North West Health
Brussels Office
Representing the North West of England health community in Brussels

EU Funding Opportunities 1: Using ICT to improve health systems and outcomes
Date: October 2010

Background

Call number**: FP7-ICT-2011-7**
Date of publication: **28 September 2010**
Deadline: **18 January 2011**, at 17:00 Brussels local time
Budget: **EUR 778.5 million**

- **EU Framework Programmes** are the main financial instrument through which the European Union supports research and development activities. Currently, we are in the middle of the 7th such programme - FP7 – which runs from 2007-2013.
- FP7 consist of several **themes** representing areas for EU action. Health research is one such theme and has been allocated funding of €6.1bn for lifespan of FP7 (2007-2013). FP7 allocates €9.1bn for Information and Communication Technology (ICT) research, which incorporates a specific funding stream for ICT for health research.
- The purpose of this briefing is to outline the health-related topic areas that will be funded under the latest Call for Proposals of the FP7 ICT theme. A more detailed briefing can be obtained by contacting health@northwesthealth.eu.

Overview

The European Commission has recently published the latest ICT theme of the FP7 (ICT Call for Proposals 2011). As stated above, whilst FP7 contains a designated health research theme, the ICT theme offers various opportunities for health researchers and practitioners to submit funding bids for health-related projects with an ICT application.

The ICT Call for Proposals identifies several **societal challenges,** such as the **ageing population, sustainable health and social care**, which will significantly affect economic and societal development over the long term. In the Work Programme (the policy document outlining what areas the Commission would like to see funded and the policy justification for this) of the Call, ICT research and development is identified as playing a major role in responding to these challenges.

Work Programme focuses on a set of eight ***challenges***. Each challenge is addressed through a series of ***objectives***, representing the thematic areas that form the basis of the Call. Consequently, project proposals must address one of the **targeted outcomes** identified in a proposed objective.

Challenge 5: ICT for Health, Ageing Well, and Inclusion

Health-related activities are overwhelmingly addressed under ***Challenge 5: ICT for health, ageing well, inclusion and governance***. This challenge addresses advanced ICT research for sustainable high-quality healthcare, demographic ageing, social and economic inclusion, and the governance of our societies. The ***objectives*** include:

- **Objective 1: Personal Health Systems (PHS)**

Targeted Outcomes:

a) **Personal Health Systems for remote management of diseases, treatment and rehabilitation,** outside hospitals and care centres.

Each project shall undertake high risk research addressing only one of following the domains:

- ***Neurodegenerative diseases;*** focusing on remote management and treatment of patients at the point of need, addressing also the needs of their carers;
- ***Rehabilitation of stroke and neurological conditions;*** providing patient services at home, with tele-supervision by health professionals;

- ***Liver failure;*** ICT-enabled artificial liver to facilitate detoxification as remote therapy, offering continuous care from hospital to home.

b) **Intelligent systems for the analysis of multi-parametric data**.

Projects will focus on analysing multi-parametric data in the context of Personal Health Systems used for prevention or remote management of clearly targeted diseases.

c) **One Coordination and Support Action** to deliver roadmaps for research and support to wide use of mobile eHealth (or *mHealth*) for lifestyle and disease management.

- **Objective 2: Virtual Physiological Human**

Targeted Outcomes:

a) **Patient-specific predictive computer-based models and simulation** of major diseases integrating medical, biological and environmental data.

b) **Development of ICT tools, services and infrastructure to obtain more elaborate and reusable multi-scale models** (e.g. models of diseases, organs) **and larger repositories** to show benefits of having both the data and models readily available.

c) **One Coordination and Support Action** to develop an Research and Technology Development (RTD) roadmap preparing the ground for a future "Digital Patient" initiative.

d) **Early demonstrators and proof of concept of digital representations of health status** of patients integrating different patient-specific data and models of organs into a more coherent representation of a "Digital Patient".

