Conference Co-Chairs' Message

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Health care has been in crisis for more than a half of a century. The passage of the *American Recovery and Reinvestment Act* (ARRA) by the U.S. Congress on February 17, 2009 and the creation and adoption of the Health Care Reform Bill by the President Obama on March 23, 2010 are simply the reflection of the urgency for health care reform. Ushered in with health care reform is the use of technology to create processes whereby shared understanding through information exchange occurs. In response to the health care mandates and in order to build a responsive community, the constituents of Western Michigan University created a university-wide center, the *Center for Health Information Technology Advancement* (**WMU-CHITA**) on April 15, 2010. The establishment of WMU-CHITA is to promote productive Health Information Technology research, education, and services for the delivery of best health care with quality, safety, security, and sustainability. To fulfill this goal, with joint interests between *Relationship-Centered Care Network of Southwest Michigan* (**RCCSWMI**) and WMU-CHITA, a planning committee was formed in March 2011 to initiate an *International Conference on Health Information Technology Advancement* (**ICHITA**). The conference planning team was commissioned to pool talents from the community, the United States, and overseas to pursue the betterment of health care via relationship-centered care and health information technology. While the lead-time for this event was less than six months, the importance of the conference was well recognized by our educational peers, both domestic and international, and the health care and information technology stakeholders in the community. We have not only successfully recruited known scholars and practitioners as keynotes, speakers, and workshop leaders for ICHITA, but also received research papers and position papers that are to be presented at ICHITA and published in this *Transactions of ICHITA-2011*, a refereed periodical that is produced in both paper format and digital form (DVD).

An array of research subjects have been covered by accepted research papers and position papers. For a quick overview, they are divided into five major tracks: *Health Care Practice*, *Health care Infrastructure and Implementation*, *Security and Privacy*, *Relationship-Centered Health Care*, and *Health Information Technology & Education*. A brief highlight on the contributors is given below.

Health Care Practice. There are four papers in this track. DeMello and Deshpande focuses on the impacts of factors that affect the use of information technologies (IT) in clinical practice. Their findings show that specific strategies are needed to increase the use of IT in health care. Ravotas addresses the issue that the use of institutionally designed documentation may impact the practice of health care. Krishnaswamy introduces a model to explain how electronic payment systems will improve the efficiency of health care services. Leidig et al. illustrates how computer modeling and simulation can be used to assist governments in setting the health care policy.

Health care Infrastructure and Implementation. Three papers are accepted in this track. First, Targowski discusses the key issues involved in health information exchange and then proposes a top-down national health information network in support of the implementation of electronic health records (EHR) in the United States. Dobrzykowski shares findings from an extensive study of

the structural constraints of Acute Care Hospitals and analysis of the adoption of EHR by different types of hospitals. Razi et al. examine the challenges before and after the implementation of EHR.

Security and Privacy. There are three presentations in this track. Lehrfeld et al. address the security and privacy issues associated with mobile (wireless) devices and discuss how to secure personal data when these devices are used in the health care environment. Salih and Lilien point out privacy threats commonly occur to electronic medical records (EMR) and/or EHR, and a specific bundle scheme is proposed to protect sensitive data via the use of a virtual machine. Chen and Lee give an extensive review of security and privacy issues in health care information systems.

Relationship-Centered Health Care. This track is composed of three studies. Dohan and Tan focus on the barriers and facilitators of relationships among clinicians and present a framework that will sustain practice audit for continuous health care quality improvement. Manning-Walsh gives a review on relationship-centered care and proposed a model to explore issues on how health information technology can affect relationship-centered care. Rea et al. present a social networking adoption matrix and demonstrate how it can be applied to the development of an expert system. The system is to assist health care organizations in selecting a proper social networking technology to enhance a hospital's relationship management with patients.

Health Information Technology & Education. Four papers have been selected in this track. Dobrzykowski et al. present the curriculum development of health care for the graduate programs at Eastern Michigan University. Falan and Han present a new approach to the design of an undergraduate health informatics and information management curriculum across multiple disciplines. Rienzo discusses how the disruptive innovation theory could be used together with HIT to salvage the health care industry. Tremblay highlights how to leverage HIT to enhance the efficiency of health care efficiency and to create strategic impacts on the health care industry.

As conference co-chairs, there are many people deserving our thanks. First, our thanks go out to all of the sponsors who provided support to ICHITA. Due to the space limit, the names of sponsors are not listed individually. However, it cannot be overstated that their generous support made this conference possible. Second, the contributors who submitted papers and reviewers who provided timely comments have significantly substantiated the quality, the value, and the contents of this publication. We deeply appreciate your efforts. Of course, among them, the Transactions Editor, Dr. Huei Lee, deserves our special thanks. Dr. Lee has tirelessly taken care of the paper submissions, blind reviews, editing, and compilation of all papers in the Transactions. Without him, the Transactions would never be published in time.

All program co-directors and members on the ICHITA planning committee are also deserving of our special thanks for their hard work and painstaking promotion of ICHITA-2011. It is our plan that ICHITA will be held every other year, and ICHITA-2011 sets the landmark for an integrative effort in pursuing the excellence of health care through health information technologies.

Lastly, definitely not the least, Western Michigan University and the administration of WMU shall receive our sincere thanks for their strong support of WMU-CHITA. Let us move on towards better health care through innovative use of Information Technologies.

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