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 diffusion. The research presented in this minitrack spans different technologies such as telemedicine, tele-homecare, and enterprise wide systems including RIS/PACS and EMR. Infrastructure and capacity assessment are among the technical issues of interest. Other research issues focus on implementation, intention to adopt and use, culture, performance, interventions, and methodology.

For nearly more than two decades researchers on e-health have explicitly shown that value, benefits, perceived usefulness or relevance is the most important determinant for successfully implementing e-health systems in the clinical domain. For almost two decades practice seems to ignore these scientific findings and keep introducing standard software in a complex individual medical setting with many disappointments as a result. How can we break through this deadlock situation? Many researchers think that Business Process Management will help to diffuse the EMR in healthcare. We think that this will only be the case when it is value driven from an individual perspective of the healthcare professional. Many e-health applications only deliver efficiency as net benefit and often this efficiency is delivered on the wrong side of the organization.

The individual perspective is addressed in three Electronic Medical Record focused manuscripts. Bhattacherjee, Davis, and Hikmet, performed an interpretive analysis of physicians to determine factors leading to some physicians being favorable disposed to adopting a hospital systems while other physicians were not. Cellucci, Cellucci, Marina Stanton, Kerrigan, and Madrake, surveyed Psychology Clinic Directors to assess the status of EMR adoption in University Psychology Clinics. Hawaiian Physicians were surveyed by Davidson, Hoffman, and Donahue, to understand if incentives for the meaningful use of EMRs are assisting in the adoption of systems by physicians.

On the group and organizational level, the main challenge is to integrate the back office and front office of health care. Instead of Electronic Patient Records (EPR), we are talking about Enterprise Resource Planning in health care or 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 risks. In the future integration in general, using standards and building architectures will have to stabilize the turbulence in e-health implementations. Because EPRs 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. On even larger scale an ICT infrastructure is needed to be able to bridge the digital divide.

On the organizational level, Ilie, Turel, and Witman, interviewed clinical staff at two hospitals to study the impact of intuitive user interfaces. Meaningful use is also assessed at the organizational level by Acharya, Coats, Saluja, and Fuller, in their study of secure exchange of electronic health records. There are also tactical studies at the organizational level. Weist, Sarminar, and El-Gayer, examine the alignment of IT assets to maximize organizational efficiency. Byrd and Byrd examined the relationship of information quality and healthcare quality in a hospital setting. Peng, kurnia, Lederman, Dreyfus, and Knott, performed a longitudinal case study in the emergency department of an Australian hospital, focusing on work routines. Another tactically oriented manuscript by Zhang, Levin, and Padman, reviewed order sets from Asthma and Appendectomy patients in a large pediatric hospital.

Inter-organizational systems and mass customization are buzzwords that have big influence on the globalization of e-health. Telecare is seen as a weapon to break down the digital divide in healthcare promising a big leap forward. Global systems like Google medical seem to break open the market but still the dangers of the individual professional level might inhibit the diffusion of these systems. In the end these systems have to evolve in knowledge management systems that can lever the global level of healthcare. On the international level, standardization and knowledge dissemination should go hand in hand to solve the global healthcare problems.

Inter-organizational research includes the Buccoliero, Bellio, and Preneistina study of web strategies in Italian hospitals. Culture is examined by Mansouri-Rad, Mahmood, Thompson, and Putnam to ascertain its influence on privacy, security, and policy, and the adoption of telemedicine.