合理門診量與藥價基準之因應一知識發現與行爲回饋系統

The Actions to Allowance of the Outpatient Visit and Drug List and Payment Scheme—Knowledge Discovery and Human Behavior

## **Feedback**

## 中文摘要

全民健保實施的目標在於提供國民適當之醫療保健服務,減少民眾就醫之經濟障礙,合理控制醫療費用。實施迄今已達成「消除弱勢者與高風險群的財務障礙,提供全民基本醫療保障」的目標。惟嚴重的財務負擔與壓力將影響健保永續經營,而保險制度之成敗取決於支付制度之設計,因此,健保局積極進行支付制度的改革,包括實施門診合理量、調整藥價、實施總額支付制度、擴大實施論病例計酬、合理調整支付標準等各項有效抑制醫療費用高漲措施,朝向提昇醫療品質及分散就醫財務風險,使醫療資源應用合理化。

健保支付制度之變革對醫療機構產生莫大之衝擊,各層級之醫療機構深切體認資訊管理的重要,期盼藉由快速準確的資訊系統的管理及分析,提供管理決策之參考依據,以獲得同儕間之競爭優勢。本研究根據某區域醫院的健保門診醫療費用申報資料,以知識發現爲基礎,以資料探勘爲工具,發展醫師行爲回饋系統,期能由費用申報資料中尋求共同的規則、篩選異常資料,協助醫院達到成本控制的績效。

本研究初步結果發現,高看診量的醫師其診治病人的給藥日數及平均藥品費用相對較高;且深入探討其用藥品項及藥品成分等藥囑開立行為,以建構醫師行為回饋系統。並於醫院門診醫令系統中增加醫師個人化網頁,以規則基底方法建立用藥組合之警示系統供醫師參考選擇,促使醫師及醫療機構共同肩負起控制成本之責任。本研究於兩家醫院完成回饋系統之建立,初步分析在健保藥費及藥品核減之個案數明顯降低,應值得進一步推廣使用,惟應隨時觀察醫療環境改變,善用醫療資訊,及時調整策略,以取得競爭優勢。

## 英文摘要

The objective of implementing the National Health Insurance is to obtain comprehensive medical care that committed towards offering public with adequate healthcare service and upholding the right of the public to equal-access of medical care. Further, Bureau of National Health Insurance has also established various plans to strengthen operations and to encourage the conscientious and efficient utilization of medical resources. In fact, National Health Insurance System has been executed successfully to create an era of "Universal coverage, excellent quality of care, care to disadvantaged groups and financial stability". Nevertheless, under current

reimbursement system, N.H.I.S. bears with heavy public's financial burden that challenges critically its life-long operation. To ease the financial burden on the public, Bureau of National Health Insurance has been taking actions aggressively to reform the reimbursement policies including Allowance of the Outpatient Visit, Adjustments of Drug List and Payment Scheme, Enforce Global Budget Payment System and Expand the Applied-Scale of Practicing Different Charges Based on Different Disease Case, and Adjust Reasonably Reimbursement Criteria ---- etc., in order to prohibit the health care providers from demanding excessive price differential. Those major changes of reimbursement policies are meant to improve the quality of Medicare and Therapeutic Services and to disperse the financial risks to make all relevant Medical Care and Therapeutic Resources can be applied appropriately.

The reform of reimbursement policy of the National Health Insurance System has brought great impact on the existing Medicare and Therapeutic Mechanisms. Intelligent computerized analysis system is thus highly expected for hospitals' executives to support them in making rapid and accurate decisions. This research presented herewith was based on clinical submission data from one of local hospitals that claimed to the Bureau of National Health Insurance for the Medicare and Therapeutic costs, and used of Knowledge Discovery as starting point, the Data Mining (Exploring Data) as a tool to develop the Human (Doctor) Behavior Feedback System. In particular, all efforts in this research is to try to build up a common rule and to filter out abnormal data among all declared expenditures to aid hospitals to control total cost effectively and run efficiently with N.I.H.S.

Compared with other doctors' prescription, the results showed that those doctors having more outpatients' visits usually give more drugs prescribed to cover longer duration that generally cost higher. Based on the doctors' behaviors for drugs prescribed, we can make a research to check how those doctors prescribe to their patients in using what kind of medicines and ingredients, and the Human (Doctor) Behavior Feedback System can be then set up. Moreover, creating a personalized Homepage for each doctor in the Medicare and Therapeutic Instruction Systems of hospital clinics (醫院門診醫令系統), we can expect to build up an alert system for doctors to follow the regulated prescriptions while making decisions and to guide those Doctors and the Medicare And Therapeutic Mechanisms to share the responsibility for the cost control with hospitals. Recently, the Human (Doctor) Behavior Feedback Systems has been installed into two local hospitals, and after the implementation of this system, we found their total medical and therapeutic cost of N.H.I.S. and the total quantity of the composition of medicines prescribed by doctors have been obviously reduced. The Human (Doctor) Behavior Feedback System is worth being expanded and applied in a wider range of Medicare and Therapeutic

## Mechanisms.

Also, it's essential for hospitals to catch the trend and utilize medical and therapeutic resources efficiently in order to take immediate action from any change of external environment and maintain the leading position among competitors.