

CANBERRA HOSPITAL PRIVATE PRACTICE FUND VACATION SCHOLARSHIPS 2010/2011 PROJECT SUMMARY

Title: Information technology and healthcare: a revolution or just more of the same

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Outline of the project:

The project aims to:

1. Evaluate innovation in clinical research through the use of technology, identifying the role of information systems, the expectations of users, and the opportunities technology offers clinical researchers to be innovative – especially in terms of collaboration, and the patient role in research
2. Establish an evidence-based discussion paper on research and its technological infrastructure needs

Background:

Governments are attempting to move Australia forward with the use of technology in healthcare. However, little has been done to understand and evaluate what health professionals think is “worthwhile”, how best it can be used, and what patients’ roles are in the process.

At the Canberra Hospital’s Epidemiology Unit we have been working towards creating a technology-based online research infrastructure that includes a plethora of tools to support innovation. A number of groups have taken up the change and are creating novel ways of using technology and engaging health professionals and patients in the process. Areas include gastroenterology, neonatology, orthopaedics, gynaecology, pain management, psychiatry, diabetic care, respiratory and sleep medicine, arthritis support services, and the unit of academic medicine.

As a vacation project for a student, we are proposing a cross discipline research study that includes the National Centre for Information Systems Research at the ANU, and the Canberra Hospital through the Centre for Advances in Epidemiology and IT. Over a two week period, a vacation scholar from the ANU would conduct a “design research” assessment based of TAM examining the innovative ways health professionals/researchers want to use information technology to create ongoing research infrastructures, engage technology to support research, and use technology to advance research. Furthermore, the assessment will consider the patient in the process and examine the innovative ways patients can be engaged in research using technology, and what implications there is for the defining research, and its future in an interactive environment.

The remaining 4 weeks of the scholarship will be focused on the analyses and presenting a sound discussion around the findings. It is envisaged that a number of publications will come from this research.

Conflict of interest declaration:

Dr Shadbolt is a director in the company, Treonic Pty Ltd, supplying the innovative technology, DiscoverQuick. He invented the technology to support advancing research in healthcare. For the technology to survive it has had to be run on a commercial basis.

Preferred study discipline being undertaken by the student:

Information systems, with a focus on healthcare

Potential benefits to the student and to the department:

This project has significant benefits all round. For the student, his/her skills in undertaking field work, analysing and interpreting data, and developing written scientific arguments will be significantly advanced. Both Professor Gregor and Dr Shadbolt have extensive experience in supporting students’ research skills advancement.

In terms of the department, the research will provide critical research on innovation and the future direction of clinical research in a technology-based environment. The project will open up the opportunity for collaboration across disciplines in fields that provide the corner stone for healthcare research now and in the future.

In terms of the hospital and research community, the project will benefit clinical researchers by providing a detailed discussion on research, information systems and research infrastructure that should help support the development of a more collaborative environment, better positioning TCH in relation to NHMRC grants etc.

Department within Canberra Hospital where the student will be based:

Centre for Advances in Epidemiology and IT