

The Basque country declaration : gerontechnology comments

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spending public money. In other words, there is a need to provide a healthcare system which is both accountable and sustainable, according to the best possible allocation of resources and return on investment (ROI).

Moreover, the European Council endorsed the European Commission's proposal for an Innovation Union in February 2012; in particular the launch of a pilot European Innovation Partnership on Active and Healthy Ageing⁶ as well as the new Joint Programming Initiative of Europe-

an States "addressing a global megatrend" called More Years, Better Lives⁷.

In this scenario, publicly funded HTA agencies are playing an increasingly significant role in determining access for health technologies as payers rely more frequently on HTA evaluations to determine whether or not they will fund a particular medicine or medical technology.

In June 2012 this declaration has been signed by all authors.

References

1. Biddle M, Rivera O, Pérez Gil J. Market and policy development for an aging society conference: New avenues to fill the gap between health and welfare demands and effective ICT solutions (AAL summit 2012). *Gerontechnology* 2012;11(2):153; doi:10.4017/gt.2012.11.02.684.00
2. European network for Health Technology Assessment – EUneHTA; www.eunethta.eu/Public/About_EUneHTA/; retrieved July 7, 2012
3. The International Information Network on New and Emerging Health Technologies (EuroScan International Network) is a collaborative network of member agencies for the exchange of information on important emerging new drugs, devices, procedures, programmes, and settings in health care; <http://euroscan.org.uk/about/>; retrieved July 7, 2012
4. International Network for Agencies for Health Technology Assessment (INAHTA); www.inahta.net; retrieved July 7, 2012
5. The Liverpool Agenda: Regional health systems and health innovation markets working together for regional development; 2010; http://healthcluster.net.eu/media/attachment/HCN_Liverpool_Agenda_24052010.pdf; retrieved July 7, 2012
6. Iglesia-Gomez M. European Innovation Partnership (EIP) on active and healthy ageing: A new stakeholder approach. *Gerontechnology* 2012;11(2):98; doi:10.4017/gt.2012.11.02.248.00
7. The Joint Programming Initiative (JPI) "More Years, Better Lives - The Potential and Challenges of Demographic Change" of 2010 seeks to enhance coordination and collaboration between European and national research programmes related to demographic change. Currently 13 European countries are participating; <http://www.jpj-demographic.eu/process>; retrieved July 7, 2012

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A.A.Franco MD^a, J.L. Fozard PhD^b, D.G. Bouwhuis PhD^c, J.E.M.H. van Bronswijk PhD^c, N. Charness PhD^d, M. Colombo MD^e, Y-L. Hsu PhD^f, C.C.M. Hummels PhD^g, W.D. Kearns PhD^h, H.S.M. Kort PhD^g, D.F. Mahoney PhDⁱ, D. Spierings MSc^j, A. Tinker PhD^k, H-W. Wahl PhD^l, P. Wright PhD^m

^aISG president, Nice, France (franco.a@chu-nice.fr); ^bISG Grandmaster of Gerontechnology (fozard@tampabay.rr.com); ^cEmeritus/Emerita professor Eindhoven University of Technology, Eindhoven, The Netherlands (d.g.bouwhuis@tue.nl ; j.e.m.h.v.bronswijk@tue.nl); ^dFlorida State University, Tallahassee, Florida, USA (charness@psy.fsu.edu); ^eGeriatric Institute 'Camillo Golgi' & 'Cenci-Galligani' Foundation, Milan, Italy (m.colombo@golgiredaelli.it); ^fYuan Ze University, Chungli, Taiwan (mehsu@saturn.yzu.edu.tw); ^gEindhoven University of Technology, Eindhoven, The Netherlands (c.c.m.hummels@tue.nl ; h.s.m.kort@tue.nl); ^hUniversity of South Florida, Tampa, Florida, USA (kearns@usf.edu); ⁱMGH Institute of Health Professions, Boston, Massachusetts, USA (dmahoney@mghihp.edu); ^jRadboud University, Nijmegen, The Netherlands (Dort.Spierings@han.nl); ^kKing's College London, London, UK (anthea.tinker@kcl.ac.uk); ^lHeidelberg University, Heidelberg, Germany (hans-werner.wahl@psychologie.uni-heidelberg.de); ^mCardiff University, Wales, UK (wrightp1@Cardiff.ac.uk)

