

# EMOTION-AAL

The increase of chronic conditions & chronic diseases in Europe is evident. The aim of scientific & political intentions is to extend the time elderly people can live independently in their home environment. The products/services developed by EMOTIONAAL respond to the need for self-care, prevention & assistance to carry out daily activities, health & activity monitoring & enhances safety & security. A self-management concept as the basis for an integrated healthcare concept that includes micro system-techniques, computer-technologies & telemedical aspects for mobile use is one result. These are a public healthcare portal aimed at prevention of diseases, software for smartphones & PCs (Plug&Care-Connector), a NAS VIS-demonstrator for transcutaneous measurement of Hb applying Fabry-Pérot filter arrays, soft- & hardware control for a demonstrator measuring acetone in respiratory air of diabetics taking the medication Metformin as well as an acetone sensor for the realisation of a preliminary study (principle correlation between blood glucose & acetone). Another outcome concerning social innovations is a blueprint for the implementation process of a Rural Supply Unit (RSU).

The innovative character of the Plug&Care-Connector is defined by the fact that drivers for metric devices can be used on other platforms like Windows Mobile or Java for PC as well. The NAS VIS-Demonstrator & the acetone sensor use a highly innovative sensor concept. The social innovations of the self-management concept are the possibility to support health promotion & prevention in rural areas. It is possible to identify risk factors for chronic diseases & pathogenic lifestyle at the health measurement corner. This self- management aspects are supported by modern social services combined with ICT. The use of ICT could change the resource allocation in health care. Measurements can be taken safely at home when it is considered most suitable & the patient does not need to wonder how to reach the health centre. This saves time & travel expenses. Health care staff need less time for routine checkups, so this concept is a cost-effective solution. It also enables work for those health care professionals who have physical or other operational limitations because it can be done in office. Prevention on diabetes will benefit society with lowered sick fund payments & needs to increase tax rates to support increasing healthcare costs.

End-users are persons with chronic diseases (or risks of chronic diseases) everywhere in Europe, but its main benefits come out in rural areas with long distances. The different products & services have different potential payers, e.g. the Plug&Care-Connector for ANDROID has been licensed to the external company MEDANDO who intends to sell it as an ANDROID-App. Beyond such business models for individual products, potential payers for products & services can be health insurance funds, healthcare companies & health improvement groups & private health improvement groups. During the project different types of end-users have been involved in different ways: Primary end-users: involvement via questionnaires in Finland: 291 in 2010; 240 in 2012; involvement via interviews in Finland: 3 in-depth interviews in 2012 (incl. 1 group interview ~ 20 participants); involvement via questionnaires in Germany: 57 in 2010; 37 in 2011; 65 in 2012; involvement via guideline based interviews in Germany: 57 in 2012; involvement in St. Martin (A): 59 in 2012 in risk test. Health care professionals: involvement via interview in Finland: 8 in-depth interviews (2012); involvement via interviews in Germany: 3 in-depth interviews (incl. 1 group interview) in 2012. Professionals from the retail & wholesale sector: involvement via interviews in Finland: 5 in-depth interviews (2012); involvement via questionnaires in Germany: 45 shop owner (2010); involvement via interviews in Germany: 5 in-depth interviews (2009); 3 in-depth interviews (2012). Public sector & administration: involvement via interviews in Finland: 5 in-depth interviews (2012); involvement via interviews in Germany: 5 in-depth interviews (2009), 3 in-depth interviews (2012). Austria: Involvement via 19 in-depth interviews (2010) with actors



from the Waldviertel region (Lower Austria). In Finland the users already wanted to continue to use this concept during the pilot. The main barriers are the tertiary end-users because they decide about the implementation as part of official system. The Portal is on market starting 1.9.2012 in Finland. The Plug&Care-Connector has been licensed. Market launch depends on planning of the company.