

Introduction

Technology Mediated Collaborations in Healthcare and Wellness Management

Collaboration Systems and Technologies and Information Technology in Health Care Tracks

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Today all countries (developed, developing, and emerging) are faced with exponentially increasing costs for healthcare delivery coupled with challenges of an aging population as well as an increase in chronic diseases. This has led to a growing need to deliver more effective and efficient healthcare. To address this situation we are witnessing the application of various technology solutions to support superior healthcare delivery and wellness management. These solutions include the incorporation of web based solutions be it as an electronic medical record (EMR), electronic health record (EHR) or personal health record (PHR) as well as a plethora of apps to support monitoring and management of acute and chronic diseases. Further, we are seeing the growth of Web 2.0 initiatives and social media to support consumer healthcare initiatives such as web sites including PatientsLikeMe which also serve to make patients more empowered in their own healthcare and wellbeing. A unifying factor of all these applications is of course the collaboration technologies that enable and facilitate all these possibilities.

We have four papers in this mini track as follows:

Paper 1: Enabling High Value Care With A Point Of Care Solution: The Australian Experience by Nilmini Wickramasinghe focusses not just on a collaborative technology solution but how this solution supports the delivery of high value, patient centered-care. Central in the use of this solution is ensuring a positive patient experience at all times. The discussed study provides insights from an Australian case study that are as applicable in various healthcare contexts globally.

Paper 2: Discovering Patient Portal Features Critical to User Satisfaction: A Systematic Analysis by Abdullah Wahbeh, Mohammad Abdel-Rahman, Cherie Noteboom and Tareq Nasrallah. This paper looks at the critical aspects of patient portals to achieve high user satisfaction. A text-mining based approach is used to discover user satisfaction features from user reviews in a mobile patient portal. Once again the collaborative nature of technology is highlighted and the need to support different user needs and perspectives is identified.

Paper 3 Creating Better Online Solutions For Healthcare Providers With KM: The Case Of Allergy Care by Nilmini Wickramasinghe. To date we have not been able to systematically track patient allergies to observe how the allergic reactions may change over time. Particularly in pediatrics, changes to allergic reactions are prevalent as children grow with some becoming more allergic while others develop greater tolerances. By combining a technology solution leveraging of knowledge management techniques it is possible to track this progression in the allergy life cycle as the paper highlights.

And Paper 4: Using Activity Theory Successfully in Healthcare: A Systematic Review of the Theory's Key Challenges to Date by Fabian Wiser, Carolin Durst and Nilmini Wickramasinghe proffers the merits of using activity theory to enable a rich and robust theoretical analysis lens for examining collaborative technologies in healthcare contexts and thereby ensuring successful design development and deployment of such solutions.

Given the socio-technical nature of collaborative technologies, Activity theory is sufficiently rich to capture multiple interactions of people with technology be they clinicians, healthcare administrators, payers and/or patients. By supporting such a multiple perspective and yet ensuring that the objectives and goals of the specific technology solution are at all times central it is possible with such an analysis to identify intended and unintended consequences with use of collaborative technologies in various healthcare settings as well as identify critical success factors.

Clearly these papers are not exhaustive of all the central issues however they do serve to highlight that in order to achieve successful and superior healthcare delivery and wellness management it is necessary to consider people, process and technology issues; i.e. to have a socio-technical perspective. To do this effectively and efficiently and thereby have a higher success it is also necessary to be cognizant of the five primary stakeholders in healthcare: researchers, clinicians, nurses, patients, and administrators who form the basis of any partnership in health care. There also exist partnerships or sub-dimensions. A partnership may be between two researchers, a researcher and a clinician, a patient and a nurse, etc. The partnerships may also be based on an exchange of data, analysis, diagnosis, or treatment singly or in combination. Further, the purpose of the collaboration may be care, research, administration, education or a combination of the four. In addition, technology's impact on the efficiency and effectiveness on these collaborations will be determined by the architecture of the technology, the systems developed around it, and the strategy for implementing it. The efficacy of the architecture will determine the efficacy of the system, and the efficacy of the system will determine the efficacy of the strategy.