

Biomedical and Health Informatics Lecture Series

Tuesday, October 12, 2010

12:00-12:50 p.m., Health Sciences Room RR-134

Eirik Årsand, PhD, MSE

Research scientist at the [Norwegian Centre for Integrated Care and Telemedicine](#) (NST),
[University Hospital of North Norway](#), researcher in the Diabetes project portfolio team at NST

Affiliated researcher at the [Medical Informatics and Telemedicine group](#) (MIT group),
[University of Tromsø](#)

Visiting scholar at the [University of Washington - Biomedical and Health Informatics](#)

"User-Involved Design of Mobile Self-Help Tools for People with Diabetes; Results and Concepts from Patient-Oriented Type 1 and Type 2 Diabetes Studies"

Paradoxically, the technological revolution that has contributed to an increase in certain health problems by facilitating drastic changes in lifestyle also holds great potential for individuals to take better care of their own health. However, many ICT tools for lifestyle changes and disease prevention can be complex and demanding. Therefore, it is vital to integrate future tools in people's everyday lives and that they are as simple and mobile as possible. The overall aim of both my recent finished PhD project, and our other current diabetes studies at our center, is to generate knowledge about how mobile tools can be designed for supporting lifestyle changes among people with diabetes. By working in collaboration with patients, we made a concrete system that is still in use by a cohort of 12 Type 2 patients, two years after the study start. I will both describe this mobile phone-based system, which is referred to as the "Few Touch application", and user feedback and results. Currently, a larger scale project is about to test a slightly modified version of this application on 200 users. In this talk, I'll both talk about previous results, current activities, and future plans and perspectives regarding mobile self-help tools, and increasing the involvement of the patients.

Eirik Årsand is a visiting scholar at Biomedical and Health Informatics, something he also was three years ago, as part of his PhD project. He finished his PhD within medical informatics a year ago, on mobile self-help tools for patients with diabetes, which is also his current research focus at the Norwegian Centre for Integrated Care and Telemedicine, University Hospital of North Norway. He is also an affiliated researcher at the Medical Informatics and Telemedicine group (MIT group) at the University of Tromsø. Årsand has been at the telemedicine section of the hospital for ten years, and has been involved in approximate 15 projects addressing self-management within diabetes in this period. He is currently engaged in a portfolio of seven projects and studies aiming to help people with diabetes by using mobile technologies, and tries to initiate a study on a Seattle population during his stay at UW as well. Årsand was diagnosed with Type 1 diabetes a few years prior to his start at the telemedicine section, and saw the possibilities that wireless technologies and mobile terminals could provide, especially for vulnerable patients such as children and elderly people. He was introduced to the term patient empowerment, and has mainly focused on the patients in his designs and studies. A more detailed description of Årsand and his research-group's activities may also be accessed at his web-page: www.telemmed.no/arsand.