用

Efficiency Evaluation in Healthcare System — An Application of Data Envelopment Analysis (DEA)

中文摘要

本研究的目的，在瞭解目前國內各醫療體系之經營現況，及尋求客觀分析醫院效率的方法，進而探討醫療體系所推行的策略與其所屬醫院效率間的關係，以期整理歸納出提昇經營效率的相關策略。

本研究爲橫斷性的研究，在初級資料的收集上，以國內各醫療體系中 100 床以上的 88 家醫院爲研究對象，並以結構性問卷爲測量工具，用郵寄的方式進行問卷調查。問卷內容是有關於醫療體系目前經營現況、對於醫院連鎖經營的看法、以及推行的整合或整體發展策略等議題，問卷回收率爲 59.09%。這些初級資料再與醫院效率分析的次級資料整合予以分析，次級資料主要來自衛生署「台灣地區 89 年醫院現況與服務量調查表」，並以資料包絡法(Data Envelopment Analysis)評估醫院效率值。最後，本研究以 Tobit 迴歸模式分析方法檢定醫療體系經營效率與其推行策略間的關係。

國內醫療體系經營效率分析的結果，不同權屬別醫療體系之平均效率值依序爲：私人醫院、榮民醫院、財團法人醫院、署立醫院、國軍醫院、市立醫院。醫療體系所推行策略與經營效率間的關係，在經控制醫院特性之後，結果發現與醫院效率成顯著正相關的策略包括：「方向性策略」面向中的單科經營制度與院長責任制，「功能性人力資源策略」面向則是統籌辦理員工教育訓練，在「功能性品質策略」的面向中則顯示若體系能設定各分院長期的品質改善目標，即能有效地提昇整體之經營效率。

英文摘要

The objectives of this study are to understand the current state of healthcare systems' operation in Taiwan, and to find out the approach to measure hospital efficiency objectively. We explored the relationship between implementation of strategy and efficiency among healthcare systems of hospitals above 100 beds, and inquired the strategies which enhance hospitals' performance.

This is a cross-sectional study combing primary and secondary data. A structured questionnaire was developed and mailed to chief executive officers of 88 hospitals of 6 healthcare systems. The questionnaire includes three sections: the healthcare systems' operational situations, those executives' viewpoints of franchise, and the strategies which they have been implementing more than one year. The response rate is 59 percent. Secondary data came from the Department of Health in Taiwan (Service Volume and Current Status of Health Care Organizations in Taiwan Area 2000). Data envelopment analysis was used to measure efficiency score. Finally, multi-tobit analysis was employed to explore the relationships between strategies and

efficiency scores.
The results indicate that the operating efficiency scores of private healthcare systems are significantly higher than those of veteran, nonprofit proprietary, Department of Health affiliated, military, and municipal healthcare systems. Adjusted for the confounding variables of ownership, accreditation status, and scale, the following operation strategies are found significantly related to efficiency: (1) “contract management of specific specialty” and “increasing the responsibilities of hospitals’ chief” in directional strategy category; (2) “integrate education activities of employee” in human resource strategy category; (3) “establish long-term quality improvement objectives” in quality strategy category. The study suggests that implements the above operating strategies could significantly improve the healthcare systems’ efficiency.