



## **Management of chronic diseases** **-Development of new and innovative assisting technologies**

Management of chronic diseases is one of the greatest challenges to the healthcare sector in Denmark as well as in the rest of the world. Join the Danish Partnership UNIK in a workshop focusing on development of new technologies for the benefit of persons with a chronic disease as well as for the public healthcare sector.

How can new technology make disease management easier for both patients and the healthcare sector? Examples of new technologies on prototype level for people with COPD will be presented along with a presentation of methods to secure end user involvement in the developing process. What are the effects for both patients and healthcare care professionals when a digital personal health is introduced?

The workshop will also focus on challenges in current and future ICT infrastructures for healthcare services and how to accelerate the deployment of telemedical solutions. How can we ensure interoperability and still support SMEs in developing innovative solutions?

### **Program:**

#### **Home training platform for COPD patients using Microsoft Kinect by associate professor Kasper Hallenborg, University of Southern Denmark**

The workshop will present a prototype of a home training platform aimed for COPD patients using the Microsoft Kinect camera to monitor exercises and give live feedback to the user during training, both to instruct and motivate training. The schedule of exercises is individually adjusted and all exercises are planned and specified in collaboration with physiotherapists to secure they both support beneficial home training of the COPD patients and can be properly validate by the attached sensors. The home trainer is part of experimental work that include home monitoring of COPD patients with advanced sensor systems and mobile devices.

The logo for UNIK, consisting of the word "UNIK" in white, uppercase, sans-serif font, centered on a solid blue square background.

## **Sketching of welfare technologies - co-creating new solutions for health by Morten Wagner, DELTA**

The workshop will cover theory and practices for co-creation methods based around “electronic sketching” that can be applied to welfare technologies. During the workshop, key points from our experiences in co-creation of new welfare-technologies with users, patients and health-care professionals within, for instance, the COPD domain will be presented. It will be demonstrated how our methods allows patients and professionals to explore new solutions, for example, to monitor and support training. Some of our tools used to gain insights and test out ideas - “Day in a life”-maps and our electrical “idemoBITS” - will be presented and demonstrated, and the participants will get the opportunity to try them out, first hand.

## **Personal health record for chronic patient, by associate professor Birthe Dinesen, Aalborg University**

Demonstration and research projects have been conducted in Denmark and abroad, involving various web-based portals functioning as ‘digital travelling health record’ or personal health record. It shows for example that by using the portals the patients: learn more about own health; learn more about the medical decision-making process; have increased participation in own treatment and care etc. But how does the personal health record support a chronic-care-model in the collaboration between healthcare professionals and patients? We will like to discuss this issue and bring together people who have experiences or interest in this field.

## **Connect2Care - challenges in current and future infrastructures for health-care services, by Michael Christensen, Aarhus University**

How do we create a dynamic ecosystem of healthcare technology and services? Join Michael Christensen in the discussion on how we secure an easier and more flexible development, integration and application of new technologies as well as how to accelerate the adoption of standards and further public/private engagement. Could the development of open source reference implementations for healthcare infrastructures along with an “app store” for healthcare services facilitate creation of transverse coherence, communication and coordination, and thus be the first major step away from the isolated islands of technology and organization that we see today?