Mini Track: ‘Information Systems Supporting Quality Care, Patient Safety and Patient Centric Technologies’

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Healthcare Information Systems are increasingly supporting evidence based medicine and patient centric technologies. Medical information systems are expected to help reduce medical errors, improve quality of patient care and safety. This mini-track seeks to better understand the impact of information systems and technologies on patient care delivery and open lines of communication between theoretical and applied research. The five papers presented motivate research, present case studies, or foster exemplary methodology.

"Telemedicine Encounter Quality: Comparing Patient and Provider Perspectives of a Socio-Technical System" authored by Cynthia LeRouge, Rosann W. Collins and Alan R. Hevner provides an excellent blend between theory and practice. This paper uses a socio-technical approach to understanding quality during telemedicine encounters. Resulting from a field study, this paper provides a comparative framework of quality attributes for telemedicine service encounters that prioritizes the attributes from provider and patient perspectives.

"Affective Computing in Tele-home Health" authored by Christine Lisetti and Cynthia LeRouge exemplifies the integration of IS behavioral science in the area of technology adoption and diffusion into the design science process. Based upon an integrative exploration, this paper proposes application of “Wizard of Oz” type studies to computer-mediated communication (CMC) environments to investigate how emotional state assessments influence responses from health care professionals and how MOUE (Model Of User’s Emotions), can be accepted into the health care environment.

"Trust, Trait Theory, and Collaboration in Telemedicine: An Empirical Test" authored by Houghton Brown, Marshall Scott Poole, Pamela Forducey, Liqiong Deng, Al Moorad, and Sharon Smeltzer investigates the effect of individual personality traits on trust in virtual collaboration in telemedicine. This paper is based on the survey of over seventy healthcare providers who are actively engaged in telemedicine encounters.

"Using Intelligent Agents to Repurpose Administrative Data in Fostering Disease Prevention in an Outpatient Context: The Case of Pneumococcal Vaccination" authored by Carla Coffin, Chad Saunders, Chandra Thomas, Andrea Loewen, Norman Campbell, and William Ghali applies intelligent agents as an economical way to repurpose administrative data in order to foster a program of disease prevention in an outpatient context. A retrospective computerized search was conducted using administrative hospital discharge data to identify patients admitted to the medical teaching unit who met the Canadian Immunization criteria for pneumococcal vaccination over a one-year period.

"GDSI: A Web-Based Decision Support System to Facilitate the Efficient and Effective Use of Clinical Practice Guidelines" authored by Douglas C. Stahl, Dave Ko, Layla Rouse, and Joyce C. Niland presents lessons learned and initial experiences based on the development of a Web-based expert system to facilitate Clinical Practice Guidelines utilization in a variety of clinical environments.

These papers represent joint efforts of researchers and medical practitioners to explore information systems that support quality care, patient safety and patient-centric technologies.