以 IHE 為基礎設計跨醫院醫療資訊交換平台

The Development of IHE_based e-Healthcare Framework for Medical Information Exchange

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摘要

順應醫療安全趨勢以及維護病人權益，跨醫院醫療資訊交換系統的需求日益增加。為提供系統研發及應用上一致性，IHE(Integrating Hospital Enterprise)乃採用國際公認的醫療資訊標準，如 HL7 及 DICOM，規劃醫療資訊交換架構及 IHE-XDS(Cross-Enterprise Clinical Document Sharing)規格。為保持其中立性，IHE *未提出*具體實作的方式，由使用者各自發展。然而，依據 IHE 規格定義開發，是否能確定系統達到互通(Interoperability)效果勘慮，且可能徒增未來病歷資料交換時的不便。資訊技術日新月異，尤其在網路服務(Web Services)技術成熟，必可解決研發 IHE 架構的缺失。因此，本研究設計 IHE_PIF(IHE Process Integration Framework)溝通平台，不但加強系統開發時效，而且在未來維護上、管理上、整合上都能簡化。

關鍵字： IHE、XDS(Cross-Enterprise Clinical Documents Sharing)、HL7、DICOM、Web Services、BPEL

Abstract

*To assure the incrementally clinical needs in support of optimal patient safety, IHE proposes the exchange framework for sharing medical information using the international standards, such as DICOM and HL7.*As usual, IHE *does make* the specification, but leave system implementation for system vendors to develop. Therefore, the interoperability of heterogeneous systems is a big issue to get correct information seamlessly in real world; especially if those systems are developed based on different information technology. Recently, the Web Services standard is gradually adapted by the information industry, and system developed on Web Service will enforce the interoperability. Therefore, this research designs IHE_PIF (IHE Process Integration Framework) to exchange medical record, and it can not only show the development in efficiency manner, but also simplify steps of the system in the maintenance, the management, and the integration in the future.

Key Words：IHE、XDS(Cross-Enterprise Clinical Documents Sharing)、HL7、DICOM、Web Services、BPEL