



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 Health Ageing is the approach to take. It's 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 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, for public services and for older people and their families. New approaches and solutions are needed urgently and you should be aware of them. Start today with 'Active and Healthy Ageing' and care for your health. The EU is working on new solutions for the problems that demographic ageing brings. There are too few people to care for the many elderly people. Exploding budgets

for health and social care. Ever more people having to live with chronic conditions, functional limitations 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 live actively and independently. It helps healthy people stay healthy, and it helps people with chronic conditions live longer independently within their own social circle, job, and at home, wherever that would be. Think of 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's all about your willingness and ability to let these new technologies into your life and live with them. Only then can they 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 the growth in Europe and strengthen its competitiveness. Furthermore, EC partners with

Member States and Regional authorities, industry, professional and user associations to support innovation and deployment at large scale through initiatives such as [Ambient Assisted Living](#), the [European Innovation Partnership on Active and Healthy Ageing](#) and the [eHealth Action Plan](#) to 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 remain independent in your home as well as keep in contact with your family and care providers at any time. The idea behind project [CompanionAble](#) is that a robot can help 'real people' like you and I.

Companionable developed Hector, a breakthrough robot developed by a consortium of European partners with

EU funding. It was tested in pilot smarthomes 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, 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.

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".



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

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 cognitive training games. People who are diagnosed with mild cognitive impairment (e.g. the initial stages



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

of dementia) can delay the negative effects of this condition and remain active and healthier longer. To see and get a feeling of how the LLM solution works in real life click [here](#) to watch the video. By combining cognitive exercises and physical activity LLM has proven to provide an effective countermeasure against age-related cognitive decline. Seniors maintain their mental capacity and in most cases even improve on neuropsychological assessments. 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 buzz in Europe for its potential and innovation. Watch the video to visualise the benefits of the project and how it works.



The password to access the content of the video is rosetta

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 run from one provider to another and are unsure about who is responsible for what. Not good for carers, costs and you.

[CommonWell](#) delivers integrated telecare and telehealth services among social care providers and hospitals. Health care providers receive up-to-date information about patients and are consequently better informed about the health status of their patients. For example, Chronic Obstructive Pulmonary Disease (COPD) patients in Milton Keynes, UK, use a monitoring

system installed in their homes every day to check their heart rate, weight, blood pressure, oxygen saturation levels and temperature. The test takes approximately 5 minutes, and it is linked with the hospital where the information is sent for scrutiny. When results are poor it triggers a warning that it is checked by a professional clinician or nurse. The main advantage with this ICT solution is that it prevents unnecessary admissions to hospitals and patients can go on living actively and independently. To find out more about the CommonWell project and the pilot in Milton Keynes (UK) click [right](#).



Milton Keynes Pilot of the CommonWell project

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

With the **'Dreaming'** project, funded by the EU, if you are in need of being monitored because of frailty or mild health issues like heart conditions, diabetes



Integration of technologies for health monitoring in your home

or pulmonary insufficiency (COPD), you can monitor yourself while continuing to live comfortably in your home. Some of the detectors and tests that are included in the system, although customised to your own needs, include: blood detector for oxygen and glucose levels as well as blood pressure and even a movement detector in your kitchen.

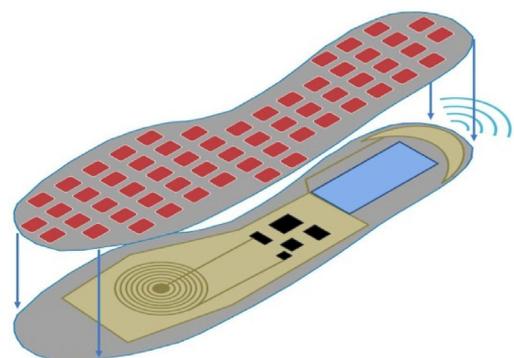
The great part comes when you don't need to read the results yourself but a voice machine reads them out to you and automatically sends them to your doctor. 'The idea is excellent, I only see the advantages in it despite my initial reservation about using the technology', a Swedish pensioner and tester 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 was immediately contacted by the doctor and taken to the 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 fatal injuries amongst this age group? At the same time, they are the most preventable, and their prevention would reduce the need for carer assistance not to mention, the increased chance for independence and living actively longer.

How does the **'WIISEL'** innovative solution work?

A shoe specially designed with sensors and communication technology in order to measure the walking pattern of a person can in fact, help predict the likelihood of falling.



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

Still in its incipient development 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 thus

help a longer life living independently at home and an improved quality of life for the elderly and their family, friends and caretakers while decreasing the fear of falling for a person.

How can you get involved and benefit from these solutions?

We are already on the right track by being aware of the ageing challenge and by realizing that change is needed. Technology helps only when we commit to using it. Moreover, by taking more responsibility of your own health, first of all, your health will improve and second of all, you won't need to be hospitalized but will be able to stay living in your own home longer. With the help of 'Active and Healthy Ageing' solutions these

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

goals can be achieved and you can enjoy active and lifelong learning for longer and with better results for yourself, your family and friends and society as whole. Links of videos and websites throughout this publication will help each person 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.

'Active and Healthy Ageing' solutions presented in this publication



Long Lasting Memories



Rosetta



CommonWell



CompanionAble



Dreaming



Wiisel



