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| • 計畫中文名稱 | 電子病歷資訊之擷取與傳輸應用                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        |             |
| • 計畫英文名稱 | Acquisition and Communication of Medical Information in Electronic Medical Records                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |             |
| • 系統編號   | PG9003-0306                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | • 研究性質 | 應用研究        |
| • 計畫編號   | DOH90-TD-1166                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | • 研究方式 | 委託研究        |
| • 主管機關   | 行政院衛生署                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | • 研究期間 | 9001 ~ 9012 |
| • 執行機構   | 台北醫學大學醫學資訊研究所                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |        |             |
| • 年度     | 90 年                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | • 研究經費 | 500 千元      |
| • 研究領域   | 醫學工程                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |             |
| • 研究人員   | 李友專,黃國哲,徐建業,簡文山                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |        |             |
| • 中文關鍵字  | 電子病歷；醫療資訊匯流排；醫療設備系統；病患照護系統；醫療設備資料語言；整體醫療設備；醫療保健資訊系統；通訊協定                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |             |
| • 英文關鍵字  | Electronic Medical Records；Medical Information Bus；Medical Device System(MDS)；Patient Care System(PCS)；Medical Device Data Language(MDDL)；Virtual Medical Device；Healthcare Information System(HIS)；Communication Protocol                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |             |
| • 中文摘要   | <p>我國醫療資訊標準工作，在衛生署十多年來不遺餘力的推動與主導之下，已有具體的基礎與成果。然而，由於國內醫療資訊體系龐大而複雜，各院所也各自有其系統架構與運作機制；若要順利推動其全面標準化與整合醫療資訊，建構完整而易於應用之「全國醫療資訊網」，除了針對歐美醫療資訊標準發展作通盤性研究，取其符合未來國際趨勢且適合我國效法之處作為我國制定標準之依據之依據，同時要能發展符合醫療院所在資源整合與成本效益之平台或應用工具，以利於整體計劃之推展。 本計劃之目的重點摘要如下：(一)、參考歐美先進國家現有醫療資訊傳輸之使用標準及通訊協定(例如 IEEE 1703, Medical Information Bus, MIB)，分析可應用於醫療資訊匯流排之可行性，評估其納入國家標準發展之可能性，以推動醫療資訊匯流排標準與應用之擬定。(二)、應用現有國際趨勢之通訊協定(Communication Protocol)，評估醫療資訊匯流排(MIB)之資料傳輸應用。 在此計劃中我們將研究歐美先進國家於醫療設備系統(MDS)與病患照護系統(PCS)資料傳輸與整合之應用狀況，以了解醫療資訊匯流排(MIB)之標準技術發展狀況，並探討美國國家標準機構(American National Institute)與電機電子工程協會(IEEE)與歐盟在此領域之要求與可運用之資源。期望研擬出我國醫療設備之通訊協定標準納入我國 CNS 標準之建議。先期應用之評估：參考現有醫療儀器之軟硬體設計，評估其輸出資料為 MIB 之標準格式之可行性及研擬後續推廣計劃。</p> |        |             |
| • 英文摘要   | The standards for medical information have been promoted by the Department of Health for many years. The purpose is to integrate all the information system and medical data in the hospital in Taiwan and hopefully to establish a national information network for healthcare. The standards for medical data                                                                                                                                                                                                                                                                                                                                                                                |        |             |

such as HL7 and DICOM3.0 have been incorporated in many healthcare institutes in Taiwan. Those standard systems are used for a high-level information exchange such as the computer data and medical images transformation between different hospitals. However, the standards for medical device system(MDS) and patient care system(PCS) are not well established. It has been a problem that to exchange and integrate data for MDS and PCS is very difficult. Therefore, the purpose of this project is: (1) To study the present Communication standard and protocol for medical devices. An good example is the IEEE 1073 (Medical Information Bus, MIB) which is developed by the IEEE Standards Association and supported by the the Medical Device Communications Industry Group (MDCIG) to accelerate the development of the Standards, as well as market and demonstrate the capabilities of standardized medical data communications. (2) To evaluate the possibility for the incorporation of MIB in the local medical device systems.