

M. IGLESIA GOMEZ (Convener). *European Innovation Partnership (EIP) on active and healthy ageing*. *Gerontechnology* 2012;11(2):122; doi:10.4017/gt.2012.11.02.016.00 **Participants:** H. HOFSTRAAT (Netherlands), M. D'ANGELANTONIO (Belgium), C. TODD (UK), J. DE VOS (Belgium) **ISSUE** In its Europe 2020 flagship initiative Innovation Union<sup>1</sup>, the European Commission put forward the concept of European Innovation Partnerships (EIP) to promote breakthroughs to address societal challenges and gain competitive advantages. It proposed to test the concept by launching a pilot Partnership on Active and Healthy Ageing. In its conclusions of 26<sup>th</sup> November 2010, the Competitiveness Council welcomed the objectives of the proposed EIP and supported the development of this pilot. The pilot EIP on Active and Healthy Ageing is a new stakeholder-driven approach to research and innovation. The overarching target is to raise the average number of healthy life years in the European Union by 2 by the year 2020. The pilot EIP on Active and Healthy Ageing is expected to bring added value by: joining up efforts, bridging the gaps between public and private actions and instruments, facilitating scaling up of results and improving the framework conditions. It seeks to improve older people's quality of life and lead to more efficient care solutions<sup>2</sup>. **CONTENT** Participants will elaborate on the ins and outs of the EIP and the innovation in the area of: (i) prevention, screening and early diagnosis, (ii) care and cure, and (iii) independent living. **STRUCTURE** The partnership pursues a triple win by (i) improving the health and quality of life of older people so they can lead independent and active lives for longer; (ii) improving efficiency and sustainability of health systems; and (iii) fostering the competitiveness of EU businesses specialized in innovative age- and health- related products, devices and services. The Partnership's work plan has been determined by the Steering Group in May 2011. The Steering Group put forward a Strategic Implementation Plan on the 7<sup>th</sup> November 2011. According to this plan, the following six specific actions in the areas of prevention, care and cure and independent living have been identified where stakeholders have demonstrated significant readiness and commitment to engage: first, prescription and adherence action at regional level; second, personalized health management, starting with a falls prevention initiative; third, actions for prevention of functional decline and frailty; fourth, replicating and tutoring integrated care for chronic diseases, including remote monitoring at regional level; fifth, development of interoperable independent living solutions, including guidelines for business models; and lastly, innovation for age-friendly buildings, cities and environments. **CONCLUSION** At this symposium we intend to present the Strategic Implementation Plan of the EIP and in particular initiatives on integrated care, interoperable independent living solutions, falls prevention and the partnership approach.

#### **References**

1. Communication from the Commission to the European Parliament, the Council, the European economic and social committee and the committee of the regions. Europe 2020 Flagship Initiative Innovation Union; COM(2010) 546 final
2. Communication from the Commission to the European Parliament, the Council, the European economic and social committee and the committee of the regions; A rational for action. Europe 2020 Flagship Initiative, Innovation Union; SEC(2010) 1161

**Keywords:** adherence, function, integrated care, chronic disease, social inclusion, workplace

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J.W. HOFSTRAAT. *Integrated care for chronic diseases, leveraging remote monitoring and telehealth approaches*. *Gerontechnology* 2012;11(2):122-123; doi:10.4017/gt.2012.11.02.293.00 **Purpose** To demonstrate critical success factors for effective and meaningful implementation of remote monitoring and telehealth solutions bridging hospital and home, enabling chronic patients to return earlier to their own environment, engaging them in their own disease management and contributing to their quality of life. **Method** Developments in technology-based solutions, covering both hardware and software (ICT) will be described. Emphasis will, however, be put on the mode of implementation of successful solutions. Reference will be made to the large European projects MyHeart<sup>1</sup> and HeartCycle<sup>2</sup>, and to first results obtained in the large British Whole System Demonstrator (WSD) trial<sup>3</sup>. **Results & Discussion** The WSD has been the largest randomized control trial of telehealth and telecare conducted so far, with participation of over 6,000 patients and more than 200 primary care practices. Pa-

