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NEXES

Supporting Healthier and Independent Living for Chronic Patients and the Elderly

European Commission
Information Society and Media

Under the NEXES project, four ICT-enabled integrated care programmes will be validated in large scale trials covering 5200 patients. The focus will be on prevalent chronic conditions such as chronic obstructive pulmonary disease (COPD), Congestive Heart Failure (CHF) and diabetes. The project aims at the immediate successful deployment of this type of services, supporting healthier and independent living.

Laia is a 55-year-old active professional with hypertensive cardiac failure, with a poor adherence to therapy. She is also overweight and has a sedentary lifestyle. Her 85-year-old mother suffers from mild dementia, so looking after her is an extra burden at the end of Laia's working day. Both of them are perfect candidates for an individually customised wellness-rehab programme including social support. Laia would benefit from an improved disease prognosis through a structured intervention supported by mobile technology and from access to a call centre. For her mother a preventive programme through interactive TV and social support would be beneficial. Moreover, enhanced accessibility will benefit both of them.

Targeting prevalent chronic conditions

The increasing prevalence of chronic disorders is expected to continue, putting ever more burden and pressure on our current healthcare systems. The importance of introducing substantial changes in the delivery of care and social support services for chronic patients is now widely recognised, including changes in lifestyle, empowerment of patients and relatives and better collaboration among different care levels. Obstacles lie in the current fragmentation of health providers and community services, as well as in the management of co-morbidity.

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

- deploying four integrated care programmes for chronic patients based on structured interventions addressing prevention, healthcare and social support
- innovating services which adopt an integrated approach, including profound organisational changes, which face the co-morbidity challenge, and which use open ICT platforms as modular and scalable tools supporting interoperability among actors
- validating the deployed programmes in large scale randomised controlled trial (RCT) studies.

Project description

NEXES is situated in the transitional phase from existing pilot experiences to the extended deployment of health/social services in elder populations. It will supplement and/or be an alternative to existent institutional approaches. The services to be deployed and validated are grouped in four programmes representing a broad spectrum of health problems, from those affecting citizens at risk or early disease to those characterising patients with advanced chronic disorders.

These programmes are:

Well being and rehabilitation
Promoting an early diagnosis and healthy life-styles of clinically stable chronic patients, enhancing their self-management and improving compliance with prescribed treatments. Physical activity will be one of the principal components.

Enhanced care:
Preventing unplanned hospitalisations with frail patients with high risk of admissions.

Home hospitalisation & early discharge
For patients with severe exacerbations of their chronic conditions.

Support:
Remote support of specialists to the diagnostic and/or therapeutic procedures in Primary Care

These services will be assessed in three different geographic locations (Barcelona, the Central Norway Region and Athens). The impact of the heterogeneities amongst these sites will be evaluated in detail. The project will also generate an operational definition of 'frailty'.

Expected Results & Impacts

The project plan foresees three main areas of work:

Area 1 - From pilot projects to products/services

This concerns the process modelling activities and the mapping with available ICT-solutions. It includes a reassessment of the functionalities of the current platforms equalising different deployment stages to meet the programme requirements, as well as the planning of necessary technical adaptations to achieve platform modularity and integration via the use of open standards.

Area 2 - Deployment, integration and validation

This area lies at the heart of the project and includes the necessary logistics related to the running of the field studies (from preparation to execution). It also includes the definition and application of a validation strategy covering the different dimensions of the project such as the organisational and educational issues for professionals, caregivers and the elderly the standardisation of interventions and service consolidation, and finally the identification of the technological requirements and limitations

Area 3 - Strategies for the extensive deployment and commercialisation of integrated care services

This area will summarise the project findings and present them from a practical perspective geared towards real application. Aspects such as adoption of integrated care programmes, scalability and formalisation of service resources (technological, organisational and professional) and the identification of public and private commercialisation requirements and limitations will be focus points for this area of work.

NEXES
Living Healthily at Home

At a Glance

NEXES
Supporting Healthier and Independent Living for Chronic Patients and the Elderly

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- Fundació Privada Centre TIC i Salut (Spain)
- Telefonica Investigación y Desarrollo SA Unipersonal (Spain)
- St Olav's Hospital HF (Norway)
- Helse Midt-Norge RHF (Norway)
- Stiftelsen Sintef (Norway)
- TXT e-solutions Spa (Italy)
- Intracom SA Telecom Solutions (Greece)
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Timetable: May 2008 - April 2011

Total cost: **€ 4,760,000**

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