# Theme 4: Formal and informal ways of awareness creation, education, training in AAL for everyone

Workshop Title: Technology to assist better living – time to create awareness for both professionals and citizens alike

Contents
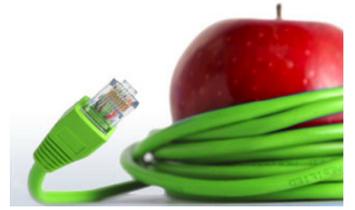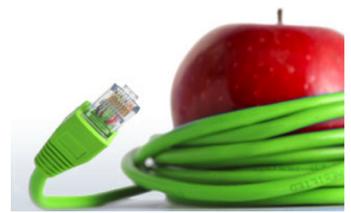
Executive Summary

Formal and informal ways of awareness creation, education, training in AAL for everyone were thoroughly explored during the two workshops entitled "Technology to assist better living – time to create awareness for both professionals and citizens alike". As a result of these workshops consensus was achieved around the following points:

- **The primary focus should be addressing the needs of the citizen, through**
  - o **Creating awareness of solutions that will enable them to stay independent and healthier for longer**
  - o **Delivering education and training appropriate to the stakeholder in focus, from citizens, their families and carers to clinicians, and policy makers.**

- **The role of the professional needs to be better defined and supported accordingly e.g. education, training, certification, checklists**

- **The marketplace needs to be further developed by all parties; manufacturers, service suppliers, the health and social workforce, academics and citizens. To include**
  - o **The creation of realistic business plans**
  - o **Proper pricing and margin setting to include CPD**
  - o **Use of existing networks and pan-European bodies (e.g. AGE Platform, ANEC, Patient, Carers associations, Health professions, etc)**
  - o **Use of digital marketing techniques and social media**
  - o **Use of family networks (e.g. children and carers)**

- **Procurement needs to be aligned to market needs and dynamics, with full understanding, recognition and use of the self-pay marketplace**

- **The realisation that "Open standards make markets" and hence the need for their creation, adoption, training, accreditation and monitoring**

- **The recognition that no one academic body can, could or should be responsible for all but that one organisation could develop, facilitate, co-ordinate and manage the creation of the courses necessary for the initiation of the process. Colleagues in the EU have agreed to collaborate**

- **EKTG given its pan-European membership, links to European bodies (e.g. DG Connect, AAL, EPN), links to Government KTN, links to academia (e.g. LSE, Loughborough University), links to professional organisations (e.g. Medical, Nursing, Occupational Therapists) and links with industry (including industry associations e.g. TSA) should be the conduit responsible for the creation of**
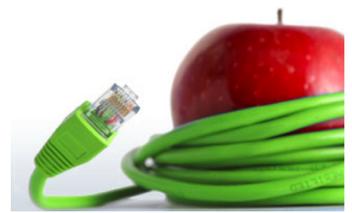
the strategy to underpin this endeavour and the initial management of its delivery

Next Steps:

1. **To confirm EKTG as the organisation to lead the creation of the strategy to underpin this endeavour and the initial management of its delivery**

2. **To secure funding for the development of course outlines based on this consensus**

3. **To arrange a Workshop, aimed at progressing these points in to actions, at**

   "European Summit on Digital Innovation for Active and Health Ageing"

   5 - 8 December 2016, Brussels

4. **To secure an academic organisation that can provide the appropriate variety of certification of the developed courses**

5. **To partner with suppliers to develop the "marketplace"**

6. **To identify partners that can disseminate/deliver the courses as required**
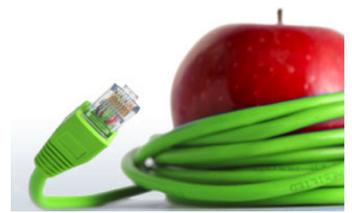
Background

It has been recognised for some time that because of increasing financial stringency the statutory bodies in each European Country will have to reduce the level of financial support and resource they can dedicate to the health and care of their ageing citizens. As a consequence there is now an accelerating need to create sharper awareness and educate citizens in Active and Assisted Living Technology, Digital Services, Open Access to records, and Technology usage.

Policy makers and employers responsibilities for the workforce include development of content in educational courses or academic curricula, specific opportunities for users, industry, and professionals (in online and face-to-face formats). These should contribute to CPD Certification, specific qualification and highly improved services and application of funding.