tients suffering from the main chronic conditions, in particular heart failure, COPD, and diabetes, have been included. First results have just been published and indicate that if telehealth approaches are implemented correctly, a 15% reduction in accident and emergency (A&E) visits, a 20% reduction in emergency admissions, a 14% reduction in elective admissions, a 14% reduction in bed days and an 8% reduction in tariff costs can be achieved. In addition, a first evaluation also suggests a 45% reduction in mortality rates<sup>3</sup>. A key consideration is the availability of appropriate technologies and tailored solutions, leveraging these technologies, but specifically considering the use case and engaging the care provider as well as the end-user, the patient. Boundary conditions and approaches for implementation will also be discussed using the MyHeart and HeartCycle EC projects, as well as the Dutch initiative 'Zorg Binnen Bereik' (Care Within Reach), an example of home healthcare established through innovation based on experience, focusing on improving the quality of life of patients suffering from chronic illness by explicit consideration of social innovation and behavioural aspects<sup>4</sup>. It is the aim of the European initiative Active and Healthy Ageing to scale local innovations up at a European level<sup>5</sup>.

#### References

1. MyHeart project; 2010; [www.hitech-projects.com/euprojects/myheart](http://www.hitech-projects.com/euprojects/myheart); retrieved March 2, 2012
2. HeartCycle; 2011; [www.heartcycle.eu](http://www.heartcycle.eu); retrieved March 2, 2012
3. UK Department of Health. Publications policy and guidance; [www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance); retrieved March 2, 2012
4. Zorg Binnen Bereik; [www.zorgbinnenbereik.nl](http://www.zorgbinnenbereik.nl); retrieved March 2, 2012
5. European Commission. Communication from the Commission to the European Parliament, the Council, the European economic and social committee and the committee of the regions. Europe 2020 Flagship Initiative Innovation Union; COM(2010) 546 final; 2010

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M. D'ANGELANTONIO. *The quest for an affordable AAL-solution. Gerontechnology 2012;11(2):123-124; doi:10.4017/gt.2012.11.02.292.00* **Purpose** Our company HIM SA has been a pioneer in the AAL-field and can currently boast 10 years of experience with a number of remarkable successes including the creation through its daughter company HIS (Munich, Germany)<sup>1</sup> of what is considered the most comprehensive and most advanced AAL-platform commercially available today: DREAMING (Figure 1). We aim to demonstrate that AAL-solutions have reached maturity and are affordable. **Method** As all pioneers know, the first steps are always the most painful because of combined effect of immature technology and an emerging but still unconsolidated market. This comes on top of the numerous obstacles and barriers which slow or prevent the deployment of innovative, and therefore somewhat disrupting, new services. From our 10-years' of experience we learnt valuable lessons on AAL-solution deployment. None of the EU-programmes addressing the AAL-market was suitable for co-funding the first steps because the technologies had already passed the R&D-phase but where not mature enough to be implemented. The dilemma: give up or take the full risk of self-funding the development. **Results & Discussion** We decided to take the full risk. Since 2008 the AAL-platform has been adopted by customers in 8 EU-countries and the first multicentre randomised controlled trial of an AAL-solution has been completed: DREAMING<sup>2</sup>. This platform consists of: (i) monitoring and alarm handling services with a combination of medical devices, environmental sensors and a decision support system, (ii) elderly-friendly videoconferencing services, and (iii) non-ICT based services provided by project partners. Detailed results will be announced at the DREAMING final conference in Trieste on June 14, 2012. In short, the results show an improved health-related quality of life (measured with the SF-36 version 2 questionnaire), a high level of acceptance of the services by older people and their formal and informal carers, a reduction in number of admissions to the emergency rooms, and a lower number and shorter duration of hospitalisation episodes for diagnoses related to chronic diseases and domestic accidents. In addition, soft evidence (general perception that AAL is good and improves life of older people) may be enough for politicians to make a move forward, as has happened for example in England<sup>3</sup>. In other cases AAL is the only option because there are not people at hand to look after older people<sup>4</sup>. I sincerely think that we have reached

the successful end of the quest but a big question remains: will the current sluggish economy accelerate or slow down the deployment of AAL-solutions. Only time will tell, but bets are accepted!

