PACITA

Collaborative project on mobilisation and mutual learning actions in European Parliamentary Technology Assessment

Grant Agreement no. 266649
Activity acronym: PACITA

Activity full name:
Parliaments and Civil Society in Technology Assessment

Deliverable 6.6
National report
Scenario workshop
in Spain

Due date of deliverable: June 2014
Actual submission date: June 2014

Start date of Activity: 1 April 2011 Duration: 4 years

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Organisation name of lead beneficiary for this deliverable: The Catalan Foundation for Research and Innovation (FCRI)

Change Records

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Executive summary

Introduction

How to cope with ageing societies is one of the grand challenges pointed out in the Lund Declaration [Lund 2009]. The rapidly growing population of senior citizens[1] confronts Europe with a double demographic challenge. The ageing population's need for healthcare services increases at the same time as the access to workforce declines[2].

Use of technology can be increasingly important for the society to be able to offer health care services at a quantity and quality that mirrors the expectations of the European populations. Our society can choose different strategies for the care services, and for the introduction of new technological tools in this sector. The technology promises many opportunities, but there are challenges to be solved and ethical dilemmas to be considered. How can we best use new technology in care services, what is acceptable and what is the resistance by the senior citizens themselves, and what type of options are policy makers faced with?

To facilitate and provoke forward-looking discussions and identify policy alternatives the PACITA project have conducted nine national and regional scenario workshops in; Denmark, Czech Republic, Hungary, Catalonia (Spain), Norway, Wallonia (Belgium), Switzerland, Austria and Bulgaria. A scenario workshop is a method aimed at facilitating forward-looking discussions and identifying policy alternatives in different contexts. In PACITA, the workshops will stimulate discussions on how one can meet the needs and face the challenges of the rising number of older adults in different European countries, with a set of scenarios as a starting point for the discussion.

To create awareness of the possible consequences of political choices, the participants were presented with three scenarios; "One size fits all", "Freedom of choice" and "Volunteering community". They differ with respect to which degree public and private players are providing future elderly care and how the senior citizens and other groups in the society organise themselves in order to meet the needs for care. To create awareness of the possible consequences of the choices, the participants was also presented with user stories, where four people were pictured and further how they could live their lives in 2025 in the given scenarios.

The scenarios and user stories have been used to provoke discussions in scenario workshops on how one can meet the needs and face the challenges of the rising number of older adults in the European countries. The scenario workshops in the PACITA project have produced visions for what kind of elderly care services the Europeans (though the views of a diverse range of elerly care stakeholders) want and policies envisaged to achieve these visions.

This report summarises and analyses the results of the national scenario workshop held in [Norway], [date].

The findings from the nine national workshops will be gathered and analysed in a synthesis report, to be presented to regional, national and European policy-makers at a policy conference in Brussels in late 2014.

[1] The term „elderly" is commonly used. We are aware that this is a sensitive terminology. We have chosen to use the more neutral term "senior citizen" throughout this document.

[2] An ageing population is defined as a population in which the number of elderly (65+) is increasing relative to the number of 20-64 year olds. http://www.population-europe.eu/Library/Glossary.aspx

National context

In line with the rest of the developed countries, people in Spain are living longer than previous generations, being the average life expectancy in 2011 for men 82.1 years and for women 85 years, one of the highest in the world (Source: United Nations). At the same time the fertility rate has been in decline in the last years, being in 2012 of 1.32. As a consequence, the percentage of people older than 65 reached 18 in 2014. This figure is expected to be doubled from now till 2050 (Source: National Statistics Institute).[3]

Population ageing has implications aside from the strictly demographic ones, for instance the growth of depending people. Age and dependence are narrowly related since the volume of people with limitations in their functional capacity increases in the group of upper ages, especially among the 80-year-olds.

