• 計畫中文名稱	建構藥物安全風險控管資訊系統之研究			
• 計畫英文名稱	The Implementation of Risk Management on Drug Safety Information System			
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• 研究人員	龍安靖,陳香吟			
• 中文關鍵字	醫療錯誤；資訊科技；病人安全資訊；基礎建設；醫療資訊系統架構			
• 英文關鍵字	--			

• 中文摘要	美國醫療機構評鑑聯合會在 2004 年提出「增進病人辨識準確性」、「增進醫療服務者間溝通」、「提升使用高危險藥物安全性」、「避免手術病人、手術位置及術式錯誤發生」、「增進輸液幫浦使用安全」、「改善臨床警示系統效益」、「降低經健康照護感染的風險」等七大目標，作爲醫療機構促進病人安全的方向。另外依據 David W. Bates 等人所發表"以資訊科技增進病人安全"一文中指出，資訊科技可從三方面來減少醫院內醫療疏失及不良事件發生率：預防醫療疏失及不良事件發生、快速及容易地反應發生不良事件、建立不良事件之追蹤及回饋機制。國內目前在病人安全議題上，尚無全面性資訊系統整體規劃，甚至在部分醫院還未重視病人安全防護。 在用藥環境中，不斷有不當用藥產生病人安全風險的情形，而這些風險大多數都可以提前識別、分析和定位。透過資訊科技的協助，更可以達到資料分析的方式達到風險自動化控管的目標。本院建構的門診醫令、急診醫令、住院醫令、中醫醫令使用率及臨床人員參與度高，作爲用藥介入的切入點十分具有可行性。 本計畫將挑選試辦藥品品項，嘗試介入抗生素使用、藥品最大劑量限制、藥品交互作用避免等。根據本院資訊系統上線數年來的臨床資料庫、健保資料庫與專家會議決議的藥品介入規則比對，獲得醫師用藥行爲/國民用藥行爲參考模式，並嘗試將本院資訊系統與用藥介入模式整合。最後透過藥物安全風險控管資訊系統之運作，回饋分析相關結果，製作報告提供其他醫院參考。 本計畫除了藥物安全風險控管資訊系統之運作經驗可提供其他醫院參考之外，預計對於未來電腦在醫學與病人安全上的應用上亦能給予有效的貢獻
• 英文摘要	In order to evaluate the safety and the quality of care provided at our accredited organizations, each year the Joint Commission establishes National Patient Safety Goals (NPSGs). These goals have specific requirements for protecting patients. The requirements for 2004 were: Improve the accuracy of patient

identification, improve the effectiveness of communication among caregivers, improve the safety of using high-alert medications, eliminate wrong-site, wrong-patient, wrong-procedure surgery, improve the safety of using infusion pumps, improve the effectiveness of clinical alarm systems, reduce the risk of health care-acquired infections. Besides, David W. Bates in the paper "Improving Safety with Information Technology" indicated information technology can reduce the rate of errors in three ways: by preventing errors and adverse events, by facilitating a more rapid response after an adverse event has occurred, and by tracking and providing feedback about adverse events. In Taiwan, it is still lack of integrated strategy for information system to deliver safer patient enviroment. Taking medication safety as an example, most of the adverse drug events can be identified, and eliminated. Through assistance of information technology, those events can also be analysed for further management by automatic detection. The computerized physician order entry (CPOE) systems of outpatient department, emergency room, inpatient department, and traditional Chinese medicine department in Wanfang hospital have high capacity utilization and are no doubt the most important infrastructure for improvement of patient safety. This research will identify a drug list to be a target of medication safety improvement by intervention of antibody usage, limitation of maximal dosage, avoidance of drug-drug-interaction. Besides, this research will implement a medication safety intervention model by analysis of historical clinical database in Wanfang hospital, part of health insurance database, and suggestion from expert meeting. By integration of this intervention model and hospital information system, we will develop a risk management system for medication safety and feedback results of this research to other hospitals.