

# Примеры успешных проектов в программе Горизонт 2020 ЕС

Тренинг  
«Как принять участие в Рамочной Программе ЕС Горизонт 2020:  
от идеи к заявке»

26 мая 2016 года, МНОЦ МГУ



# Какие проекты поддерживает Европейская Комиссия?

Благополучие старших  
возрастных групп

Болезнь  
Паркинсона

Робототехника

ИКТ в здравоохранении

Персонализированная  
медицина

Тест системы при раке

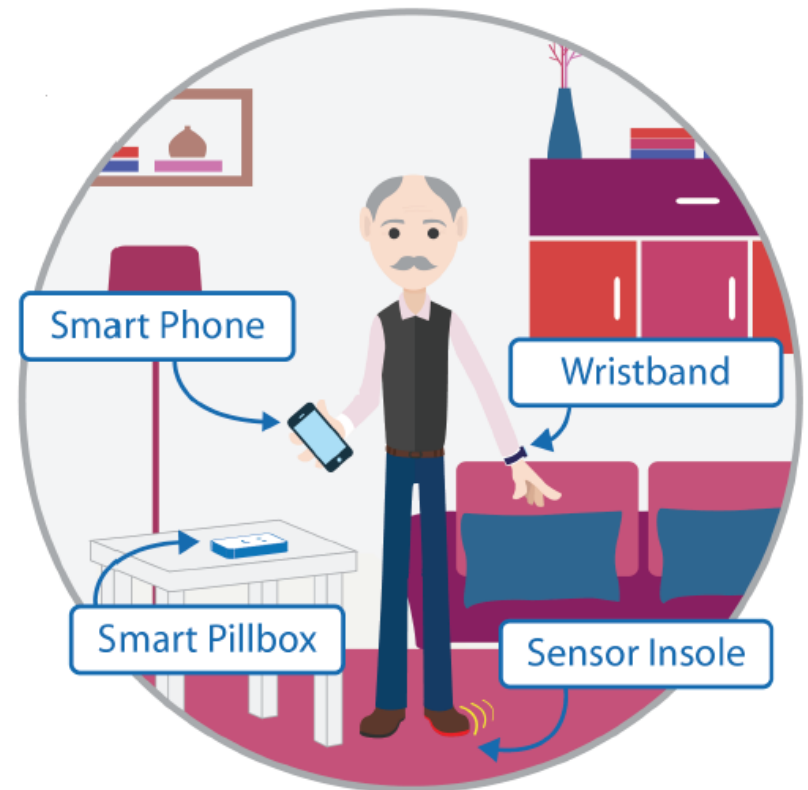




# PD\_Manager: mHealth platform for Parkinson's disease

Цель проекта: создание и оценка инновационных мобильных устройств для управления экосистемой пациента, страдающего болезнью Паркинсона.

- Многоцентровое клиническое исследование (230 человек).
- Оценка клинической эффективности, переносимости и удобства разработанной платформы и мобильных приложений PD\_manager как новой модели для управления здоровьем и качеством жизни у больных болезнью Паркинсона.