A.A. Franco, J.L. Fozard, D.G. Bouwhuis, J.E.M.H. van Bronswijk, N. Charness, M. Colombo, Y-L. Hsu, C.C.M. Hummels, W.D. Kearns, H.S.M. Kort, D.F. Mahoney, D. Spierings, A. Tinker, H-W. Wahl, P. Wright. The Basque country declaration: Gerontechnology comments. *Gerontechnology* 2013;11(4):547-550; doi:10.4017/gt.2013.11.4.011.00 At the end of ISG*ISARC2012 World Conference, Eindhoven, June 27-29, 2012, a discussion took place by video conference, between participants of the AAL summit (chaired by Olga

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Rivera, Basque Country's Deputy Minister of Health Research and Innovation) and the gerontechnology conference (chaired by Alain Franco, ISG president). The Basque country declaration has been well received by the Gerontechnology community as convened in Eindhoven at the ISG*ISARC2012 conference. It was understood that the AAL Summit in Bilbao concerned R&D funding and business issues of Ambient Assisted Living (AAL). The Basque country declaration is a sturdy and welcome initiative to turn the aging society in a successful society for all. It looks for new and sustainable models for health and takes into account stakeholders from academia, industry, technological research institutes, care organisations and even users. Some remarks are presented about education, prevention and sustainability, end users, usability and building environments. The Basque country declaration is an important and needed document, which hopefully will have considerable impact. We strongly support the pronounced user orientation regarding technology development and use as clearly highlighted in the declaration. The gerontechnology community may further strengthen our move to a successful aging society by providing insights and results on the interface of gerontology and technology, including needed paradigm changes.

Keywords: gerontechnology, prevention, physical environment, end users, AAL

The Basque country declaration (BCD)¹ was welcomed by the Gerontechnology community as convened in Eindhoven at the ISG*ISARC2012 conference. It was understood that the AAL Summit in Bilbao was dedicated to R&D-funding and business issues concerning Ambient Assisted Living (AAL) in the European market. The Eindhoven conference also took into account underlying phenomena, their definitions and founding principles, as well as global and world aspects concerning solutions and restrictions. Thus we experienced two different approaches with the same goal: a successful aging society!

The BCD is a sturdy and welcome initiative to turn an aging society in a successful society for all. It looks for new and sustainable models for health and takes into account stakeholders from academia, industry, technological research institutes, care organisations and includes end users.

The declaration strikes a bold vision of cooperation between primary stakeholders; patients, service providers, academics, government agencies and international bodies to enhance the delivery of health-related services. The guiding principles of increased responsibility by patients for their own health or patients' empowerment, enhanced interactions with providers and developers of new interventions squares well with the user-centred approach to health care underpinning gerontechnology.

The innovative view of the BCD is especially visible in the agreed upon Principle (vi) of a global market for the proposal of relevant products. This is new and permits the achievement of the goal of maintaining sustainable national and European-wide cure and care systems with less expensive technologies.

Below are some gerontechnological issues that could further strengthen the joint aim of Ambient Assistive Living (AAL) and Gerontechnology.

EDUCATION AND PARADIGM CHANGE

The BCD addresses a variety of stakeholders, although education is not specifically mentioned. For institutions of higher learning there is a challenge to develop educational programmes for professionals working in the field of gerontechnology.

In fact, all potential users of health technology (health care professionals, clients) need to have access to well-designed training programmes and technical support systems. Consumers need better education about how to manage their health care, particularly chronic health conditions. Attention to human factors considerations in design and training is a necessary step for effective design, development, and deployment of innovative health care systems.

Use of gerontechnology, like the use of e-Health in care implies innovation in care protocols, a shift in healthcare from a disease oriented model, to a well-being oriented model. A structural exchange of knowledge and experience in functionalities and user needs will be necessary to remove the barriers to a large-scale roll-out of e-Health and gerontechnology principles in health care.