This situation has forced Spain, like its neighbour countries, to put in practice policies for guaranteeing the quality of life of elderly people to which technology should contribute by satisfying equally the challenge of usability, accessibility, ethics, availability, affordability and the privacy they require.

Local players and responsibilities in the care sector

Policy Enablers

This group includes the agencies involved in the generation of policy at a national or regional level. They are the most powerful agents both politically and economically regarding the implementation of the teleassistance technologies since the future development of the market and its regulation depends on their decisions:

- Ministry of Health, Social Services and Equality (Government department). The Ministry is in charge of the proposals and implementation of the Government's general guidelines about health policies.
- Regional Health Departments (Regional department). The regional organisation of health services is the responsibility of the autonomous Regions. The health planning must be based on the central administration policies.

Policy Enactors

This group includes those of organisations representing the needs and interests of the final users, elderly people, their families and non-professional carers. Their labour can influence the dissemination and the adoption of the necessary technological solutions:

- *Sociedad Española de Geriatría y Gerontología* (Spanish Society of Geriatrics and Gerontology). Non-profit scientific society dedicated to welfare of the elderly people. It advises and collaborates with institutions dealing with health and social problems derived from the ageing.
- *Asociación Española para el estudio científico del envejecimiento saludable (AECES)* (Spanish Association for the scientific study of the healthy ageing). Non-profit association dedicated to the promotion of the scientific study of the ageing phenomenon and of the integral promotion of the

[3] Sources: Instituto Nacional de Estadística (National Statistics Institute) http://www.ine.es/inebmenu/mnu_dinamicapob.htm#3 , http://www.ine.es/prensa/np784.pdf , http://www.ine.es/prensa/np838.pdf and United Nations http://unstats.un.org/unsd/demographic/products/socind/

health of the old people through the multiprofessional contribution, the improvement of the health assistance and the prevention, promotion of the health and rehabilitation.

- *Cruz Roja* (Spanish Red Cross). Humanitarian institution of voluntary character and of public interest which promotes and participates in health programs and in actions affecting public health.
- *Foundation for Health, Innovation and Society*. Foundation which develops and supports initiatives fostering the debate and the knowledge and technology transfer amongst the social, health and economical agents.

National policies

Following the mandate of the Spanish Constitution, the National Health System is based on the principle that all citizens regardless their personal situation have the right to assistance and protection of their health.

Spain has a decentralised administration and is divided in 17 autonomous communities and 2 autonomous cities (Ceuta and Melilla). The State provides the economical resources from the central budget, basic direction and coordination thus assuring a common basis for the health services in all the territory. The autonomous regions are responsible for the organisation of the health services.

Since the ageing phenomenon in the Spanish society will continue for the next decades at the same time that the proportion of young people will diminish, the assistance and care of the elderly people is of core importance not only for the maintenance of their quality of life but also for the narrow relationship with the use of health and social services.

This demographic tendency along with the social family changes, the incorporation of women[4] to the labour market and the reforms in the health service, are affecting the availability of carers for dependent and old people. This situation as well as the people bond with their homes has caused the evolution of the social and health services towards the prioritisation of the assistance in the own user's surroundings[5].

Teleassistance system in Spain has evolved from the assistance in emergencies to prevention, providing security to the users and minimising hospitalizations and medical assistance.

The State has promoted public teleassistance through co-financiation and regulation measures. The main national policies put into practice in recent years are (in cronological order):

- 2006. *Ley 39/2006 de Promoción de la Autonomía Personal y de Atención a las Personas en Situación de Dependencia* (Law 39/2006 of Promotion of the Personal Autonomy and Assistance to People in Situation of Dependency)[6]. Country law regulating the basic conditions for promoting the personal autonomy and assistance to dependent people with the implication of all the public administrations in Spain. It pretended to make uniform the services offered by the Spanish regions and municipalities in the matter. In practice each region has its own catalogue of services according to their necessities, citizen sensitiveness, budget and demographic structure.
- 2007. *Real Decreto 727/2007 de 8 de junio, sobre criterios para determinar las intensidades de protección de los servicios y la cuantía de las prestaciones económicas de la Ley 39/2006 de 14 de diciembre, de Promoción de la Autonomía Personal y Atención a las personas en situación de*

[4] Family has been the main agent in care providing, being the role of women especially important.

