November 20, 2008

# **NEXES** Supporting Healthier and Independent Living for Chronic Patients and Elderly

Validation of four ICT-enabled integrated care programs in large scale trials (5200 patients), targeting prevalent chronic conditions. The project aim is to ensure immediate successful deployment of this type of services supporting healthier and independent living in these individuals.

## At a Glance

#### **Project:**

Supporting Healthier and Independent Living for Chronic Patients and Elderly (Nexes)

#### **Project coordinator:**

Hospital Clínic de Barcelona

#### **Partners:**

Hospital Clínic i Provincial de Barcelona, Fundació Privada Centre TIC i Salut, Telefonica Investigación y Desarrollo SA Unipersonal, St Olav's Hospital HF, Helse Midt-Norge RHF Stiftelsen Sintef, TXT e-solutions SpA, Intracom SA Telecom Solutions, Institute of Social and Preventive Medicine, 1st YPE of Attica - Sotiria Hospital, Trondheim Kommune, Santair SA, Fundació Clínic per a la Recerca Biomèdica

**Duration:** 36 months (05/2008-04/2011)

#### **Total funding:** €2.380.000

**Programme:** ICT Policy Support programme under the Competitiveness and Innovation Framework Programme (CIP)

### Further information:

Website: <u>http://www.nexeshealth.eu</u> Email: <u>mhillen@clinic.ub.es</u>

CIP: <u>http://ec.europa.eu/cip/index\_en.htm</u> ICT-PSP: <u>http://ec.europa.eu/ict\_psp</u> The new European Commission portal on social affairs: <u>http://ec.europa.eu/social</u> ICT for Health - European Commission – Information society and Media DG Office: BU31 06/73 B-1049 Brussels Email: <u>eHealth@ec.europa.eu</u> Tel: +32 (0)2 296 41 94 - Fax: 02 296 01 81 <u>http://ec.europa.eu/information\_society/eHealth</u>

# Targeting prevalent chronic conditions

The increasing prevalence of chronic disorders is expected to continue, leading to dysfunctions of our current further healthcare systems. It is widely accepted the importance of introducing substantial changes in the delivery of care and social support services for chronic patients, including changes in lifestyle, empowerment patients and relatives and better of collaboration among different levels of care. Obstacles lie in the current fragmentation of health providers and community services together with the challenge of managing comorbidity.

Nexes aims at the extensive deployment and sustainability of validated integrated care services, by:

- Deploying four integrated care programs for chronic patients based on structured interventions addressing prevention, healthcare and social support.
- Innovate in services that: a) adopt an integrated approach that includes profound organizational changes, b) face the co-morbidity challenge, and, c) use of ICT as modular and scalable tools supporting interoperability among actors.
- Validate the deployed programmes in large scale RCT studies.

#### **Project Description**

NEXES faces the transitional phase from existing pilot experiences to extended deployment of health/social services in elder populations, thus supplementing and/or being an alternative to existent institutional approaches. The services to be deployed and validated are grouped in four programs that represent a broad spectrum of health problems, from those affecting citizens at risk or early disease to those characterising patients with advanced chronic disorders. These programs are the following:

- Well being and rehabilitation: promoting early diagnosis and healthy life-styles of clinically stable chronic patients, enhancing their self-management and improving compliance with prescribed treatments. Physical activity and cognitive aspects will be the principal components.
- Enhanced Care support of unplanned hospitalisations with patients with high risk of admissions.
- Home hospitalisation & early discharge of patients with severe exacerbations of their chronic conditions.
- Support diagnostic and/or therapeutic procedures

All services will be assessed at three distinct localisations (Barcelona, Central Norway Region and Athens). The impact of the heterogeneities among sites will be evaluated in detail.

#### **Expected Results & Impacts**

The project plan foresees three main areas of work as described below.

Area 1 - Evolving from pilots to product/services

This area concerns the process modelling activities and the mapping with the ICT solution available. It includes: 1) Reassessment of functionalities of current platforms equalizing different deployment stages to meet the programme requirements; and, 2) Planning necessary technical adaptations to achieve platform modularity and integration via the use of open standards.

Case study

Laia is 55 yrs-old. She is an active professional with hypertensive cardiac failure, poor adherence to therapy, overweight and sedentary. Moreover, her mother, 85 yrs-old, suffers from mild dementia and taking care of her is an extra-burden at the end of Laia's regular working day. Laia and her mother are perfect candidates for an individually customized Wellness-rehab program including social support. Laia's targets are to improve disease prognosis through a structured intervention supported by mobile technology and access to a call centre. Her mother may benefit from a preventive program through interactive TV and social support. Enhanced accessibility will benefit both of them.





Area 2 - Deployment, Integration and validation

٠

This area represents the core of the project and encompasses: 1) the necessary logistics related to the running of the field studies (from preparation to execution), and; 2) the definition and application of a validation strategy covering the different dimensions of the project (Organizational and educational issues for professionals, and elder individuals; caregivers standardization of the interventions and service consolidation, and; identification of technological requirements the and limitations)

Area 3 -Strategies for extensive ••• deployment and commercialization of integrated care services This area will summarise the project findings and present them from a practical perspective towards geared real application. Aspects such as institutionalisation of integrated care programs, scalability and formalization of service resources (technological, organizational and professional) and identification of public and private commercialization requirements and limitations will be focus points for this area of work.