摘要

　　本研究主要目的在建立一套新的醫療通報資訊系統建構模式，讓醫護人員透過簡單的操作畫面及流程，不用撰寫任何程式，即可快速產生通報表單，節省程式開發時間，有效提升醫療通報資訊系統的建置速度。

　　透過全國醫院院內急救通報系統實作，對醫療通報系統表單內容與流程進行分析，包含通報表單主旨、擁有者、需建立的資料庫名稱、通報說明與通報項目內容種類、限制、答題方式、答題跳題流程、資料搜尋與呈現方式等等，規範出以 XML 為基礎的通報內容基本元素定義模式，藉以提高系統的擴充性。

　　研究同時設計一通報系統編輯工具，滿足醫護人員需求易變，系統上線時間短的需求。此一工具主要功能模組包括三大部分：(1)表單設計模組：通報表單設計、答題流程控制、資料輸入介面、資料庫連結與設計、搜尋與瀏覽個案、資料統計與匯出等；(2)程式產生模組：透過表單程式產生器、資料庫連結與資料表產生器、功能程式產生器解析 XML 檔案，產生所對應的通報系統程式；(3)系統功能模組：資料安全、資料加密、資料交換等。透過此編輯工具可節省許多程式開發時間與可能產生的人為錯誤，有效提升醫療通報資訊系統的開發速度與品質。

　　本研究所規劃的全國醫院院內急救通報系統 2004 年 10 月上線，第一階段有 33 間公立醫院參與，第二階段再增加 13 間私立醫院，系統上線至今共累積 713 例院內急救通報個案，並可透過各項成效指標看出個別醫院與全體醫院的差異。而通報表單編輯工具也成功應用在其他的醫療通報系統上，不僅證明系統的功能的完整性，同時也能有效縮短通報表單開發時程，讓沒有太多資訊背景的醫護人員，可以依照實際需求，自己完成通報表單內容的設計與系統建置，提高通報系統建置的效率與品質。

關鍵字：通報系統、院內急救通報、醫療資訊系統、問卷系統

Abstract

The purpose of this research is to build a new medical reporting system development model. Without writing any programs, the medical staffs can generate sheets of report rapidly through brief procedures and operation frame, which save the time for developing programs, and increase the speed of establish of medical reporting system.

This research analyze the content of sheet and procedure of the medical reporting system through the practice of International In-hospital CPR Reporting System, including the substance of reporting sheet, owner, the name of database require establishment, description and category of item content of report, restriction, type and procedure of answer, searching and presentation of information, etc. It makes a standard of basic element definition mode of reporting content, which based on XML, so as to raise the expansion of system.

During the researching a editing tool was designed at the same time, which meets the needs of medical staffs for easy to modify, short-time from design to publish. The primary function module of this tool include 3 major aspects: (1) Sheet design module: design of reporting sheet, procedure control of answer, interface of data input, connection and design of data base, searching and browsing for case, exporting and statistics of data, etc.; (2) Program generation module: Parsing the XML files through sheet program generator, database connector and table generator, function program generator, and generate the corresponding reporting program automatically; (3) System function module: Data security, data encryption, data exchange, etc. Applying this editing tool

will save a lot of time for program deploy and avoid the mistakes probably caused by human, effectively improve the time for deploy and quality of medical reporting system.

The international in-hospital CPR reporting system designed in this research was published in October 2004, 33 public hospitals participated in first stage, 13 private hospitals more in the second stage. The system accumulate 713 cases of in-hospital CPR report up to the present, and the differences of single and total hospital can be noticed via every index of results. Also the editing tool of reporting sheet can be applied on other medical reporting system successfully, not only proving the integrity of system functions, but also abbreviate the time from design to deploy of reporting sheet, therefore the medical staffs, who have limited ability of programming, can complete the design of reporting sheet and system establishment according to the actual needs, increase the efficiency and quality of establishment for reporting system.

Key word：medical reporting system,XML, quality inprove