The two sessions organised by EKTG (European Knowledge Tree Group) at the 2016 AAL Forum were designed to:

- [Session 1] Review the effects of further financial stringency the statutory bodies in each European Country, the need for wider understanding of assistive living technologies to address needs and applications for practical cost effective services.
- [Session 2] Provide a brief summary of cost effective Active Assisted Living, Digital Services, Open Access to records, and Technology systems, their application and identify specific education formats maximising the views of AAL Forum participants.
- [Session 2] Review and develop opportunities for education and training for the citizens and the workforce and how identify/plan how these can be launched speedily.

Session 1 objectives:

- To review Active and Assisted Living Technology, Digital Services, and Technology Services and applications in the EU.
- To define why educational opportunity is needed, will support improved services and save expenditure.
- To describe online and face to face formats of education.
- To consider urgent involvement at National & European levels of Professional Bodies, Trade Associations, Health and Social Care policymakers, Health and Social Care management, regulators and practitioners and users in this process.
- To create a Summary plan of identified issues and actions, which will form the basis of a Report that will be shared with AAL Forum, EU Officials, and others to act as a basis for action at both national and individual levels.
- For all participants to have gained a greater personal knowledge and ambition in these areas.
- For all participants to have identified at least 3 actions that they can personally and immediately undertake to further the awareness of these services within their locality to the benefit of their ageing population.

Session 2 objectives:

- To review examples from across Europe that provide supporting data and specific education formats identified within the Rationale.
- To create a Summary plan of identified issues and actions that will act as a basis for a Report that will be shared with AAL Forum, EU Officials and others at both national and individual levels.
- For all participants to have gained a greater personal knowledge of the areas under discussion.
- For all participants to have identified at least 3 actions that they can personally and immediately undertake to further education and better application of Active Assisted Living Technology, Digital Services, and Technology Services within their locality to the benefit of their ageing population.
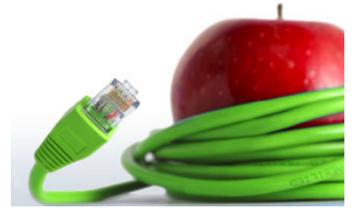
IMPORTANT

EKTG defines eHealth: Including Assistive Living/mHealth, as per the following diagram:
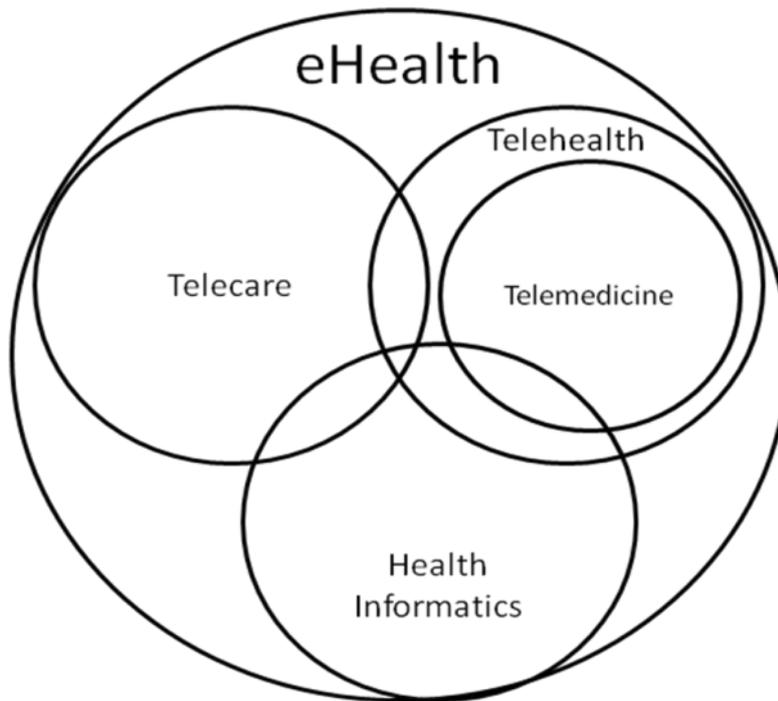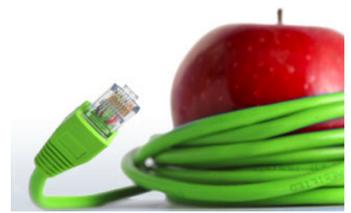
Session 1 Summary

