Introduction to IT Adoption, Diffusion, and Evaluation in Healthcare

Leigh Cellucci
East Carolina University
celluccie@ecu.edu

Cynthia LeRouge
Saint Louis University
lerougec@slu.edu

Ton Spil
University of Twente
a.a.m.spill@utwente.nl

Carla Wiggins
Weber State University
carlawiggins@weber.edu

1. Introduction

Adoption, implementation, and evaluation of information technology (IT) in healthcare continue to challenge organizations and society, as well as researchers. This mini-track addresses these Health IT topics within the framework of 1) EHR and PHR; 2) Adoption resistance and attitudes; 3) Health Information Exchanges; 4) HIT use; and 5) Tele-services.

1.1. EHR and PHR

Physician's acceptance of EHR remains an important topic: Steininger et al. find privacy concerns and social influence as having impact on physician's acceptance of EHR, while Noteboom et al. find that the sub-scale items measuring physician's opinions about EHR are different than those for nurses. Nambisan looks at the impact of peer support and online forums on office based physician's adoption of EMR. On an organizational level, Gan finds that an organization's adoption of EHR depends upon the fit between the EHR and the organization's clinical activities and social contagion. The related topic of Personal Health Records (PHR) is also explored by researchers in this mini-track: Using Self-Determination Theory, Assadi and Hassanein explore the mechanisms through with individuals become motivated to take an active role in utilizing PHR and Spil and Klein take a user point of view to explain, through grounded theory, why Google Health's PHR failed and predicts whether Microsoft can reach the tipping point with its PHR initiatives.

1.2. Adoption, resistance, and attitudes

Continuing the HIT research community's active stream of inquiry into these topics, Corneille et al. use Diffusion of Innovation Theory to explore user acceptance of text-message based health interventions. They find that technology adoption factors, rather than risk beliefs and privacy concerns, impact participant intentions to use a text-message intervention. Smith et al. find that contextual factors brought on by user engagement in the design process may significantly limit the effects of resistance to chance on user intentions. Exploring a somewhat different level of

analysis, Thomas et al. address the role of the IT manager as an innovation partner, which they hold demands greater attention in the IS literature. Looking at the adoption of assistive technologies among older adults, Vichitvanichphong et al. identify factors that impact their adoption of assistive technologies: factors related to the technology itself, allocated tasks, individual factors, and social influences. On the national level, using data to form a case study on the German Electronic Health Card, Kloecker proposes that asymmetries amongst stakeholders' objectives can posit a cause for implementation failure for nation-wide eHealth technologies.

1.3. Health Information Exchanges (HIE)

Sharing of information and data are key aspects of HIT. Edberg et al. describe the planning process followed by one state in creating its HIE, while Pendergrass examines the value proposition, coordination between patients, and workflow in regard to coordinated adoption and implementation of HIE.

1.4. HIT use

While Hao et al. investigate social influence on technology's sustained use in healthcare, Nguyen et al. identify 15 success factors and suggest a pyramidal approach for research that will show interactions of stakeholders with implementers. Poba-Nzaou report on the investigation of a hybrid model of open source EHR project governance adopted with success by a large North American hospital and Wiggins and Peterson explore HIT use in ambulatory surgery centers and find low usage of HIT, both within centers and between outpatient settings.

1.5. Tele-services

Wang and Doong explore how personal attitudes toward a health care service may be changed by shaping the nature of the endorser and the information displayed in online advertising. In particular, they uncover how men and women may differ in their perception-forming process. Meyer and Pare provide an overview of non-technical telepathology research and present a research agenda for future efforts.

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