

Productivity

Global e-health solutions vendor

Stakeholders: Product Manager and Clinical Consultants

Goal

- ◆ Integrate a Computerised Physician Order Entry (CPOE) system with other healthcare systems, to enable seamless ordering of medications and diagnostic tests in a hospital setting, and to significantly reduce medical errors and costs.

Results

S23M Managing Partner Andrew Shewring designed all of the mappings from XML message representations to standard Health Level Seven (HL7) messages, allowing straightforward integration of a CPOE with hospital filler systems. The integrated system provides physicians and radiologists with a simple and paperless process for ordering medications and diagnostic tests, eliminating several sources of potential errors in the ordering process.

- ◆ Andrew designed and implemented a framework for automated testing of the messaging system, making use of declarative definitions of end-to-end tests, including the transformations between the XML and HL7 formats.
- ◆ The consistency and accuracy of the transformations and the correctness of the messaging software was verified using a large set of sample messages.
- ◆ Related publication: *Effect of Computerized Physician Order Entry and a Team Intervention on Prevention of Serious Medication Errors.*
<http://jama.jamanetwork.com/article.aspx?articleid=188074>



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Collaboration for Life

Productivity

Industry experience

Insurance, utilities, healthcare, government, manufacturing, distribution, banking, industrial automation.

Domain expertise

Customer relationship management, billing engine design, pricing engine design, product management, transaction systems, enterprise resource planning, logistics, warehousing.

Solution design

Requirements analysis, solution architecture, performance indicator specification, data service design.

Implementation

System implementation, software configuration & customisation, software development, system integration.

Operational support

Process analysis, automation of system operations (DevOps), solution life cycle management.



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