[5] There is also a growing tendency in society towards independent life models which elderly people have followed. As a consequence the number of single-member homes has increased, especially in the upper ages.

[6] http://www.boe.es/buscar/doc.php?id=BOE-A-2006-21990

dependencia[7] (Royal Decree 727/2007 of 8 June, about the criteria for determining the intensities of protection of the services and the quantity of the economical benefits of the Law 39/2006 of Promotion of the Personal Autonomy and Assistance to People in Situation of Dependency). Definition of the services to be given to the old people according to the conditions established in the above-mentioned Law. Many key questions are left to each region.

- 2009-2012. *Sanidad en Línea. Plan Avanza* (Health online. Avanza Plan)[8]. Plan for the development of the Knowledge Society by modernising public services and promoting the expansion of broadband infrastructure, implementation of PCs and other devices and ICT for both administrative and medical purposes.
- 2011. *Libro Blanco del Envejecimiento Activo (White Book of Active Ageing)*[9]. Document sponsored by the Spanish Government guiding the policies for the improvement of the quality of life of elderly people.
- 2012-2015. *Pla estratègic SITIC (Strategic Plan SITIC)* [10]. Regional (Catalan) framework document for all the health sector conceived for the encouragement of ICT in the system.

The national incentives put in place to encourage the adoption of telecare and home based telemedicine practices are:

- April 1993 - December 2012: *Programa de Teleasistencia instrumentalizado mediante el convenio-marco IMSERSO-FEMP* (Home-based telecare program implemented through the Framework Agreement IMSERSO-FEMP). The Ministry, through IMSERSO, financed the 65% of the cost of the implementation of the service of Telecare whereas the public local entities (municipalities and provinces) financed the remaining 35%. It is a mixed model: public ownership, private management. Owing to the economical crisis, in 2013 this program was cancelled and now each region and municipality manage it with their own budget and resources and with the users' co-pay in some cases. According to IMSERSO[11] (Ministry of Health, Social Services and Equality) more than 87,000 people benefited in 2010.

Finally, it must be noted that the application of teleassistance is linked to ethical, legal and political responsibilities with regard to the management of health information, guaranteeing the right of each patient to their data protection. In Spain two laws regulate this: Organic Law 15/1999 (general rules about data treatment) and Law 41/2002 (about the autonomy of the patient and its rights and obligations regarding clinical information and documentation).

[7] http://www.boe.es/buscar/doc.php?id=BOE-A-2007-11446

[8] http://www.msc.es/profesionales/hcdsns/TICS/TICS_SNS_ACTUALIZACION_ES_2010.pdf

[9] http://www.imserso.es/InterPresent1/groups/imserso/documents/binario/8088_8089libroblancoenv.pdf

[10] http://www20.gencat.cat/portal/site/canalsalut/menuitem.41e04b39494f1be3ba963bb4b0c0e1a0/?vgnextoid=61976eb8efae3310VgnVCM1000008d0c1e0aRCRD&vgnextchannel=61976eb8efae3310VgnVCM1000008d0c1e0aRCRD&vgnextfmt=default

[11] http://www.imserso.es/InterPresent1/groups/imserso/documents/binario/lbea_c11.pdf

Technological status and development

The following information has been provided by the experts: Eva Beloso (Federación Española de Empresas de Tecnología Sanitaria, FENIN; *Spanish Federation of Healthcare Technology Companies*); Francesc Moya (TicSalut); Martí Martínez (Creu Roja (*Red Cross*); Andreu Català (Technical Research Centre for Dependency Care and Autonomous Living); Daniel López (Universitat Oberta de Catalunya, UOC; *Open University of Catalonia*).

