入院護理管理資訊系統之建置與評估

Development and Evaluation of Admission Nursing Management Information Systems

中文摘要

入院護理是病人進入醫院後的第一項護理，也是醫護人員獲取資料的第一步，需評估收集的資料項目繁多，但大多數醫療機構仍使用手工填寫方式，不但耗費人力、物力、時間，無法與其他醫療團隊成員達到立即溝通、即時傳遞資料之目的外，發生失誤及遺漏重要訊息的機會也較多，影響病患安全及照護品質。因此本研究目的是開發與建構一個整合型之入院護理管理資訊系統，以簡化流程及提高訊息傳遞功能，期使病患資料能達即時傳遞與連續性，增進病患安全及服務品質。本研究採用螺旋模式開發系統，組成護理工作小組，運用文件收集、工作環境觀察、使用案例模型（use-case modeling）及聯合應用設計會議(Joint Application Design, JAD)進行系統需求分析與設計。開發建置之整合型入院護理管理系統，主要包括：（一）入院護理管理資訊系統：將入院護理相關表單電子化，自動連結共通性及重複性基本資料，以減少護理人員之重複書寫，並將超出正常值資料自動帶入護理計劃，提供相關護理診斷供護理人員參考，同時亦將異常資料即時傳遞相關部門，達即時溝通之功能。（二）交接班資訊管理系統：將交接班項目格式化並直接匯入資料，提高交接班訊息之正確完整、增進醫護溝通。（三）連結檢驗及藥物管理系統，增加危急值處理時效及給藥安全。

系統評估乃是運用資訊系統成功模型，發展問卷評估護理人員對系統的接受及滿意度，共回收 309 份問卷。結果顯示，使用者滿意、自我感受參與度、年齡與資訊品質對個人及組織效益有正向影響（個人及組織效益=0.771+.550×使用者滿意+.238×自我感受參與度+.110×年齡+.114×資訊品質），解釋力達 65.3%。護理人員對本系統之接受與滿意度，介於普通到滿意之間，尤其「系統所提供之資訊符合我的需求」、「系統讓我覺得很重要」、「系統建置時，提供給我的參與度」等項目之得分與系統實施前相比達統計差異；工作效能改善、對個人及組織的效益構面，在系統建置後得分均有增加情形。

研究所開發之整合型入院護理管理資訊系統，並已正式於某醫學中心上線使用。由此可知，本研究所開發之整合型入院護理管理資訊系統，對於工作業務的簡化與推展，具有臨床之實用性。

英文摘要

Admission care was the first received care after patients were admitted to a clinic institute. However, admission assessment items were numerous and documented by handwriting. The disadvantages of handwriting were time-costing, more possibilities of mistakes happens or losing important information when exhausting. In additional, failure to communicate or exchange health records in time with other medical members might affect health care quality. The research aimed to develop an admission nursing management information system in order to simplify the admission procedure, enhance the efficiency of medical information documentation. Therefore, by correctly delivering patients' health records, and providing continues care, patient safety and care quality would be effectively improved.

The study was to apply Spiral Model development system to compos a nursing information team. By using strategies of data collection, working environment observation, applying use-case modeling, and conferences of Joint Application Design(JAD) to complete the system requirement analysis and design. The Admission Nursing Management Information System mainly included: 1) admission nursing management information system. 2) intershift meeting information management system. 3) the linkage of drug management system and physical examination record system.

System evaluation was to apply information success model , and developed questionnaire of consisting nurses' acceptance and satisfaction. The results of a total 309 questionnaires were: users' satisfaction, the perceived self involvement, age and information quality were positively to personal and organizational effectiveness.

The Admission Nursing Management Information System was developed and start operated in a medical center.

According to the results of this study, the Admission Care Management Information System was practical to simplifying clinic working procedure and effective in communicating and documenting admission medical information.