Introduction to Minitrack: Information Technology in Health Care Track - IT Adoption, Diffusion, and Evaluation in Healthcare

Leigh Cellucci
East Carolina University
celluccie@ecu.edu

Arnold Kamis
Suffolk University
akamis@suffolk.edu

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

Carla Wiggins
Weber State University
carlawiggins@weber.edu

The adoption, diffusion, and evaluation of information technology (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. On a national or system-level, reimbursement structures, regulations, inter-organizational concerns, infrastructure and the existence of standards may have an explanatory role. On an organization level, previous strategic choices, strategic priorities, size and location of the organization, information assurance, stakeholder experience and many other factors may play a role. On a project level, issues associated with both national and local concerns impact the risk of success. Many studies also focus on the individual level of analysis, with the individual user as the unit of analysis. It is wise to consider individual related success determinants such as broad technology adoption, relevance, attitude, requirements and resources. Yet, on this level, we need to learn more about the identification of different allied health professions and the role that IT has for their various work processes that may be impacted.

The papers in this minitrack utilize numerous research approaches. Delphi studies, surveys, interviews, and longitudinal case studies all provide different methodological approaches on the broad-based issues underlying the successful adoption, implementation, and evaluation of IT. These four approaches are all represented in the papers from this minitrack.

We start with four papers that represent the core of this minitrack, adoption and diffusion of ICT in Healthcare. We are proud that this minitrack was the basis for many journal publications in this area. It is still difficult to innovate healthcare beyond process innovation and the four papers in the first session show how we can improve this.

The second session is a classical one on electronic health records in four different contexts. Despite 20 years of experience, the electronic health record is still not mature in most healthcare organizations but recently we see a big step forward. This year, two of this minitrack's chairs edited a special issue for The Journal of Policy, Health and Technology which addressed Health IT initiatives from several countries all over the world. This year's minitrack also includes four cases of medical professionals adopting electronic records showing the way for many healthcare organizations to follow.

The last session represents the future, showing adoption and evaluation issues in mobile and Web applications. On-line healthcare has improved its validity. It can never replace physical healthcare but can be a big support in relieving the work pressure of the professional staff. All kinds of new services arise that have difficulty in getting adopted by the regular system. Again adoption and diffusion theories are necessary to help diffuse the good medical services and stop the new services that are not relevant or not valid.