Minitrack: IT Adoption, Diffusion, and Evaluation in Healthcare

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The adoption, diffusion, and evaluation of IT in healthcare continue to present challenges to organizations and society, as well as to researchers. IT is seen as an enabler of change both nationally and locally in healthcare organizations. However, IT adoption decisions in healthcare are complex because of the uncertainty of benefits and the rate of change of technology.

The papers in this minitrack utilize numerous research approaches. Delphi studies, surveys, interviews, and longitudinal case studies all provide different methods to investigate the range of issues underlying the successful adoption, implementation, and evaluation of IT. These approaches are all represented in this minitrack. Overall, this minitrack contains a variety of interesting papers with some recurring themes.

Paper 1483 surveyed 323 visitors in Germany concerning their reasons and intention to use an Indoor Navigation/Indoor Localization system in a hospital. The results show that intention to use is quite high with attitude being the main predictor, perceived norms having some influence and behavioral control not being relevant at all.

Paper 1523 reveals that IT plays a large role in establishing and maintaining situation awareness in cardiac arrest teams. This is both positive and negative. Non-technical skills help to mitigate the risks involved.

Paper 1548 investigates the role of patients' first impressions of online health social communities on their subsequent interaction experience. Drawing from social presence theory, the study analyzes initial posts of 168 patients. Intimacy and communication were found to be the most important predictors of giving and receiving participation respectively.

Paper 1906 describes the formulation of a theoretical framework that describes the factors which influence dashboard acceptance in the healthcare sector. Based on a systematic review of existing literature, 53

factors, grouped into 10 broad categories were identified. Results indicate that perceived sociotechnical fit and cognitive load affect users' beliefs, and subsequently their interaction.

Paper 2033 analyzed data from 17,756 healthcare providers and 3,418 locations to come to the following results. When taking both network contagion and spatial contagion into account, healthcare providers connected with more prior adopters within 30 miles are more likely to adopt the Electronic Health Record incentive program.

Paper 2078 reviewed the literature from eight leading IS journals at the intersection of Information Systems and Health at both the micro and macro level. The authors use the Believe-Action-Outcome framework in three phases across input, method, steps, and results to arrive at a set of important research questions worth investigating.

Paper 2481 investigates what elderly people value in the context of implementing digital health for active, healthy aging. It draws on interviews of people aged 65-85 from three countries using Value Focused Thinking. The paper contributes a set of 10 value-based, individual-centric objectives to guide ICT interventions and illustrates how to extend the Active Ageing Index (AAI).

Paper 2623 reports on the use of affordance theory and its application in the research of mHealth apps. A focused review of existing literature in the led to the development of a congruent framework which incorporates theories from diverse schools including ecological psychology, and information systems.

Paper 2639 is positioned to better understand the impact of EMR and related technologies on healthcare organizations' revenue cycle management. As a result of action research engagement, four competing logics were identified – care, business, management, ad technology – which shape organizations' RCM in the wake of their EMR implementation.

Paper 2740 develops a framework to help innovators to identify digital health innovation (DHI) barriers and the likelihood of success implementation in Germany. Thorough literature review and design-oriented research approach is deployed to assess DHI barrier resilience.

Paper 2779 helps to better understand the meaning of measures used to evaluate satisfaction with telemedicine. Content-validity is discussed to demonstrate the importance and challenges of measures development in practice.

The above 11 papers cover a wide range of challenges healthcare faces and they highlight possible solutions. We look forward to discussing these topics in this minitrack and encourage the authors to consider the feedback they receive advance their studies after the conference. Furthermore, we encourage submissions in the future addressing healthcare technology adoption, diffusion, and evaluation challenges using a variety of methods and research approaches.