



European
Commission

Active and Healthy Ageing For you & with you



We all get older and Europe is ageing. In the upcoming decades this trend will change our lives drastically. Active and Healthy Ageing is the approach to take. It is better for the economy, for society and for you. Let us explain about the challenges and opportunities of today and tomorrow.

The challenges of getting older

Europe is ageing and that comes with challenges, both social and economic. The number of people aged 65+ in Europe will almost double, from 85 today to 151 million in 2060.



People in Europe aged 65+ will almost double in the next 50 years

Living longer is great, but it is also a formidable challenge for both public and private budgets and services, and for older people and their families. New approaches and solutions are to be implemented urgently and you should be aware of that. Start today with 'Active and Healthy Ageing' and care for your health. The EU is working on new solutions for the demographic ageing problems. There are too few people to care for the many elderly people. Budgets for health and social care will grow substantially over the next decades. Ever

more people have to live with chronic conditions and disabilities, which can lead to loneliness and depression. It is not easy to tackle the ageing challenge, but it can be done. It can even become an opportunity for better quality of life, for more sustainable health and social care, and for innovation and economic growth.

Smart innovation with ICT technology definitely helps. It helps care for your health, and it helps you live actively and independently. It helps healthy people stay healthy, and it helps people with chronic live longer independently within their own social circle, job, and home. For example people with chronic diseases such as heart or pulmonary conditions, Alzheimer's disease or other forms of dementia, or individuals with a high risk of falling.

“Live more actively and healthier at home”

Technology is part of the solution but you are crucial to its success. It is all about your willingness and ability to let these new technologies into your life and to live with them. Only then they can help you live more actively and healthier at home without having to be hospitalized or to travel back and forth to your doctor.

What does Europe deliver and how may it help, now and in the future?

The [European Commission \(EC\)](#) funds research and innovation actions through [7th Framework programme](#) for research and development and [Competitiveness and Innovation Programme \(CIP\)](#). EC now prepares with Member states and [European Parliament](#) the details for the new Framework programme [H2020](#) to strengthen Europe's competitiveness and growth potential. Furthermore, the European Commission

partners with Member States, regional authorities, industry, and professional and user associations to support innovation and deployment at large scale. With initiatives such as the [Ambient Assisted Living](#), the [European Innovation Partnership on Active and Healthy Ageing](#) and the [eHealth Action Plan](#) they bring beneficial solutions directly to you. Let us give some examples.

A robot at your table: meet Hector from CompanionAble

Allowing a robot into your house can help you live independently in your home as well as keep in contact with your family and care providers at any time. The idea behind the project [CompanionAble](#) is that a robot can help 'real people' like you and me.

The Companionable consortium developed Hector, a breakthrough robot, with EU funding.

It was tested in smart homes in the Netherlands, Belgium and Spain. Real ageing people lived with the robot for two days. Hector can scan the environment and the patient's body to determine if the person has fallen or has high blood pressure. It can provide entertainment, and memory and cognitive training, or reminders for day-to-day tasks (like taking medicine) and can also offer communication lines with relatives and doctors. The results show that Hector really helps patients in the early stages of their condition such as Alzheimer's disease and delay its evolution.



Watch the robot from CompanionAble, Hector, help people receive home care

Professor Atta Badii at the University of Reading, UK says: "We hope Hector will help people stay independent for longer, receive care in their own home environment and avoid unplanned hospital admissions".

Boost your brain and body with 'Long Lasting Memories'

The EU-funded project [Long Lasting Memories \(LLM\)](#) trains the fitness of your mind and body through



Train the fitness of your mind and body through cognitive training games

cognitive training games. People who are diagnosed with mild cognitive impairment (e.g. the initial stages of dementia) can delay the negative effects of this condition and remain active and healthier longer. To get a feeling of how the LLM solution works in real life [watch the video](#). By combining cognitive exercises and physical activity LLM has proven to provide an effective counterforce against age-related cognitive decline. Seniors maintain their mental capacity and in most cases even improve on neuropsychological tests. Whilst the project has formally come to a close, "the initiative is very much alive" mentions Professor Bamidis at Aristotle University of Thessaloniki in Greece, while talking about the business potential of LLM. He wants to encourage people to learn about and experience its usefulness for those affected by cognitive conditions: "Try it out, it really improves your brain and body".

Living with dementia can become easier and safer with Rosetta

Another project that can bring advantages to you in your home is [Rosetta](#), a three pillar solution for people living with dementia that has already created a buzz in Europe for its innovative potential. Watch the video to visualise the benefits of the project and how it works.



