This minitrack focuses on the role of adoption, implementation, diffusion, and evaluation factors and the interaction of these factors at various levels to healthcare system success. These topics continue to present challenges to individuals, organizations, society in general, and the research community. Although IT is seen as an enabler of change for healthcare organizations both nationally and locally, adoption decisions are complex given a multitude of technologies, stakeholders, and potential levels of analysis. The research presented in this minitrack conveys the complexity and breadth of issues addressing Health IT adoption and evaluation. Infrastructure and capacity assessment are also among the technical issues of interest. Other research issues focus on implementation, intention to use, culture, performance, interventions, measurement, and methodology. This research spans a broad range of technologies from tele-homecare to enterprise-wide systems including RIS/PACS, Electronic Medical Records (EMR), and Electronic Patient Records (EPR).

For nearly two decades researchers on e-health have explicitly shown that value, benefits, perceived usefulness and contextual fit and relevance are the most important determinants for successfully diffusing e-health systems in the clinical domain. However, practice seems to ignore these findings with the introduction of software congruent with the health care workflow and preferences and without clear added value to all stakeholders. Using EMR as an example, we ask “how can this situation be resolved?” Some researchers believe that Business Process Management will help to diffuse the EMR in healthcare. However, other research shows that, because benefits of EMRs do not accrue to all organizational stakeholders, until values are driven from an individual perspective of the healthcare professional diffusion will be impairs.

Because Electronic Medical Records have a value beyond the individual end user, the organization should create vision on how to communicate this to the whole healthcare chain and back again to the end user. As more systems come into use, we face the challenge is to integrate the back office and front office of health care. Instead of EPR, here we are talking about enterprise-wide systems combined with information services in the front office. Enterprise Application Integration is already widely used in business but health care is just in its first steps toward integration. Another challenge on the organizational level is to manage the clinical systems and avoid unanticipated interruptions. The hope is that standards and demonstrative architectures will stabilize the turbulence in e-health implementations. On even larger scale an ICT infrastructures is needed to be able to bridge the digital divide. On the international level, standardization and demonstrative architectures will stabilize the turbulence in e-health implementations. On even larger scale an ICT infrastructures is needed to be able to bridge the digital divide. In the end, these systems have to evolve into knowledge management systems that can benefit the global level of healthcare.

Inter-organizational systems and mass customization are buzzwords that have big influence on the globalization of e-health. Telehealth is seen as a weapon to break down the digital divide in healthcare promising a big leap forward. Global systems like Google medical have the potential for impact, but boundaries at the individual professional level might inhibit the diffusion of these systems. In the end, these systems have to evolve into knowledge management systems that can benefit the global level of healthcare.


The seven manuscripts on adoption of electronic medical records reveals a strong research interest in this domain. With three manuscripts, “Evaluation and Neuronal Network-Based Classification of the PHRs Privacy Policies”; Factors in Physician Expectations of a Forthcoming Electronic Health Record Implementation”; and “Measuring Users Mental Strain when Performing Technology Based Surgery”, individual level EMR adoption is the dominant theme for EMR manuscripts. System level papers include: “Motivations Underlying the Adoption of ERP Systems in Healthcare Organizations: An Analysis from Success Stories and IT Adoption: HealthCare Metrics Tracking” and “IT Adoption: HealthCare Metrics Tracking”. The organizational perspective is represented by “Evaluating the Impact of Electronic Health Records on Clinical Reasoning Performance” and Evaluation of an Electronic Patient Record in a Nursing Home: One Size Fits All?

Finally, three papers are concerned with the diffusion of telehealth: “An E-health Readiness Assessment Framework for Public Health Services Pandemic Perspective”; “Factors Affecting the Adoption of Telemedicine: Does Culture Matter?”; and “Evolving the Business Model to Improve Care Performance for Remote Patient Management: A Case Study”.

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