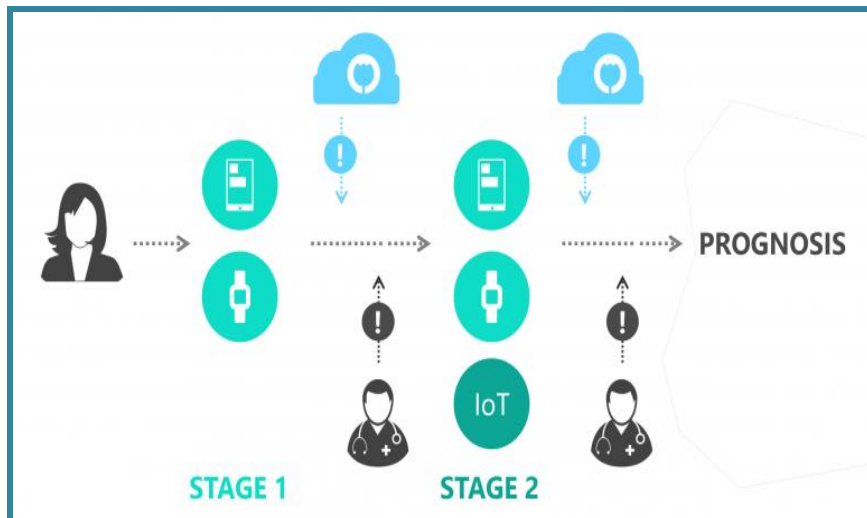
<http://www.parkinson-manager.eu>

## Intelligent Parkinson early detection guiding novel supportive interventions

### PARKINSON'S DISEASE FACTS

- A progressive disease
- Varying Symptoms
- No definite early detection
- 55+ years

### A two stage-PD detection process



**i-PROGNOSIS** aims to develop early and unobtrusive Parkinson's disease detection tests based on the interaction of users with their everyday technological devices



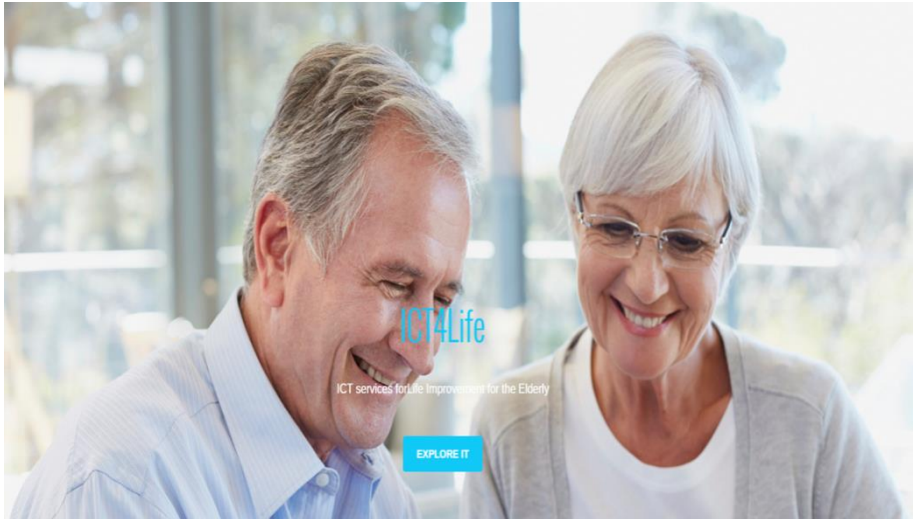
Personalised Game Suite:  
Affective games, ExerGames,  
Voice games, Dietary games,  
Handwriting games



Monitoring



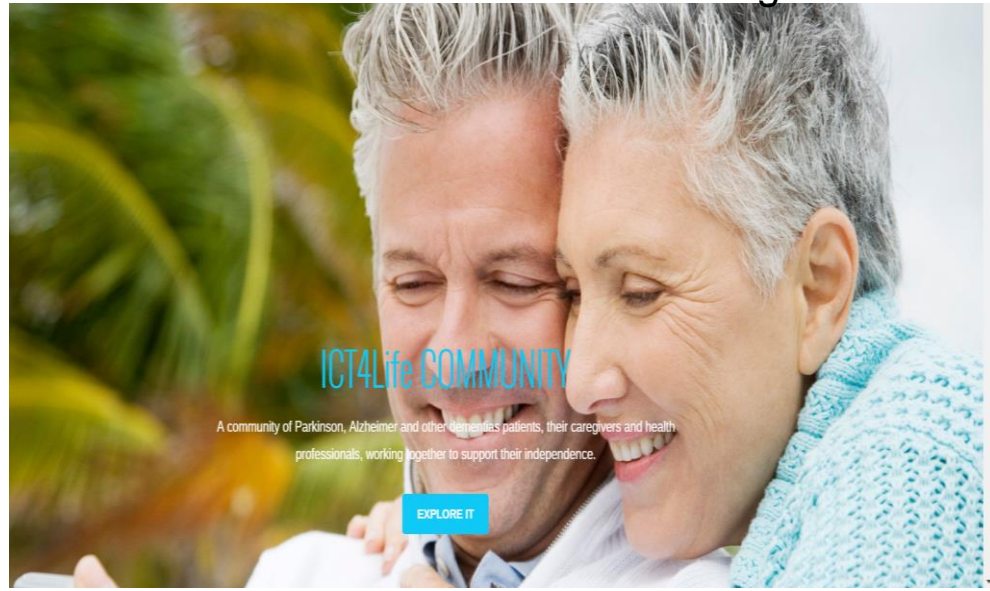
# ICT4Life: ICT services for Life Improvement for the Elderly