Combine health and social care with 'CommonWell'

Today, social care and healthcare services are often delivered separately by different providers. This is inefficient: people have to go back and forth between home, hospital, pharmacist, and GP for check-ups, treatments, medication and advice. Not good for carers, their clients nor care costs.



Milton Keynes Pilot of the CommonWell project

[CommonWell](#) delivers integrated telecare and telehealth services to social care providers and hospitals. With CommonWell, health care providers receive up-to-date information about the health status of their patients.

Chronic Obstructive Pulmonary Disease (COPD) patients in Milton Keynes, UK, use a monitoring system installed in their homes to check daily their heart rate, weight, blood pressure, oxygen saturation levels and temperature. The test takes approximately 5 minutes, and its results are automatically sent to the hospital for examination. When results are poor the system triggers an alert and a professional clinician or nurse checks the results. CommonWell prevents unnecessary hospital admissions and allows patients to go on living actively and independently.

Find out more about the CommonWell project and the pilot in Milton Keynes (UK).

'Dreaming' of staying home while knowing at any time what your health status is & how it is developing over time?

The EU funded the ['Dreaming'](#) project for a good reason. If you need to be monitored because of frailty or chronic health issues (like heart conditions, diabetes or pulmonary insufficiency - COPD), you can monitor yourself while continuing to live comfortably in your home. Some of the detectors and tests that could be included in your personalised system are a blood detector for oxygen and glucose levels as well as blood pressure and even a movement detector in your kitchen.



Integration of technologies for health monitoring in your home

The great part comes when you do not need to read the results yourself but a voice machine reads them out to you and automatically sends them to your doctor. 'The idea is excellent, I only see advantages in it despite my initial reservation about using the technology', a Swedish pensioner and tester of the technology says.

He still uses the system and it even 'saved his life' when one day his blood pressure was dangerously low and he was immediately contacted by the doctor and taken to hospital. Technology can offer many benefits indeed for people in need.

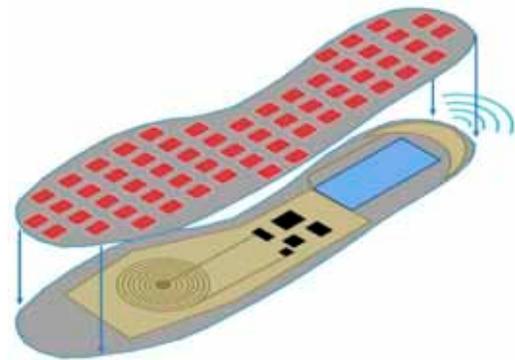
You may think it is impossible to predict the moment when someone will fall but the EU project, WIISEL, tells you why you should think again.

Did you know that falls are the dominant cause of injuries among people over the age of 60, accounting for 29% of their fatal injuries? At the same time, falls can be prevented, which would reduce the need for carer assistance, and increase independence.

improving the quality of life for the elderly and their family, friends and caretakers, as well as decreasing people's fear of falling.

How does the 'WIISEL' innovative solution work?

WIISEL can help. It is a shoe, specially designed with sensors and communication technology that can measure the walking pattern of a person to help predict the likelihood of falling.



WIISEL - preventing the likelihood of falls with the help of ICT

Still in its incipient stage, the main goal of the project is to develop an unobtrusive, self-learning and wearable prevention and warning system to decrease the incidence of falls in the elderly population. By decreasing the incidence of falls, WIISEL will help people live independently at home for more years, while

How can you get involved and benefit from these solutions?

We are already on the right track. We become more and more aware of the ageing challenge and we realise that change is needed. Technology helps only when we commit to using it. By taking more responsibility for your own health, first of all, your health will improve and second of all, you can stay out of hospital or care home and will be able to stay living in your own home for more years. With the help

of 'Active and Healthy Ageing' solutions these goals can be achieved, with better results for yourself, your family and friends and society as whole. Links of videos and websites throughout this publication will help you to easily find more information on active and healthy ageing. Below you can find the links to the websites of the EU projects and programs mentioned in this publication.

***Be active
& proactive
towards change and
innovation!***

'Active and Healthy Ageing' solutions presented in this publication



Long Lasting Memories



Rosetta



CommonWell



CompanionAble



Dreaming



Wiisel

Other links



H2020



FP7



CIP



EIP on AHA



AAL



eHealth Action Plan

European Commission

Directorate-General Communication Networks, Content & Technology

This brochure can be downloaded at: <http://bit.ly/Y18FXE>

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