

Community Pharmacy Medication Incident Reporting and Management System (CPMIRMS) and Evaluation of clinical interventions in community pharmacy

University of Tasmania Pharmacy Informatics Research Group

Executive Summary

At present, the documentation of cognitive services and medication incidents in community pharmacy practice in Australia is virtually non-existent, yet quality care cannot be provided without complete documentation. The future of our profession lies in our ability to document the benefit of pharmaceutical care for our patients.

The project team has recently developed and evaluated a convenient, computerised process for the recording of medication incidents and community pharmacists' cognitive services. This system was devised after an extensive literature evaluation and it underwent several pilot phases with many iterative modifications. It was initially developed for incorporation into the Rex system (Phoenix Corp). Details of medication incidents recorded include the drug involved, problem identified and its potential severity, and the steps that were taken by the pharmacist to resolve the problem, including time taken and details of contact with the prescriber (and whether the recommendation was accepted).

This project will build upon the team's existing research to establish a sustainable, nationwide system for the ongoing collection of information from community pharmacies identifying incidents related to medication safety and subsequent clinical interventions by community pharmacists. The system will be easy to use, incorporating drop down menus and check boxes wherever possible. It will interface with dispensing software to enable direct importation of patient and medication details. In the first instance, the system will be designed to interface with the Rex system (Phoenix Corp) and WiniFRED (NU Systems/PCA).

With the guidance of both a local reference group and national panel of experts, there will be a comprehensive review of our current definitions and classification of medication incidents, and of similar medication-related reporting systems from overseas.

With respect to the information technology components of the project, which constitute the major aspects of this first phase of the research, the team will consult with NU Systems/PCA and develop (i) a comprehensive architecture integration plan and system architecture framework, including technical specifications for incorporation of the recording module into the WiniFRED system; (ii) software for incorporation of the recording module into the WiniFRED system; (iii) an architecture plan for secure and central transfer and collection of recorded data - the coding of the server (API), communications, interfacing with dispensing systems, etc.; and (iv) the system for the secure and central transfer and collection of recorded data (includes the physical setup of the interventions repository server, the web server, and other hardware components).

The system will be pilot tested, with iterative refinement as required. An implementation (rollout) plan for the next phase of research will be developed and a final report will be submitted to the Pharmacy Guild of Australia.

Proposed Timelines and Budget

Duration of Project	6 months
Proposed Commencement Date	November, 2003
Total Budget including GST	\$638,880

Timetable

Stage 1 (November-December 2003)

- Finalise contract and signoff
- Recruit project staff
- Planning of project (Gantt charting etc.)
- Establishment of a local reference group, with representatives from the Pharmacy Guild, PSA, SHPA, AACP (i.e. accredited consultant pharmacists), the Tasmanian E-Health Association, State Department of Health and Human Services and the Southern Tasmania Division of General Practice.
- Ethics submission
- Reference group meetings
- Meeting with EAG
- Review our current definitions and classification of medication incidents (including review by health economist)
- Review similar medication-related reporting systems from overseas

Stage 2 (December 2003 - January 2004)

- Consultation with NU Systems/PCA
- Develop comprehensive architecture integration plan and system architecture framework, including technical specification for incorporation of the recording module into the WiniFRED system
- Cost out development
- Negotiate costs with NU Systems/PCA

Develop a contingency plan to implement if negotiations with NU Systems/PCA fail; plan discussions with another major dispensing software vendor
Reference group meetings
Establish a national reference group of experts to review definitions and a classification system for the incident reporting and management system

Stage 3 (December 2003-March 2004)

Develop software for incorporation of the recording module into the WiniFRED system
Consult with the national reference group of experts to agree on definitions and a classification system for the incident reporting and management system
Reference group meetings
Develop architecture plan for secure and central transfer and collection of recorded data - the coding of the server (API), communications, interfacing with dispensing systems, etc.

Stage 4 (March-April 2004)

Develop system for the secure and central transfer and collection of recorded data (includes the physical setup of the interventions repository server, the web server, and other hardware components)

Stage 5 (April 2004)

Pilot testing, with iterative refinement as required
Develop implementation (rollout) plan
Draft report

Stage 6 (May 2004)

Final report
Submit Plan for next phase (rollout, collection and comprehensive clinical and economic analyses of data)