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e-Government event

Achieving Business Intelligence for Chronic Disease Management - Local Requirements in Ontology and Temporal Query Management

Presented by: Professor Jim Warren,
Chair in Health Informatics, The University of Auckland

The Chronic Disease Management (CDM) component of health budgets, along with health budgets overall, is growing as we live longer lives filled with energy dense foods and less physical activity. Australia and New Zealand are among the world leaders in maintaining a high quality electronic medical record (EMR) in General Practice, providing opportunity for querying the records for 'business intelligence' about health status and healthcare delivery. CDM, however, poses special challenges in that only a limited set of questions can be answered without constructing a temporal model of the data. Such questions include issues of patient adherence to medication, treatment of compelling indications on co-morbidities (e.g., when managing hypertension concurrently with diabetes), and monitoring of lab results to test that treatment is tolerated. Moreover, the relevant concepts for such clinical queries are at a higher level of abstraction than the data in the EMR.

This presentation reports from the context of the presenter's recent experiences in development of quality audit reporting for improved antihypertensive prescribing in a largely Pacific population in suburban Auckland. Development of ontology based tools to make query development more reliable and sustainable is described. The talk concludes with discussion of the relative capabilities of local systems as compared to larger (e.g., regional) networks and consideration of the requirements for the latter.

Professor Jim Warren is Chair in Health Informatics at The University of Auckland where he holds a joint appointment between the Department of Computer Science and the School of Population Health. He is a member of the Executive of Health Informatics New Zealand (HINZ) and Programme Chair for the HINZ annual forum 2006, 2007 and 2008. He was a co-editor of the Proceedings of the 12th World Congress on Medical Informatics (MEDINFO 2007). His research interests span systems interoperability, health consumer empowerment and health data mining. He has a BSc in Computer Science and PhD in Information Systems, both from the University of Maryland, and was with the University of South Australia from 1993 to 2005.



Date: **Monday, 21st January 2008**
Time: **4pm—6pm** (with refreshments)
Venue: Boardroom, 2nd floor, NICTA
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ACT 2601
RSVP: by Friday 18th January to
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AGENDA:
4:00pm-4:15pm Welcome and Introductions
4:15pm-5:00pm Presentation by Jim Warren
5:00pm-6:00pm Discussion, refreshments, and
networking