The use of technology for recreation supporting mental and physical activities in older persons tends to get lost in the strong emphasis on e-Health and telemedicine applications such as those described in the BCD. Adaptations of existing interactive games to the interests of older persons and imaginative user interfaces such as the Wii can do much to increase the use of these technologies. More computer games with strong intergenerational appeal such as the old board game, 'Monopoly', can improve the quality of life of seniors².

PREVENTION AND SUSTAINABILITY

From the viewpoint of societal and economic sustainability more emphasis is needed on pri-

mary prevention. Most of the chronic ailments that burden older age have their cause in a (almost) lifelong noxious exposures. Think of 'house borne' allergens originating with mites and fungi causing asthma from the age of toddlers leading to more rapid aging of the lungs; or of lifestyle elements associated with mobility problems and heart disease in later life. Sustainable preventive medicine and health promoting technologies must be a part of our endeavour to maintain our success and profitability in an aging society.

Agreed Principle viii of the BCD rests on the important collaboration of regional authorities. It should be stressed that successful and sustainable cooperation includes not only public and private parties, but also cure and care authorities, and diverse relevant national ministries and international organizations.

The last main challenge presented to stakeholders, creating a harmonious ecosystem, should be widened beyond services to apply more broadly to the lives of consumers.

USABILITY AND MAINTENANCE

The BCD is a good starting point for guiding development of innovative health care technologies. For the process to ultimately succeed, more attention must be given to ensuring that products are designed to be maximally usable and maintainable. Too often technologies such as assistive devices are abandoned by their intended users because of design flaws. Human factors and ergonomic approaches involving usability testing need to be more extensively used to promote user-centred design processes.

In a lifespan view of human development, such an orientation means that aging individuals increasingly control their own development, even when faced with pronounced functional impairment and frailty, due to the influence of offsetting technology. That is, the exertion of agency in later life and active aging substantially relies on health and care technology present in the near future, particularly in cases of advanced age. This trend toward technology use will significantly enrich the public's positive views of aging.

PHYSICAL AND SOCIAL ENVIRONMENT

The influence of the built environment on health and well-being of older adults needs to be addressed by academia and technological centres as well as health and social care systems, in order to maximally benefit from the EU initiative to create age friendly cities.

In order to strengthen social cohesion, support of informal care and contributing to the social qual-

ity of living and housing, attention to the physical component of our environment is fundamental, logical, and crucial. It is fundamental, because the built environment provides the underpinnings for our social environment. The way we construct our cities and group our homes determines our social interactions. It is logical, because shaping our physical environment is a natural way of designing and creating. Stacking bricks to house our needs is an act rooted in time immemorial. And finally, it is crucial, because mistakes in the fundamentals or the brick stacking have lasting consequences on life's quality, time, and costs. Therefore, in our view a socially sustainable society needs a physically sustainable backbone.

THE END USER

The authors of the declaration are to be congratulated for their aspiration to build new bridges across health-and-welfare and the technological divide. Consumers' empowerment and responsibility for participation are emphasized. However, obligations entail rights to fully unbiased disclosure of information to enable optimal cost-efficient choices by consumers. In addition, the potential loss of privacy through monitoring technologies needs to be weighed against potential monitoring benefits. Also, technology-aided quality of personal life and 'fun' technology deserve more attention (see above).

Direct costs to the consumer are a central issue in the distribution and dispersal of assistive technologies. Gerontechnology contributes to the serious discussion of how costs of assistive technologies could be shared by consumers who desire advanced communication technologies but hesitate to pay for them fully out of their own pockets. As an older person interested in independent living, I might agree to pay for the costs of linking my assistive devices to medical care centres if I knew that I could use my iPad or advanced cell phone for purposes other than communicating medical data from my home to a medical care service.

Indeed, a number of items in the BCD may strongly benefit the end user, such as services that can respond comprehensively and synergistically, technological, commercial and organizational innovations, improved cooperation between public and private parties, regulations and standards, and the 'open mindedness' to exclude obsolete technologies or those bringing no 'added value'. Currently new technologies sometimes confront us with unexpected, undesirable or meaningless results³.

It appears that a little more emphasis on the roles of infrastructures (such as broadband and IT

training) would be helpful for end users to maintain communication links as essential ingredients of a good quality of life, especially as families become dispersed and transportation becomes difficult for those with mobility problems.