- ➤ Educating the users and their families for Active Assisted Living Technology, Digital Services, and Technology Usage

  - For end-users/consumers it is important to have more user friendly, unobtrusive and attractive products/services, access to training on general digital skills and awareness about available/comparable products and services according to current and future needs. For professionals we must recognise digital skills and innovation as part of the current and new curricula and provide access to training/(re)skilling, guidelines and professional networks. For decision makers we must better support innovation/risk management and Return on Investment (RoI) assessment, access to resources and peer networks/benchmarks.

    The advent of the European "Blueprint" will be critical in delivering the solutions to these issues.

  - Nurses are an important part of the healthcare system and yet their value is often missed or understated. The European Federation of Nurses Voices works to ensure that their importance is recognised, not just through qualifications but through a whole range of competencies, including areas such as public health, direct and constant contact with patients and their family/social environment, promotion of healthy lifestyle, identification of potential diseases/conditions and encouraging citizens to seek appropriate treatment.

  - As demonstrated so clearly By Mrs Hildegard Längle the voice of the citizen/end user is critical e.g. "I was really interested in the health data monitoring and I think it´s quite easy to use, but I would wish for a 100% reliable system; for me, the AAL solutions should be reliable and not too expensive; furthermore educating the users is important and sometimes also persuasiveness / a good seller to make users try something new (it was like that for me with the iPad – now I really like it)."

- ➤ Creation of on-line and off-line resources
  - There is a fantastic help/value/social inclusion to be had once you gain the basic skills. Dedicated groups, often with a lot of local activism, help people gain enough skills to join in; personal tutoring e.g. seniors through children/grandchildren is particularly helpful/important. As part of the digital inclusion agenda, local authorities also have useful services. Commercial entities are starting to do the same - even if it is to keep people out of local branches.

  - The availability of on-line resources is patchy, with really good examples being rare. There is much need for a quality label for "health apps", further training for professionals in the creation, awareness and use of on-line resources.

- ➤ Creating an appropriate Business: Consumer marketplace

  It is well recognised that due to limited statutory funding citizens, or their families (in particular children and grandchildren), will have to pay more themselves to have their needs met; especially if they want choice. Due to the ever increasing care costs there is a growing recognition that a 5,000 Euros one off investment in adapting a citizens home now with technology that enables them to live independently can save upwards of 50,000 Euros per annum in care home fees.

  Although ecommerce as a whole (e.g. Amazon, eBay) is something now used and cherished by the majority, in the AT marketplace its role and value is not understood or appreciated by professionals; yet no professional can keep up to date with what new technology is available and so should be demanding increased use of this marketplace to satisfy the needs of its citizens. Ironically it is likely that consumers (not professionals) will decide what they want to match their needs and keep up to

date (in particular children, grandchildren). To some professionals it is seen that we are pushing a market and that this itself will not work and that what we need is a killer eHealth app to stimulate real growth – but will our citizens wait for this?

A new ecommerce marketplace, supported or driven by the professionals is not easy to create due to the need for the right language, right products and services, coupled with the right support. As stated, consumers will not wait for the professional to catch up and these unsated consumer needs are something already recognised by industry as a whole with the advent of web sites such as www.telmenow.com . Websites such as these know how to use and harness the importance and power of social media and digital marketing and as such can drive in excess of one million hits per annum. The best of these, such as www.telmenow.com, also recognise that a B:C marketplace is not just about sales but has to be a balance of sales, content, support and critically service delivery

- ➢ Meeting legal and ethical requirements
  - It is vitally important that the legal and ethical requirements for assistive living technology innovations in the EU and elsewhere are identified and met, especially when providing a service (certification and education will be required). It is possible to create a checklist of items that must be considered/addressed, such as
    - o Nuremburg Code
    - o EU Guidance for Applicants Informed Consent Directive 2001/20/EC
    - o Data Protection Action
    - o Health and safety
    - o Public liability
    - o Personal liability
    - o Employment contract and laws
    - o EU Medical Device Directive (EN60601) \
    - o Radio Equipment Directive (199/S/EC, 199/S/EC, 2014/53/Eu from June 2016)
    - o EU General Product Safety Directive (GPSD 2004)
    - o Accessibility – new EU Mandate being reviewed

