

某區域醫院醫師效率及其影響因素之探討

Evaluating Physician Efficiency in a Regional Hospital and its Related Factors

中文摘要

本研究之主要目的在衡量醫師的效率，並探討醫師效率的影響因素，希望藉由研究之結果來瞭解醫師效率高低之原因，以協助醫師提昇工作效率，進而對醫院整體營運效率有助益。

本研究為橫斷性研究，以台北市某區域教學醫院內有參與醫療服務、教學及研究工作的 16 個專科之專任主治醫師為研究對象。除由個案醫院業務單位提供投入與產出資料外，輔以問卷調查業務單位無法提供之醫療服務、教學與研究工作時間分配之資料。問卷共計回收 64 份，因此研究中運用資料包絡法(DEA)來衡量此 64 位醫師的效率，並以 Tobit 迴歸方法來分析醫師效率相關影響因素。並藉由參考群體分析與差額變數分析，找出可資效率值較低醫師可學習之對象與改善方向。

分析結果主要發現，以醫師個人來看，有 29 位醫師效率值為 1。以科別來看，有兩個科相對有效率($E=1$)，三個科在平均效率值方面較低($E<0.8$)。而醫師在不同的性別、年齡及工作年資方面，其效率值均無顯著差異，但不同的專科別，效率值卻有顯著不同。因此建議效率值較低之醫師可深入了解其同科內或其他科效率值較佳醫師的工作模式，做為提昇效率之參考。醫院管理者亦可透過 DEA 來瞭解醫師投入與產出的實際狀況，提供改善的建議，使其在工作效率上有所提升，並有助於醫院的經營效率。

英文摘要

The purpose of this study is to evaluate physician efficiency and its related factors. We hope that the results will be helpful to increase both physicians and hospitals efficiency.

Totally 64 attending physicians are evaluated by using data envelopment analysis (DEA), a relatively linear-program-based efficiency evaluation tool. This study was carried out in 16 medicine departments of a regional hospital in Taipei. The analysis units were the attending physicians. The input-output data needed to be calculated by DEA was collected from administrative departments and self-answered questionnaires. A Tobit regression analysis is conducted to see which variables are associated with physician efficiency. Reference group analysis and slack analysis were done to provide inefficient physicians improving information.

The pure technical efficiency scores illustrate 29 physicians being efficiency ($E=1$). The results of Tobit regression show no significant differences in efficiency

scores among physician gender, ages and years of practice. However, the scores among different departments are significantly different.

We suggest that physicians could improve their efficiency scores by referencing different physicians' working process. The information related from DEA could help physicians and hospital administrators to find out how to improve their efficiency and combat the problem of rising hospital costs.