ICT4Life aims at increasing the quality of life and the autonomy of older adults in their own homes, nursing homes, day care centres and hospitals by providing proactive and patient centred care from either formal or informal care givers' remote stations;  
ICT4Life Platform will deliver a series of innovative services which will connect elderly people with cognitive impairments and other dementias, Alzheimer's and Parkinson's diseases, clinicians and formal and informal caregivers

ICT4Life radical innovations for integrated care will be implemented by means of an efficient and cost-effective ICT-based Health Service Platform which exploits latest technological advances.

<http://www.ict4life.eu/>

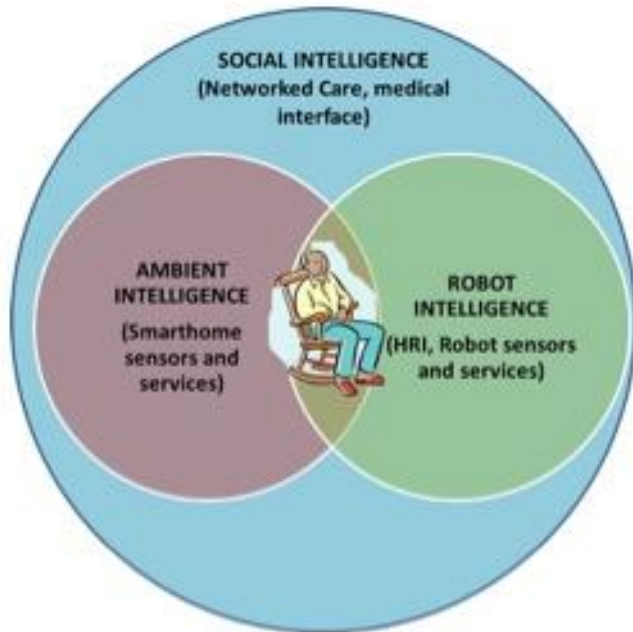






## ENRICHME: Enabling Robot and assisted living environment for Independent Care and Health Monitoring of the Elderly

**Цель проекта: обеспечить активное, независимое и здоровое старение с помощью робототехники.**





## A SERVICE ROBOTICS SYSTEM FOR BATHING TASKS



### **Objective 1**

To use state-of-the-art, modular, flexible and cost effective robot technology for developing an ICT supported service robotics system assisting the frail senior citizens to safely enter and exit the shower environment and most importantly to safely, effectively and independently perform the complete sequence of shower activities, such as properly washing their back, their lower limbs, upper parts, their buttocks and groin, and to effectively use the towel, while respecting their privacy and dignity.

### **Objective 2**

To deliver a service robotics system in the bathroom environment that is absolutely safe and reliable from all end user, operational and industrial perspectives.

### **Objective 3**

To deliver disruptive innovations by seamlessly integrating human-robot interaction, cognition, sensing and actuation in the integrated service robotics system that are fully adaptable to the user's behaviour and abilities (in particular to his/her manipulation and force exertion abilities, as well as address cognitive abilities to the extent possible.).