Session 1 Agreed Actions
Identified issues and actions to be carried over to Workshop 2

1. Users must be at the centre
2. The role of the professionals needs to be addressed (certification/legal/ethical)
3. Building the marketplace
4. Creating awareness
5. Procurement – decision makers
6. Train all stakeholders, including the end users
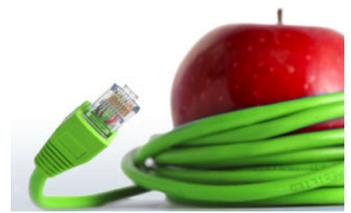
Session 2 Summary

- > 2.2.   Educating the professionals and users

  - The European Federation of Nurses Associations (EFN) have identified 8 compentencies that help define what nurses should do every day, that underpins the importance of nurses and helps drive the develolpment of the teaching curriculum. These being
    1. Independently diagnose, plan, organise and implement
    2. Cooperate with other players from the health sector
    3. Empower patients towards a healthy lifestyle & self-care
    4. Independently initiate measures to safe lives
    5. Independently advise, instruct and support
    6. Ensure the quality of nursing care
    7. Communicate comprehensively and cooperate with members of other professions in the health sector
    8. Analyse the quality of care

    At FHS St Gallen the development of a "Living Lab" will enable nurses to teach patients and patients to teach nurses so ensuring AAL systems and services are better developed and deployed for the benefit of all.

  - Dr. Christiane Brockes (Leader Clinical Telemedicine, University Hospital Zurich has taken the delivery of eHealth to a new level through the organisation of a Medical Online Consultation Service for everyone, including Consultation Services for patients with Heart Failure and LILA - long independent living assistant. Education in "Clinical Telemedicine / eHealth" is also embedded in the curriculum of medical students at the University of Zurich, through the delivery of 20 hours of learning over a 6 month period. The students response to which has been extremely positive as measured through questionnaires.

- > Creating an appropriate face to face programme and online marketplace

  - It should be possible to have a positive intervention when supporting people in the adoption and use of AAL services by incrementally building people's skills and competencies – not forcing an unnatural change or driving forward any specific 'project'; i.e. training should not be the principle goal on the basis that the more training you give the worse the outcome This positive intervention could be done by drawing good practice from models found elsewhere, such as
    - o   Digital changing in clinical contexts
    - o   Pensions advice and financial services
    - o   Professional CPD schemes
    - o   Leisure activities (sailing, diving, skiing, riding)
    - o   Domestic work (gas fitting, appliance maintenance)

    and by making use of modular structures that offer paced progression; are suitable for multiple audiences and delivered through multiple channels.

- In doing this we must be cognizant of existing Education and Training systems e.g. such as those in Switzerland, MSc in Infomatics; the needs of the stakeholders, the agility of the providers to respond (e.g. Universities can often take up to 18 months to facilitate change in the curriculum); the need for industry to take more responsibility and the need to be able to measure effectiveness.
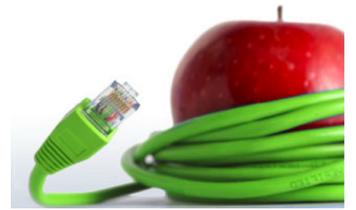
- ➢ Meeting legal and ethical requirements
  - • Identifying legal and ethical requirements for assistive living technology innovations in specific countries is essential and should always include both the workforce and the user. Certification, qualifications and methods for audit of knowledge should equally be part of this as much as providing knowledge and understanding. Checklists can easily be provided to facilitate comprehensive coverage of the issues, not forgetting that individual country requirements can vary tremendously e.g. USA

Session 2 Agreed Actions

See Executive Summary

Appendix 1 – AAL Workshop Agenda, Contributors and Slides – Session 1

Interactive Session / Workshop Information	
Thematic area:	Theme 4: Formal and informal ways of awareness creation, education, training in AAL for everyone
Title of session and workshop:	Technology to assist better living – time to create awareness for both professionals and citizens alike SESSION 1