In Spain few advanced monitoring technologies are being used. Instead many security devices or social alarms are widely in use like fall, smoke or gas detectors.

Lately mobile technologies have been implemented to offer services out of home.

Type of Telecare/ Home- based Telemedicine	Description
Panic button	
Geolocation technology (GPS or RFID)	Alerts when the person goes out a established security perimeter
Environment sensors: detection of gas, water, electricity…	
Sensors to determine abnormal behaviour (falls, movements, etc)	
Health monitoring devices	Biosensors, measuring systems, smart tissues, etc. Remote control of chronic patient health, continuous measuring systems with automatic data processing
Staff videoconference systems	

Thanks to the improvements in the world of telecommunications, the advance in the future will be teleassistance based in mobile devices (mobile phones, others).

The most important factor for the development of the teleassistance technologies in Spain is economic. The rapid population ageing motivates the research in devices which despite their high costs are considered indispensable and economical in long term. However the current economic situation has caused that both firms and public administration cannot undertake the necessary investments.

Likewise, the implementation of teleassistance services is also linked to economy since the majority of the users need grants to purchase devices and services.

Thus it is not expected the implementation of the newest techniques and systems in the next years to come but a maintenance and consolidation of the current ones.

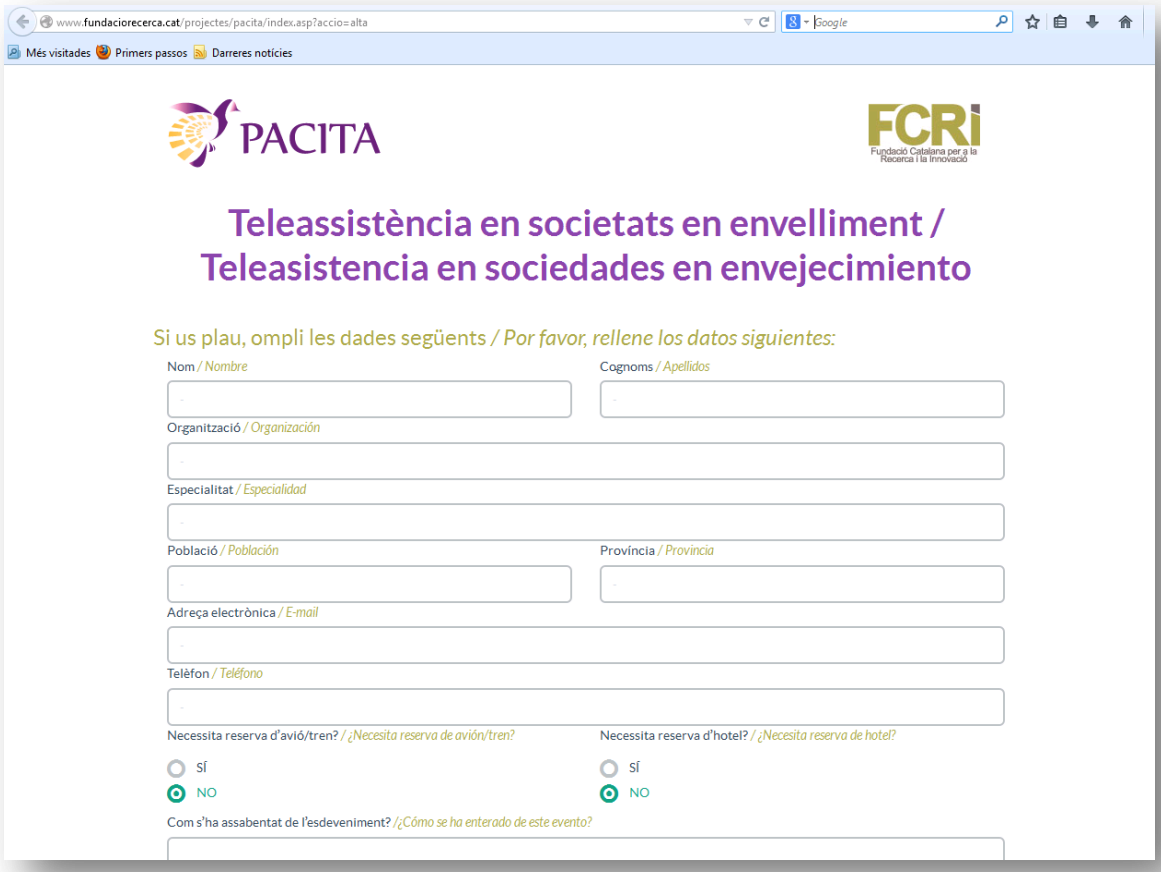
Stakeholder workshop in Spain

Recruitment process and participation

In January 2014 a letter of invitation explaining the scenario workshop was prepared and sent in February by e-mail to people among the following sectors:

- Medical
- Spanish Geriatric and Gerontologic Societies
- Foundations and associations dedicated or representing old people and their welfare
- Universities
- Research centres participating or having participated in telemedicine and/or teleassistance European projects
- Firms providing teleassistance services
- National, regional and local governmental agencies or foundations dedicated to e-health and teleassistance
- Local politicians

The invitation included a link to an application form designed by the FCRi:



Two of the requested data (organisation and speciality) were included to facilitate the classification of the applicants and their distribution among different groups, as devised in the workshop.

The objective was to attract the maximum possible number and the widest variety of professionals linked to ageing and ICT for the elderly in all Spain.