**References**

1. Health insight solutions. Telemonitoring - Taking a new approach; www.health-insight.de; retrieved: April 6, 2012
  2. The DREAMING Project; www.dreaming-project.org; retrieved April 6, 2012
  3. UK Department of Health. Whole system demonstrator programme: Headline findings – December 2011; 2011; www.dh.gov.uk/health/2011/12/wsd-headline-findings; retrieved April 6, 2012
  4. Fonden for Velfærdsteknologi. About the Danish public welfare technology fund; 2012; www.abtfonden.dk/da/Om-fonden/English; retrieved April 6, 2012
- Keywords:* active and healthy ageing, AAL, affordability, success stories  
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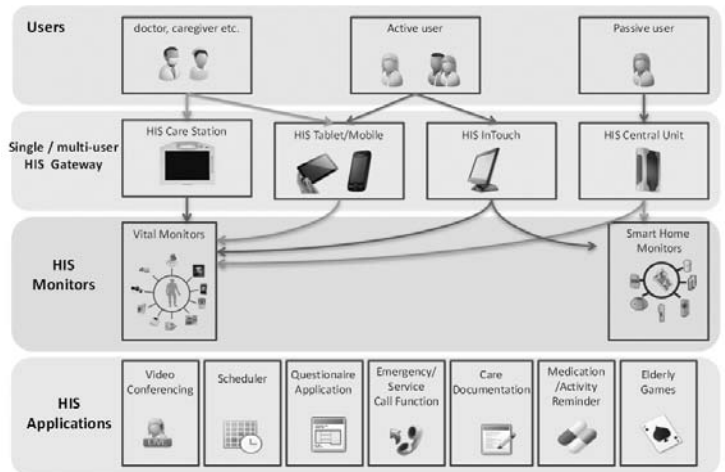


Figure 1. HIS AAL platform

**C.J. TODD. Preventing falls amongst older people in Europe: Networking to build the knowledge base and promote practice.** *Gerontechnology* 2012; 11(2):124-125; doi:10.4017/gt.2012.11.02.345.00

**Purpose** Europe is home to some 460 million people, 101 million are over the age of 60, representing 22% of the population. Projections indicate that by 2060 there will be more than 151 million people ≥65 years in Europe. Every year, 120 000 older people in EU die as a consequence of injuries. Falls are a major cause of unintentional deaths and the leading cause of injury-related deaths among people ≥65 years. About 30-40% of people ≥65 years living independently fall each year, for people in residential settings this figure is much higher. Approximately 10% of falls result in serious injury; 5% are fractures. Perhaps the most serious fall injury is hip fracture, of whom about half do not regain their previous walking ability and 20% die within six months. The burden of treatment, rehabilitation, and care triggered by fall-related injuries of older people is enormous. Physical injury is not the only consequence of falling; psychological problems and fear of falling are common. Loss of confidence, social withdrawal, and loneliness can occur, even when there has been no injury. Systematic review and meta-analysis reveal a strong evidence base for strength and balance exercises to reduce falls<sup>1,2</sup>, but the evidence for population- and ICT-based assistive technologies is weaker<sup>3,4</sup>. We consider the evidence on preventing falls, and how ICT can be used in fall prevention strategies with the aim of reducing burden on health systems and improve the quality and quantity of life of older people.

**Method** A systematic review and evidence synthesis of literature on use of assistive IC technologies in falls prevention is undertaken<sup>5-7</sup>. We developed a taxonomy<sup>8</sup> with utility for ICT based assistive technologies. **Results & Discussion** Initial scoping reveals a paucity of high grade evidence (randomised controlled trials) of effectiveness. Most research has focused on getting technology to work in the field, rather than assessing health outcomes. Taxonomy facilitates comparison across interventions and evidence synthesis. It is clear how falls can be prevented: strength and balance training exercises which are progressive challenging and regular, either in groups or individually delivered. Professionally delivered environmental modifications for specific high-risk groups also works. ICT can be used to support evidence-based interventions and new ICT-opportunities such as biofeedback and adherence maximisation. Synthesising evidence from various research designs and paradigms provides

guidance on best practice. A thematic network should disseminate and implement best practice across EU, to move technologies with demonstrated effectiveness, to market, and integrate them with health and social care provision. One of the great challenges remains ensuring uptake of falls prevention activities and technologies by older people themselves.