Summary of Agenda

Session	Subject	Speakers	Organisation
1	Technology to assist better living – time to create awareness for both professionals and citizens alike	Tony Cornford (Chair)	London School of Economics
1.2	Educating the users and their families for Active Assisted Living Technology, Digital Services, and Technology Usage	Peter Wintlev-Jensen	EU DG Connect
		Birgit Vosseler	Director of Nursing, FHS St Gallen
		Hildegard Längle	Service User
1.3	Creation of on-line and off-line resources	Richard Foggie	Knowledge Transfer Network, UK
		Sofia Moreno-Perez	Valde Consulting
1.4	Creating an appropriate Business: Consumer marketplace	Clive Noak	Protelhealth Ltd
		Henk Herman Napp	Vilans
1.5	Meeting legal and ethical requirements	Maggie Ellis	London School of Economics
1.6	Panel discussion/debate with participants		
1.7	Summary plan of identified issues and actions, which will form the basis of a Report of identified issues and actions and lead to Session 2		
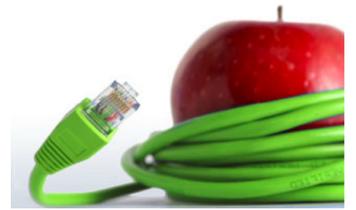
Theme 4: Formal and informal ways of awareness creation, education, training in AAL for everyone

Session 1: Technology to assist better living – time to create awareness for both professionals and citizens alike

Interactive Session / Workshop Information	
Thematic area:	Theme 4: Formal and informal ways of awareness creation, education, training in for everyone
Title of session and workshop:	Technology to assist better living – time to create awareness for both professionals and citizens alike SESSION 2

Summary of Agenda

Session	Subject	Speakers	Organisation
2	Technology to assist better living – time to create awareness for both professionals and citizens alike	Ron Summers (Chair)	Loughborough University
2.2	Educating the professionals and users	Birgit Vosseler	Director of Nursing, FHS St Gallen
		Christiane Brockes	Leader Clinical Telemedicine University Hospital Zurich
2.3	Creating an appropriate face to face programme and online marketplace	Tony Cornford	London School of Economics
		Ron Summers	Loughborough University
2.4	Meeting legal and ethical requirements	Maggie Ellis	London School of Economics
2.5	Panel discussion/debate with participants		
2.6	Summary plan of identified issues and actions which will form the basis of a Report		

Theme 4: Formal and informal ways of awareness creation, education, training in AAL for everyone

Session 2: Technology to assist better living – time to create awareness for both professionals and citizens alike
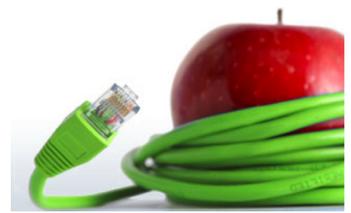
Appendix 3 – Bios of Contributors

Speaker profile	
Name:	Tony Cornford
Current affiliation(s):	Associate Professor of Information Systems
Key interests:	Digital Health, Digital Medicines
Short biography:	Tony Cornford is Associate Professor in the Department of Management at the London School of Economics. His research focuses on digitalisation in health care and government. Recent work has involved developing support resources for large-scale implementation in hospitals, critical evaluation of national projects, and studies of digital materiality. His particular interest is in how medicines are combined with new digital technologies in both professional and domestic setting.

Speaker profile	
Name:	Maggie Ellis
Current affiliation(s):	Lead Academic, Enterprises, LSE Co-ordinator EKTG
Key interests:	Technology, Cost effective innovations for citizens, Open access to records, personal responsibility for health, Good practice design - Guide ISO 71 Rehabilitation and healthier living in Lifetime Homes
Short biography:	Since 1999 - London School of Economics and Political Science (LSE), involved with EU and UK Research Projects e.g. MonAMI, SOCIONICAL and a Review of Scottish Government Services. As an occupational therapist, managed physical disability and mental health services, ex-Chairman of the British OT Association, European OT Committee and Member of many university and research boards including EU and ISO Technical Committee Membership. Maggie uses this background in her OT Practice at West Square Associates (WSA), as a Member of Cross Party Groups for Digital Inclusion and Disability, Holyrood and for Smart Cities and Legal Aid in the UK Parliament.
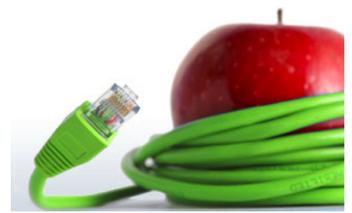
Speaker profile

