
Despite the need to a sustained use of healthcare information systems, research on the continuous use of knowledge-based clinical decision support (KB-CDSS) is lacking in the extant literature. This presentation will focus on key approaches to identifying knowledge gaps with KB-CDSS in the extant literature. It will explain how a novel theoretical model to understanding a phenomenon such as continuous use of a pain management CDSS can be developed. It will highlight the appropriateness and suitability of using mixed methods longitudinal vs. cross-sectional study designs to uncover hidden knowledge, and to emphasize the need for knowledge translation research to bridge theory with practice. Importantly, guidance on how to go about conducting theory-based, method-appropriate applied research studies to explore factors influencing continuous use of automated clinical guidelines will be provided. The aim is to enhance a researcher’s understanding of the basic research process for interdisciplinary areas such as the need to provide guidance on developing a priori hypotheses relating to constructs and relationships underlying acceptance, use, and continuance use of, knowledge-based clinical decision support and on investigating the potential role of health information systems use in knowledge translation and practice.

Professor Tan’s research has been widely cited and applied across a number of major industries. Among the peer-reviewed journals in which Professor Tan publishes are Communications of the ACM, Decision Sciences, Health Care Management Review, Information Systems Research, International Journal of Human-Computer Interaction, Journal of Digital Imaging, Journal of the American Medical Informatics Association, Journal of Health Administration Education, Methods of Information in Medicine and The Communications of the Association for Information Systems. HealthTechTopia has recently listed him as among the top 10 most influential informatics professors.