

# “Safer at Home” – Technology supported coordination & cooperation

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## Abstract and Objective

*“Safer at home” is a pilot project between Lovisenberg Diakonale Sykehus and 4 (of 15) local district administrations and the Agency for Nursing Homes in the City of Oslo. The objective is to investigate if and how information technology can improve the coordination between the hospital and the four districts and/or nursing homes – resulting in a better and more integrated health care for the individual patient.*

## Introduction

Lovisenberg Diakonale Sykehus provides medical and psychiatric hospital services to several inner city districts in Oslo. In addition, the surgical clinic receives patients for scheduled operations from all over Norway. The hospital is the largest privately owned hospital in Norway with 300 beds and extensive out-patient facilities.

Oslo is the capital of Norway and the only metropolitan region in the country with a size and composition comparable with metropolitan regions in Europe. A key task of the City of Oslo is to provide its inhabitants with a basic range of health, nursing, care and social services. The state of health and life expectancy of Oslo’s inhabitants vary according to their education, occupation and income. Health disparities are significant between the districts, with up to 12 years’ difference in life expectancy – with the inner city districts having the lowest.

Public health services in Norway are financed by taxation and the health service is designed to be equally accessible to all residents, regardless of social or economic status. Our health care system is mainly organised as a two-tier system with the responsibility clearly divided between the state and the municipalities: the state is responsible for the running of all specialist health services (i.e. hospitals), while the Municipalities are responsible for primary health services.

One of the major challenges in this system is a (serious) lack of coordination between hospitals and primary health care. There is a lack of coordination and cooperation in all segments of the health care services, with insufficient contact between municipalities and the hospitals, between the municipalities, within the municipalities, and within the hospitals. This is an issue that is currently addressed in several reports and on many government levels.

## Methods

The project is organised as a true pilot project, aiming to include input from professionals in the hospital, the home care, and nursing homes, and even the patients themselves – prior to define solutions needed, develop and test these. This broad approach is a challenging process but will ensure that the project itself and the outcome will have a professional foundation as well as a user/patient perspective.

Basically, we will implement tablet/touch screens in a number of elderly patient’s homes. These will be a tool for the patient to contact the primary health service, but also a tool for the primary health care to get in direct contact with the hospital when visiting the patient (through video communication). The solution will include tailor made information to the patient – e.g. training programs or user manuals for medical equipment – and could be used for questionnaires or other feedback from the patient. We also foresee integrating various sensors in the solution – both personal (e.g. fall sensors or (lack of) activity sensors) and general ones (e.g. temperature sensors) – that can provide the patient or the health personnel with useful information. Finally it can be used as a tool for the primary health care to access patient information, medical information (e.g. medicines) etc. from the patient’s home, and even report what has been done during the visit.

## Results

The objectives of the pilot project are:

- to develop new models for cooperation and coordination between hospital and primary health care
- to explore new ways of operations and relations through (existing) IT solution
- to increase the safety for elderly people living at home, their relatives and those working in primary health care
- to involve the user/patient and mobilise his/hers own resources in improved health care

The pilot project started in January 2009 and will run for three years, ending in December 2011. The first tablets is scheduled to be implemented in May/June 2010.