Name:	Richard Foggie
Current affiliation(s):	Knowledge Transfer Network HoIP Telecom FP7 STOPandGO PPI project
Key interests:	• Internet of Things IoT • Sharing Economy • Sensing Technologies • Big Data • Social Innovation
Short biography:	Currently Knowledge Transfer Manager in KTN dealing with IoT technologies and applications. Director of MVNE HoIP Telecom. Worked in industry, government and third sector on technology based and socially driven e/m/smart-health solutions.

Speaker profile

Name:	Sofía Moreno-Pérez
Current affiliation(s):	Valde Consulting FP7 STOPandGO PPI project
Key interests:	• Active and Healthy Ageing • Innovative procurement • Social Impact of ICT • Sharing Economy • Social Innovation
Short biography:	Experienced as a University research engineer, managing director of a high-tech spin-off, networker of National Technology Platform on Active and Healthy ageing, partner in several companies and European Projects. Sofía has got a broad and complete vision of the use of ICT for Active and Healthy Ageing.

Speaker profile

Name:	Henk Herman Nap
Current affiliation(s):	Vilans – Expertise centre on long-term care
Key interests:	- eHealth - Gerontechnology - Inclusive Design - Health Policy - Serious Gaming - Smart Housing - Domotics
Short biography:	Currently at Vilans as a senior researcher on innovation in eHealth and health policy. Associate editor of Gerontechnology Journal and Industry Liaison of the Gerontoludic Society. Worked in academics, Smart Homes, and many European AAL, H2020 and Framework projects. We should design (health) technologies that are meaningful, accessible, and non-stigmatising.

Speaker profile

Name:	Clive Noak
Current affiliation(s):	Independent telehealth/telecare consultant Director, Protelhealth Ltd (the home of www.telmenow.com)
Key interests:	- Telehealth and telecare - Development of an ecommerce market-place for technology for independent living
Short biography:	Clive has spent the majority of his career in pharmaceutical sales and marketing in the UK and overseas (Merck & Co. Inc.). In more recent times specialising in UK health informatics and patient experience programmes (Dr Foster Intelligence); Business Development within the health consultancy arena (Tribal Health and Capita Business Services Limited); Business Development for the Telecare Services Association (TSA). Currently a member of the planning group of the European Knowledge Tree Group (EKTG), Director of Protelhealth Ltd and an independent consultant.

Speaker profile

Name:	Ron Summers
Current affiliation(s):	Loughborough University; EKTG for eHealth
Key interests:	Clinical translation of health innovations; health measurement and its traceability; methods to improve wellness and health promotion.
Short biography:	Ron has worked in precursor disciplines to AAL since 1984. He has progressed from systems that investigate the hospital-based care of patients with illnesses to care in the community and health promotion. He is a Technical Director of a clinical spin-off for service delivery in the community for 'less glamorous' clinical conditions that still impact a significant proportion of the population. The first example being the patient-centred management of lower urinary tract disorders. The wellness and health promotion agenda of this activity – principally for the ageing population - relates directly to AAL.

Speaker profile

Name:	Peter Wintlev-Jensen
Current affiliation(s):	European Commission DG CNECT H3
Key interests:	Research, Innovation and scaling up of Digitally enabled solutions for active and healthy ageing
Short biography:	Working for the European Commission DG Communications, Networks, Content and Technology, responsible for development of policy and research strategy related to Information and Communication Technologies and Demographic Ageing. Involved in this field for the last 8 years, including the European Joint Research Programme on Ambient Assisted Living and its continuation under Horizon 2020, the ICT research and innovation agenda on Ageing in the 7th Framework Programme and in Horizon 2020, the Joint Programming Initiative with Member States concerning multi-disciplinary research on Demographic Change entitled "More Years – Better Lives" and the European Innovation Partnership on Active and Healthy Ageing. Before joining the European Commission in 1990 worked in the telecommunications industry as project manager in Denmark and US in a number of large industrial computing and communications projects. Peter has an Engineering degree in Electronic Systems from Aalborg University, Denmark.