- **Objective 3: Patient Guidance Services (PGS), safety and healthcare record information re-use**

Targeted Outcomes:

a) **Patient guidance services (PGS) for personalised management of health status.**

The focus is upon semantic integration of patient health data into a personal health record system (PHR) that is ubiquitously and securely accessible by patients and their physicians.

b) **Tools and environments enabling the re-use of electronic health records.**

Development of an advanced environment for clinical research that enables secure and consistent integration, or linking of clinical care information in electronic health records with information in clinical trial systems.

c) **A Network of Excellence on semantic interoperability and European Health *Infostructure*.**

The aim is to engage leaders and organisations, including professional organisations, national competence centres, industrial associations and standards development organisations to define and implement a research agenda on the semantic interoperability of health information systems and particularly electronic health records.

d) **Innovative services for patients and health professionals developed and validated against public sector needs through a joint Pre-Commercial Procurement** (PCP).

The services should be based on mobile access to existing regional or national patient portals, personal health records systems or other systems and applications using patients' health information. Examples of services include communication between health services and patients at the point of need e.g., scheduling appointments, alerts, emergency admissions etc.

- **Objective 4: ICT for Ageing and Wellbeing**

Targeted Outcomes:

a) **Service and social robotics systems for "Ageing Well".**

The work should focus on the integration of advanced robotics systems and intelligent environments to improve the quality of life of elderly people, facilitating their independent living.

b) **Smart and self-adaptive environments prolonging independent living.**

Focus is on ICT to provide early detection and adaptive support to changing individual needs related to ageing (e.g. increased risk of falls, depression, sleep deprivation, or cognitive decline).

c) **Coordination frameworks** to develop:

RTD roadmap and stakeholder coordination on ICT for 'active ageing at work', establishing an ICT research analysis and exploration of possible ethical issues.

d) **Services for elderly people developed and validated against public sector needs through a joint Pre-Commercial Procurement** (PCP).

The services should focus on enabling extended independent living of elderly people and support for higher efficiency and quality of care work based on robotics solutions. Examples of services include support to daily tasks, mediated social interaction with carers and relatives as well as support to mobility.

- **Objective 5: ICT for smart and personalised inclusion**

Targeted Outcomes:

a) **ICT tools, infrastructures and devices for mainstream accessibility in daily life.**

The objective is to support accessible services for persons with disabilities, in various and changing settings (e.g. home, workplace, public transport, shops, education or medical centres, other public spaces, both indoors and outdoors).

b) **Intelligent and social computing for social interaction, user empowerment and learning or skills acquisition for people at risk of exclusion.**

Advanced ICT-enabled solutions - including social, affective and persuasive computing, and possibly serious games - for the empowerment of people with disabilities or people at risk of social exclusion, including people with low literacy, cognitively or mentally challenged, or with anti-social behaviour, which may include young people.

Budget breakdown of objectives (EUR):

ICT for Health, Ageing Well, Inclusion and Governance

Objective 1	Personal Health Systems	60,000,000
Objective 2	Virtual Physiological Human	68,000,000*
Objective 3	Patient Guidance Services (PGS)	35,000,000
Objective 4	ICT for Ageing and Wellbeing	37,000,000
Objective 5	ICT for smart and personalised inclusion	35,000,000

For a more detailed briefing of the health-relevant aspects of this call, please contact health@northwesthealth.eu.

*(cordis.europa.eu/fp7/ict/programme/challenge5_en.html)

NW Health Brussels Office Advice

All Frameworks Programme themes are extremely competitive, with an average 15% - 20% success rate amongst UK applicants. It is therefore very important to have a European dimension with suitable European partners, fitting to EU identified priorities. Only by doing this will you be successful with your application. If you cannot find your chosen topic or area of expertise we would advise you to contact us and advise on what priorities you would like to see included in calls for the coming years.

It is important that organisations in the region consider the amount of time that it takes to prepare and implement an FP project. Often, from the launch of the call, until you begin receiving money can take from 12-14 months. For this reason we would only recommend applying if participating in an EU project or the identified research topic area fits with the long term priorities of your organisation. The NW Health Brussels Office is prepared to advise on bid development and provide information and experiences to prospective applicants from partner organisations in the North West. However, we are not able to provide a bid writing service. Please contact health@northwesthealth.eu for more information.