### **Objective 4**

To enable intuitive and transparent user-machine interaction by the incorporation of sophisticated but reliable user intention recognition techniques and to enable, in real time, adaptation of the reactive and supportive service robotics system' behaviour.

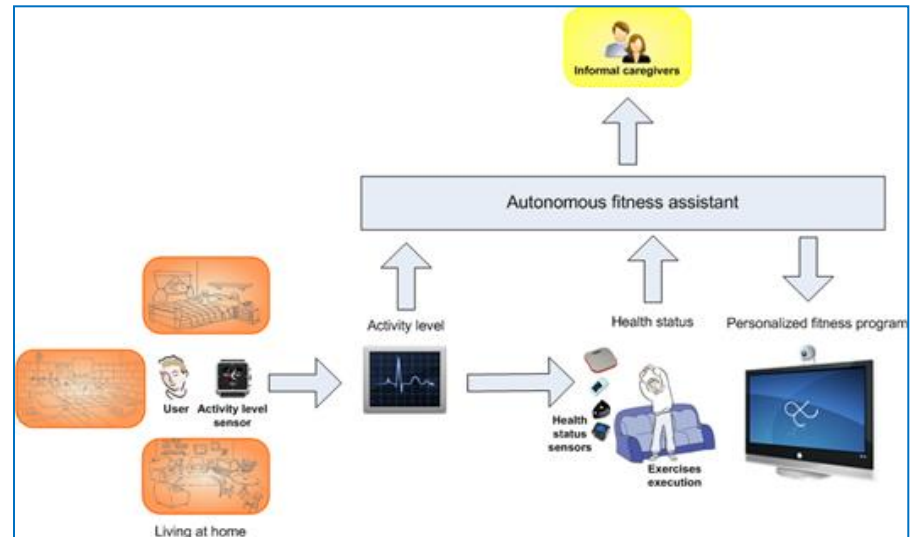
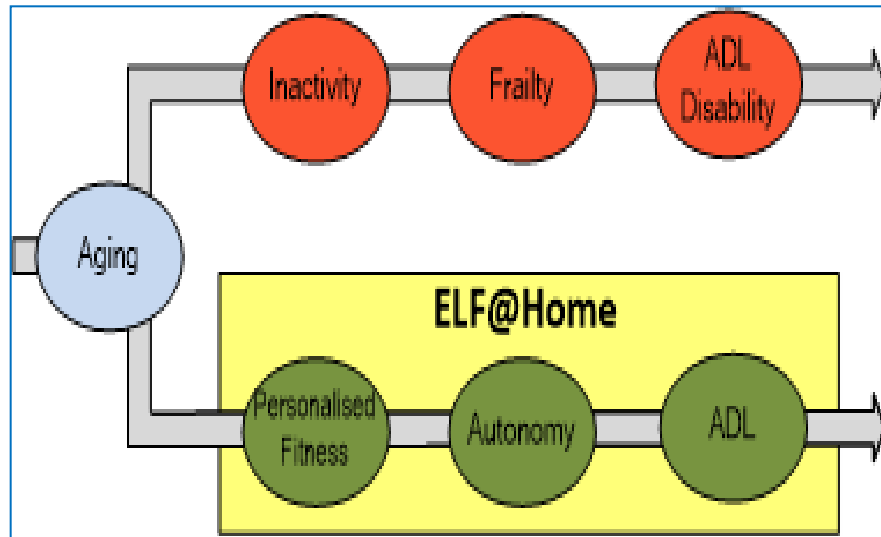
### **Objective 5**

To demonstrate that the proposed robotic service contributes to better quality of life, autonomy, longer independent living and minimisation of the need for health care assistance or institutionalization when ageing with emergent functional impairments.

