

## 5.2 Digital aspects of active & healthy ageing

### Why invest in Active and Healthy Ageing?

Active and healthy ageing (AHA) is one of the societal challenges we will be facing in the upcoming decades. Demographic ageing heavily impacts on society and economy. The ratio of working people versus inactive people will shift from 4:1 to 2:1 in 2050 and a shortage of up to 2 million jobs in care and health is projected to emerge already by 2020. EU-wide public spending on pensions, healthcare, long-term care, and education will increase by around 20% between now and 2060, while expenditure on long-term care is expected to double in that period. Smart innovation with ICT can help turn the ageing challenge into an opportunity, to achieve a triple win: better quality of life for older citizens and their carers, more efficient and sustainable care systems, and new market opportunities and economic growth. Ageing should drive innovation, tapping into a big and growing 'silver market'. Regions and member states have to address this challenge of ageing by coming up with solutions that really work and at the same foster regional growth.

Digital applications of AHA span across a wide range of sectors such as healthcare (tele-health, tele-care & ambient assisted living), social policy and age-friendly environments (mobility, transport & social inclusion). The services are underpinned by a wide range of hardware and software.

In FP7 and the Competitiveness and Innovation Framework Programme (CIP), around EUR 80 million were dedicated to ICT and AHA research and innovation. Structural and Investment Funds can be used to deploy large scale infrastructures and services for AHA, along the targets of the respective European Innovation Partnership (EIP).<sup>79</sup> In fact, they can be the prime funding source for large scale deployment for those regions which are eligible, such as regions and Member States in South and East Europe. Given the high initial costs of many AHA projects, ESIF can help to kick-start them. It is possible to seek support in ESIF for deployment of EIP related services, under the priority lines of e-services or innovation for example. Also in countries with national OPs, regions can influence the priorities in the new funding period by talking to their national administration.

The **Maltese Union of Midwives and Nurses (MUMN)**<sup>80</sup> has received EUR 1.2 million of Structural Funds to implement integrated care systems, promote continuity of care based on proactive and personalised community/home-based care, improve the health status and quality of life of the targeted population, and support the long-term sustainability and efficiency of the healthcare system.

<sup>79</sup> [http://ec.europa.eu/research/innovation-union/index\\_en.cfm?section=active-healthy-ageing&pg=%20commitment](http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=%20commitment).

<sup>80</sup> <http://www.mumn.org>.

### Barriers & challenges

The EIP on Active and Healthy Ageing is designed to help overcome barriers and create scale, combining demand and supply side innovation. As the 2010 stakeholder consultation on AHA<sup>81</sup> pointed out, regional action is needed to overcome innovation barriers. The key obstacles are: (a) aversion and non-involvement of end-users as well as lack of end-user training, (b) lack of funding, (c) authorities not promoting innovation, (d) lack of evidence or scattered evidence and (e) problems with patents and standards. Apart from this, cultural differences between different actors – such as service providers, health care and industry – may make it difficult to agree on joint AHA initiatives.

### How to act?

**1. Analysis:** It is important to have (a) an adequate ICT infrastructure; (b) societal and individual acceptance/right incentives, and (c) a good business model and the right policies that allow for a systemic change in health and care for elderly people.

**2. Stakeholder involvement:** In this area it can be relevant to interact with regional/local governments, health and care authorities and service providers, hospitals, homes for the elderly, insurance companies, patients and older people and their representative organisations, social and health care professionals and their organisations and large, medium and small industry. In fact, all those that are needed for the large scale introduction of new ICT-enhanced products and services for active ageing, from R&D to market introduction to policies for innovation, health and age-friendly environments. The required multi-stakeholder-approach is being practised by the Commission in initiatives like the Ambient Assisted Living Joint Programme<sup>82</sup> and EIP AHA.

**3. Priority setting:** In the Strategic Implementation Plan for the EIP AHA, the Steering Group has recommended 6 specific actions<sup>83</sup> that are being taken up by the corresponding Action Groups:

- Innovative ways to ensure patients follow their medication prescriptions.
- Innovative solutions to prevent falls and support early diagnosis for older people.
- Prevention of functional decline and frailty, with a focus on malnutrition.

<sup>81</sup> [http://ec.europa.eu/health/ageing/docs/consult\\_report\\_en.pdf](http://ec.europa.eu/health/ageing/docs/consult_report_en.pdf).

<sup>82</sup> <http://www.aal-europe.eu>.

<sup>83</sup> [http://ec.europa.eu/research/innovation-union/index\\_en.cfm?section=active-healthy-ageing&pg=%20commitment#action\\_plans](http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=%20commitment#action_plans).

- Integrated care models for chronic diseases amongst older patients, e.g. by remote monitoring and integrating social and health care.
- Interoperable ICT-independent living solutions to help older people stay independent, mobile and active for longer (coupled with an action for global standards).
- Age-friendly environments: innovative living spaces in support of an ageing population.

Regions and Member States are encouraged to engage with the EIP and the AAL JP as they are the prime beneficiaries of their activities, both in terms of the wellbeing of their citizens and of the sustainability of their health and social services.

**4. Policy mix:** The next step is to develop a roadmap with accompanying activities and policies. These should be aligned with private actors, national, regional and EU policy programmes and activities, such as H2020/COSME and the European Social Fund. It is important to use existing and widespread standards for tele-medicine and other fields to build upon. Furthermore, the roadmap should be related, if appropriate, to existing national innovation schemes and the planned EIT Knowledge and Innovation Community on healthy living and active ageing.<sup>84</sup>

An outward looking dimension is imperative in order to seek synergies with external actors and work towards clearing pending issues in inter-operability and standards. Interregional cooperation is deemed beneficial to gain

efficiencies in the design and implementation of innovative services, e.g. through coaching between regions, exchange of good practices, lessons learnt etc. CIP pilot projects are typically based on interregional cooperation and so do AAL JP projects, which require parties from at least 3 Member States to be represented in their consortia. Examples are DART, age-friendly-counties and health for growth. There is an upcoming EIT KIC on healthy ageing.

**Galician Health Innovation Platform<sup>85</sup>** - The public health authority of Galicia (Spain) has received EUR 80 million of Structural Funds to support projects that develop innovative healthcare through public procurement of innovation. The platform has also developed the IANUS system of electronic medical records that makes clinical information available to all health centres and hospitals and to all pharmacies in Galicia (in total 36,000 healthcare professionals are connected).

**5. Monitoring and evaluation:** Typical indicators used in this area are measurements of improvements in quality of life for citizens, extra years of living actively and independently at home, number of healthy life years, efficiency gains in care systems and impact on growth and job creation associated with these markets. As part of the EIP-AHA an impact measurement framework is under development which is defining key output impact indicators which could also be used.<sup>86</sup>

#### Further reading

<http://s3platform.jrc.ec.europa.eu/active-and-healthy-ageing>

<sup>84</sup> [http://europa.eu/rapid/press-release\\_IP-11-1479\\_en.htm?locale=en](http://europa.eu/rapid/press-release_IP-11-1479_en.htm?locale=en).

<sup>85</sup> <http://www.ehtel.org/references-files/ehtel-symposium-2012-files/EHT12%20S3-4%20Javier%20Quiles%20-%20Galician%20Health%20Innovation%20Platform.pdf>.

<sup>86</sup> <http://is.jrc.ec.europa.eu/pages/TFS/MAFEIP.html>.