### References

1. Gillespie LD, Robertson MC, Gillespie WJ, Lamb SE, Gates S, Cumming RG, Rowe BH. Interventions for preventing falls in older people living in the community. *Cochrane Database of Systematic Reviews* 2009;2:CD007146
2. Sherrington C, Whitney JC, Lord SR, Herbert RD, Cumming RG, Close JCT. Effective Exercise for the Prevention of Falls: A Systematic Review and Meta-Analysis. *Journal of the American Geriatrics Society* 2008;56:2234–2243
3. McClure RJ, Turner C, Peel N, Spinks A, Eakin E, Hughes K. Population-based interventions for the prevention of fall-related injuries in older people. *Cochrane Database of Systematic Reviews* 2005;1;CD004441
4. Martin S, Kelly G, Kernohan WG, McCreight B, Nugent C. Smart home technologies for health and social care support. *Cochrane Database of Systematic Reviews* 2008;4;CD006412
5. Centre for Reviews and Dissemination Systematic Reviews: CRD's guidance for undertaking reviews in health care. York: University of York; 2009
6. Pawson R, Greenhalgh T, Harvey G, Walshe K. Realist review a new method of systematic review designed for complex policy interventions. *Journal of Health Services Research and Policy* 2005;10(Suppl.1):21-34
7. Pope C, Mays N, Popay J. Synthesising qualitative and quantitative health research: a guide to methods. Maidenhead: Open University Press; 2007
8. Lamb SE, Becker C, Gillespie LD, Smith JL, Finnegan S, Potter R, Pfeiffer K. Reporting of complex interventions in clinical trials: development of a taxonomy to classify and describe fall-prevention interventions. *Trials* 2011;12:1; doi:10.1186/1745-6215-12-1

**Keywords:** adherence, physical function, falls prevention, active and healthy ageing

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**Full paper:** No

### *J. DE VOS. Living Tomorrow: Open-innovation platform to invent the future in health care.*

*Gerontechnology* 2012;11(2):125; doi:10.4017/gt.2012.11.02.249.00 **Purpose** The project intends to

realize a real-life environment focused on quality of life, comfort, care and health enabled by new technologies, products, and services. **Method** Bill Gates stated at the inauguration of the Living Tomorrow, the 'House of the Future'-project in 1995: "it is very wise to start exploring what this next decade of revolution all means. Bring people in, let them talk about that and get them involved in building their future". That is what we now do by focusing on health and the European healthcare industry. We need to confront the decision makers of today and tomorrow with trends, products, services, and technologies in health and care that start to build our future now! We explain why and how innovation in technology and creative optimization of processes will make healthcare more efficient and affordable to everyone. Even in uncertain economic times the future can change dramatically. Innovation in healthcare and breakthrough optimization of processes, legislation, and business models are good opportunities for Europe to become a global leader of excellence. Investing in this future not only guarantees success in meeting the challenges on our continent, it also opens up opportunities in becoming the number one global knowledge provider in health and care solutions for all. Moreover, this not only addresses the issue of care for the aging population, but also intends to target primary prevention that will keep our population healthy and vigorous. This is the best investment in prosperity we can make for generations to come. **Results & Discussion** We propose an open-innovation platform where participants' can showcase their ideas and visions, products and services that will make our lives more comfortable. We actively connect and match needs and solutions by building proof-of-concept and living-lab integrations, combined with strong sensitizing and PR-activities about efficient innovation and key learnings from the open-innovation work that is conducted. All this is supported by professional guides and communicated to target groups interested to take part in the future of care and health.

**Keywords:** platform, innovation in healthcare

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