Other aspects of the technology end user seem to be underrepresented in the BCD; especially the explicit consideration of the role of age-related cognitive impairment, which challenges technology use, but may benefit significantly from the compensating, optimizing, and stimulating role of technology. Related to this phenomenon is the need to explicitly stress the commitment to persons with

dementia and their (in)formal carers, and - not to forget - accommodating older workers in general⁴.

CONCLUSION

The BCD is an important and needed document, which hopefully will have considerable impact. We strongly support the pronounced user orientation regarding technology development and use as clearly highlighted in the declaration. The gerontechnology community may further strengthen our combined move to a successful aging society by providing insights and results on the interface of gerontology and technology, including needed paradigm changes.

References

1. Rivera O, Sancho F, Sánchez M, McCormick A, Berlo A van, Barrios Á, Benito J, Yanguas J, San Sebastián I. The Basque country declaration. *Gerontechnology* 2013;11(4):545-547; doi:10.4017/gt.2013.11.4.004.00
2. Bronswijk JEMH van, editor. Fun technology. *Gerontechnology* 2009;8(4):187-265; doi:10.4017/

gt.2009.08.04.000.00

3. Riikonen M, Mäkelä K, Perälä S. Safety and monitoring technologies for the homes of people with dementia. *Gerontechnology* 2010;9(1):32-45 doi:10.4017/gt.2010.09.01.003.00
4. Bouma H. Accommodating older people at work. *Gerontechnology* 2013;11(4):489-492; doi:10.4017/gt.2013.11.4.001.00

ADDITIONAL INFORMATION

Comments were collected and edited by the fourth author. Contact: j.e.m.h.v.bronswijk@gerontechnology.info. The ISG-Sinophone chapter has made a

Chinese translation available of this correspondence in their journal 'Gerontechnology and Service Management', go to <http://gerontechnology.org.tw:8080/ojs/index.php/JGSM/issue/view/2>.

PROFESSIONAL NEWS

Sinophone chapter launches new journal



ISG-Sinophone Chapter, which is currently represented by the Chinese Society of Gerontechnology and Service Management, launched its first issue of the 'Journal of Gerontechnology and Service Management'¹ in December 2012. This new journal intends to provide a venue for scholars, researchers and practitioners in the Sinophone world to publish their research findings in Chinese. The journal accepts manuscripts written in Chinese (with an English table of contents and abstracts added), in the forms of original research, literature review and case studies. All papers are free to view and download. Paper copies of the journal will be printed every quarter to distribute to authors, libraries, and related departments and institutions.

The first full issue and the second one under construction, saw contributions on the senior driver, virtual reality, hand-eye coordination training, innovation, rehabilitation, robot systems, senior tourism, wheelchair improvement, e-Health and telehealth, walker design, a supportive belt, and standing-up support.

Reference

1. <http://journal.gerontechnology.org.tw>; retrieved March 8, 2013

Yeh-Liang Hsu PhD

E: mehsu@saturn.yzu.edu.tw

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LinkedIn Gerontechnology

The Gerontechnology (ISG) LinkedIn Group¹ is an open information sharing and discussion group created by the International Society for Gerontechnology (ISG) for all who are interested in technology for the benefit of older people. The group was created in May 2009 following a suggestion by ISG member Dr. Lauren E. Stork and approval of ISG's executive committee. Initially intended as an experimental alternative to the ISG Discussion list mail², to date the LinkedIn group has attracted over 690 subscribers, with a steady influx of several new members each week. Consequently, while the original list mail is still available it has been virtually inactive for several years, thus rendering the LinkedIn group the de facto on-line forum for ISG members. To encourage new membership, the LinkedIn group also welcomes subscribers who are non-members.

References

1. www.linkedin.com/groups/Gerontechnology-ISG-1945469; retrieved March 10, 2013
2. www.jdc.org.il/mailman/listinfo/isg_discussion; retrieved March 10, 2013

Lawrence R. Normie MSc, Administrator of the Gerontechnology (ISG) LinkedIn Group

E: lnormie@gerontech.org.il

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