The result was that 61 professionals showed interest and made their applications. From them 16 people had to decline to attend the workshop for labour reasons days in advance and 4 of them the same day, this meaning that 41 people actually attended the workshop (see Appendix A).

All the applicants received full information about the workshop and the project through the website made for the partners in several languages, including Spanish and Catalan: http://wp6.pacitaproject.eu/home/

They were encouraged to actively participate giving their opinions from their own point of view as professionals.

The stakeholders represented were classified and divided into 5 different categories and groups (see Appendix A):

- Public administrations, **group A**: 5 people working in issues related to health and teleassistance for the regional and local public administration.
- Provider firms **group B**: 11 people working in Spanish firms providing Telecare and Teleassistance services.
- Medical sector, **group C**: 8 people among doctors, nurses, physiotherapist, pharmacist.
- Engineering, technology and research, **group D**: 7 professionals working in the ICT sector and in neurosciences and ageing.
- Elderly people representatives, **group E**: 10 people among psychologists and social workers.

As it can be seen, with the exception of group A, the number of attendees on each group is quite similar and representative of the sector.

The absence of lay old people and politicians was significant and even stressed by many of the attendees.

In this regard, it should noted that 2 regional politicians applied two days before the date of the workshop and the FCRi had to inform them that they were welcome but for the correct development and exploitation of the workshop it was necessary that they read all the documents provided by the website. In the end they refused to participate since they had thought that the event was the typical lecture given by a few experts, not a participative one.

Likewise it must be mentioned that the majority of the attendees came from the region of Catalonia: 78%. This was to be expected bearing in mind that the workshop was held in the city of Barcelona and during a labour day, which for potential participants from the furthest corners of Spain meant 2 or 3 labour days spent between the transport and the event itself. In the current context of crisis with the majority of the Spanish organisations suffering from shortage of staff and subsequently an overloading of work this aspect influenced the assistance.

Organisation of the workshop

The stakeholder workshop "Teleasistencia en sociedades en envejecimiento" took place in Barcelona on 29 April 2014 in the FCRi premises: Passeig Lluís Companys, 23.

