Editorial

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Biographical notes: Lesley Pek Wee Land is a Senior Lecturer at the School of Information Systems, Management and Technology, The University of New South Wales. She received her BSc (Hons) in Computer Science from the University College London, University of London, MSc in Intelligent Systems from Brunel University (UK), and her PhD in Information Systems from The University of New South Wales. She has published in *IEEE Transaction of Software Engineering*, *International Journal of Empirical Software Engineering*, and international IS conferences. Her current research areas are IS implementations including E-Health, software quality techniques for IS development and E-learning.

Simon K. Poon is a Lecturer at the School of Information Technologies, The University of Sydney. He received his BSc (major in Computer Science), PhD in Information Systems and Master of Public Health from the University of Sydney. He also holds a Graduate Certification in Mathematical Sciences and a Master of Engineering Management from the University of Technology, Sydney. He has presented his work in international IS conferences including *International Conference on Information Systems* (ICIS). He has published in *OMEGA*, *Expert Systems with Applications*, *Statistical Analysis and Data Mining*, and *Electronic Journal of Information Systems Evaluation*. He has researched extensively in the areas of IT business value. His current research interests include developing analytical framework to handle complex interactions in data and health informatics focusing on patient data analysis.

This special issue is on healthcare information systems, specifically trying to understand ICT healthcare innovations through diverse perspectives. There is a wide array of interest in this complex area and interests can span across many disciplines such as IT/IS, Public Health, Medicine, and Health Informatics. This is largely seen as an important and emerging area of research as healthcare impacts everybody, regardless of geographical and temporal boundaries. With increasingly better ICT infrastructure, and individuals and communities becoming more focused on healthy lifestyles and lifelong learning, issues

related to healthcare (particularly the impact of technological advancement on it) are increasingly being researched, discussed and funded. In this issue, we picked four papers which we thought would contribute to the electronic healthcare research in the IS area. Below, we will summarise each of them.

The first paper by Appari and Eric Johnson on 'Information security and privacy in healthcare: current state of research' reminds us of the security and privacy considerations that need to be addressed for healthcare systems. Healthcare information is undoubtedly very sensitive. Therefore its exchange between different stakeholders must address this concern, otherwise acceptance and adoption of such systems would be gravely affected. The authors have provided a comprehensive review of the state of the art of information security and privacy in the healthcare sector, and concluded with suggestions for key areas of future research in the area.

Patients' acceptance contributes to the ultimate success of e-health systems. One important aspect of their acceptance is patients' electronic consent (eConsent). Using content analysis from a year's worth of news reports across a number of countries (Canada, New Zealand, Australia, UK and USA), the second paper, by Cockcroft, identified the key issues related to eConsent.

The third paper presents a framework for assessing e-health readiness from an electronic health records perspective, integrating and trying to fill gaps in the existing literature. Li et al. argue that readiness assessment contributes to the successful adoption of Electronic Health Records Systems. They propose quantifying constructs in the model using connected graph theory.

The last paper, by Heiro and Raitoharju, provides a case study of the Finnish healthcare context, focusing on the non-technical issues related to the use of medical information of patients. The paper emphasises the importance of the quality of medical data for electronic health record systems, and examines the non-technical characteristics that patient specific medication information should have within a Finnish primary care organisation.

A number of important observations result from the selected papers in this issue. Firstly, e-health systems present a myriad of issues not necessarily restricted to technology or technical issues (e.g., data quality, ethical, security, privacy, human-related issues). Secondly, e-health research exploits the literature from many different disciplines. However, different disciplines have a different culture of conducting research. For example, research approaches and methodologies may differ in rigour, and levels of theorising. This may present difficulties in collaboration across disciplines. New ways of collaboration will need to be established, including better appreciation of the strengths of researchers from diverse disciplines, because each group adds to our overall understanding of this complex area.

Lastly, we wish to acknowledge the enormous help rendered by Dr. Vincent Pang in ensuring that the quality of the papers' formats conform to the journal.