<http://www.i-support-project.eu/the-project/>

# ELF@Home: Elderly self-care based on self-check of health conditions and self-fitness at home

Цель проекта: расширение прав человека в управлении собственным здоровьем на основе самодиагностики, самопомощи и самоподдержания активности.

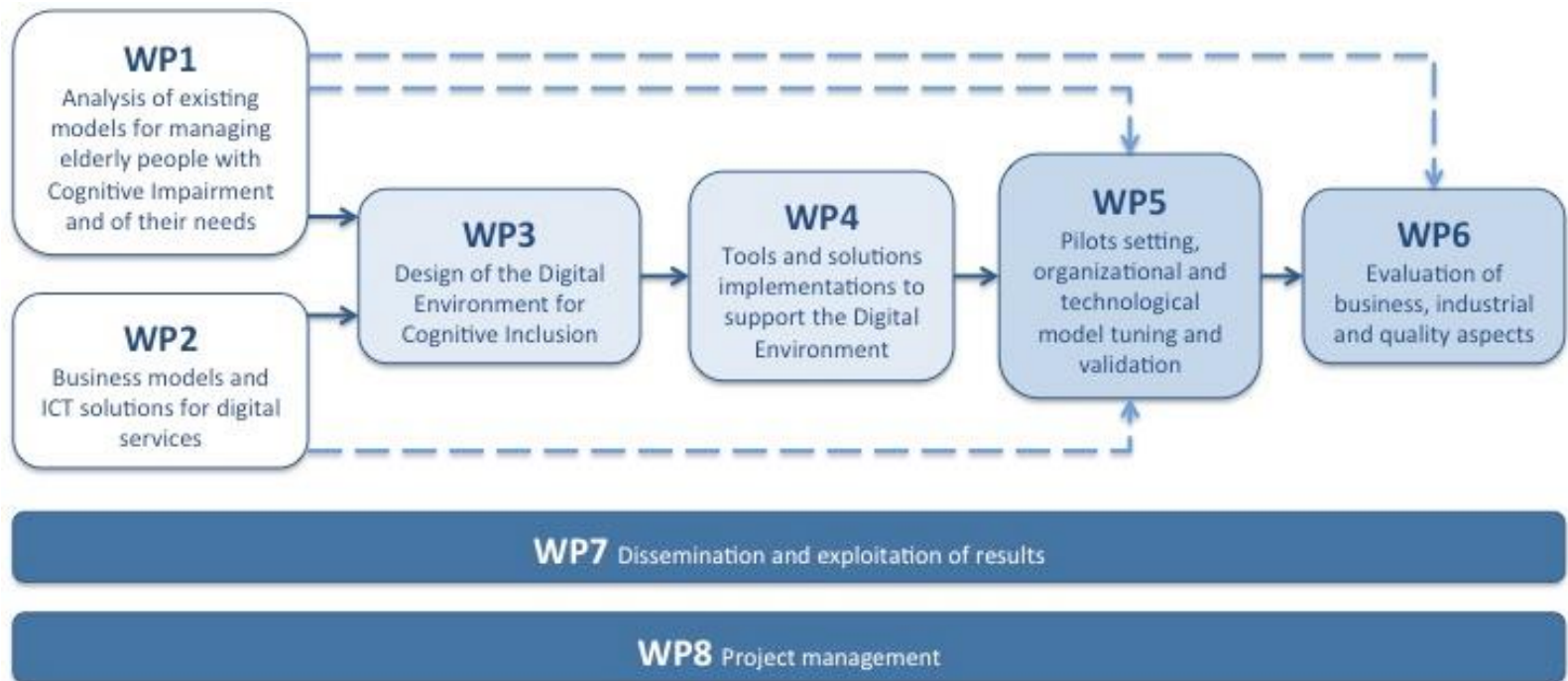


SC1-PM-15-2017:

Personalised coaching for well-being and care of people as they age



DECI will propose ways to strengthen **traditional care organization models**, through the **support of digital tools targeted for elderly with Cognitive Impairments**, based of innovative technologies, information sharing, data interoperability and replicable logics. To pursue this goal, the DECI Consortium gathers partners from five different countries (Italy, Sweden, Spain, Israel and Netherlands), merging academic and research competences-focused subjects, care and social-care providers, healthcare authorities, ICT industry and their broad network of stakeholders. (PHC20 – Advancing active and healthy aging with ICT: ICT solutions for independence living with Cognitive Impairment).



