There are two key challenges in today’s healthcare system: One is the significant cost pressure on healthcare delivery and the second is the rapid growth of the field of medical informatics and e-health, increasingly using ambient and pervasive technologies. In addition, there is a trend to foster active patient participation in their care. Patients of all ages are becoming more and more familiar with technology, especially mobile devices. Therefore, it is prudent to look at the application of such technologies for healthcare with the goal to facilitate value-driven healthcare delivery. Here, a new field of research is evolving which is focused on ambient and pervasive technologies for healthcare. This rapidly growing area is expected to play an increasingly important role for healthcare globally. Reasons for this include: the higher mobility of individuals, the need to have active and empowered patients, the pressure to provide effective and efficient care, the growth in chronic diseases and therefore the demand for appropriate solutions to monitor and manage these diseases. This minitrack has been designed to provide an outlet for research in this nascent area.

In our inaugural session for Sensing and Pervasive Technologies for Healthcare The three papers in this mini track include: 1 “Using Self-Regulation Theory to Inform Technology-Base Behavior Change Interventions by Soror and Davis. This paper focuses on trying to show the effectiveness of technology used to promote health related behaviors. 2 “A Service Framework for Improved Service Networking Portfolio” by Zadeh, Gavanovich and Lowe which extends the ideas from network centric warefare to provide a consumer-provider framework to improve service networking in healthcare contexts. 3 “Information Security and Privacy of Patient-Centred Health IT Services: What needs to be done?” by Dehling and Sunyaev examines what needs to be addressed regarding information security and privacy needs for patient health services. Taken together these papers touch on key aspects within the domain of sensing and pervasive technological applications for healthcare; namely privacy and security, evaluation of effectiveness and networking issues. Clearly this is not exhaustive but does assist in trying to move the science and practice in this domain forward.