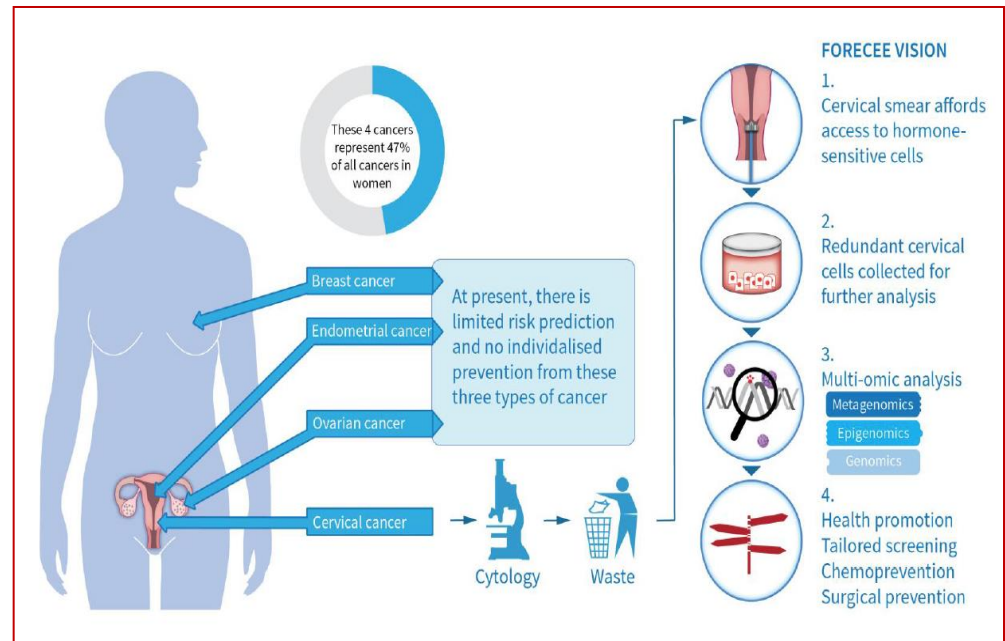


# FORECEE

## Female Cancer Prediction Using Cervical Omics to Individualise Screening and Prevention

The FORECEE (4C) research project is a new major study investigating the risk of breast, ovarian, womb and cervical cancer (that we have called the 'Four Cs'). The project will study tissue from healthy women and women who have already been identified to have a risk factor or one of the 4Cs.

**The FORECEE research project is a unique investigation of the molecular and bacterial/viral factors that may predict a woman's risk of developing breast, ovarian, womb and cervical cancer (the 4Cs).**





## Specific Aims

The overall objective of APERIM is to develop an advanced bioinformatics platform for personalised cancer immunotherapy, which integrates NGS data, whole tissue slides imaging data, and clinical data, as well as novel analytical software tools.

- A tool to quantify **tumor-infiltrating lymphocytes (TILs)** in colorectal cancer patients. This digital sorting tool will be invaluable for future clinical application to stratify colorectal cancer patients.
- An analytical pipeline for **NGS-guided personalised cancer vaccines**. In the future tumor – specific neo-antigens could be identified and selected as individual vaccine targets.
- A novel method to **predict T-cell receptor (TCR) specificity**, forming the most visionary aim of the project. Based on this information adoptive T-cell cancer therapy might be successful in the future.

Спасибо за внимание!



**HORIZON 2020**