Agenda:

09.00 – 09.15	Register
09.15 – 09.30	Welcome and introduction to the method
09.30 – 09.45	Introduction to the scenarios
09.45 – 10.45	Workgroup, **phase 1: General reactions to the scenarios**
10.45 – 11.00	Coffee-break
11.00 – 12.00	Workgroup, **phase 2: ¿How woul the reality be in scenarios 1, 2 and 3?**
12.00 – 12.45	Plenary session: presentation of phase 2
12.45 – 14.00	Workgroup, **phase 3: Formulation of the participants' visions**
14.00 – 15.30	Lunch
15.30 – 16.15	Plenary session: presentation of phase 3
16.15 – 16.30	Conclusions
16.30	Coffee-break and goodbye.

The time assigned to the introduction to the method and the scenarios was shortened because the stakeholders had received full information well in advance and to prolong the time for phase 1, which was in our opinion too short.

The workgroup sessions took place in 5 different rooms whereas the plenary session took place in the auditorium.

5 contracted journalists acted as moderators-rapporteurs: Raül Toran, Susana Alcaide, Lorena Farràs, Íngrid Aznar and Mercè Erro. Each conducted 1 of the 5 groups in which the attendees were divided into and took minutes about the issues discussed on a template provided by the FCRi.

One professional photographer was contracted and a video was made with interviews.

In general terms, the workshop ran quite smoothly and according to plan. The attendees participated actively in the debates, with such an enthusiasm that the moderators found it difficult sometimes to centre the debate and put an end to the workgroup. For the FCRi staff it was challenging to stick to schedule.

Owing to a misunderstanding one of the moderators in phase 2 workgroup addressed the wrong scenario, with the result of scenario 2 debated three times instead of twice as it had been planned.

A survey was sent by e-mail to the participants after the meeting. The aspects of the event to be valued were:

- Previous dissemination
- Inscription and information

- Website contents
- Moderators
- Workgroup
- Timetable
- Organisation

Only more than half answered it (58.5%), but the results are very positive[12]:

	Muy negativo	Negativo	Ni positivo ni negativo	Positivo	Muy positivo	Total
Difusión previa del acto	0.00% 0	4.17% 1	25.00% 6	54.17% 13	16.67% 4	24
Inscripción e información	0.00% 0	0.00% 0	8.33% 2	58.33% 14	33.33% 8	24
Contenido de la web	0.00% 0	0.00% 0	4.17% 1	45.83% 11	50.00% 12	24
Moderadores	0.00% 0	4.17% 1	12.50% 3	41.67% 10	41.67% 10	24
Trabajo en grupo	0.00% 0	0.00% 0	4.17% 1	37.50% 9	58.33% 14	24
Horario	0.00% 0	4.17% 1	0.00% 0	58.33% 14	37.50% 9	24
Organización	0.00% 0	0.00% 0	8.33% 2	25.00% 6	66.67% 16	24

These results are in accordance with the spirit and statements made by the participants during the event. Many of them congratulated the FCRi and the PACITA project for organising this kind of activity which they found original and attractive.

The only negative point, which the FCRi shares, is that the time for the workgroup was rather short.

The moderators enjoyed also the experience and even transmitted the organisation their desire to repeat it in future projects.

One of the attendees, Mr. Francesc Moya, was called to be interviewed in a programme of the public Catalan TV called “Espai Terra” (*Space Earth*) to talk about the meeting and teleassistance. It can be watched in this link: http://www.tv3.cat/videos/5051551/Espai-Terra-Dimarts-29-abril (Minute 05.45).

[12] Source: Surveymonkey.

Responses to the scenarios

Scenario 1: One size fits all

General response to scenario 1

This model is the existing one in Spain in general terms. Public administration is responsible for guaranteeing the right of all people to health and social assistance: It is thus the most equalitarian but little realistic in economic terms for the future. A funding model exclusively based on the State public resources is unsustainable. Its functioning depends too much of the financial situation of the country and the quantity of elderly people and their health state and kind of pathologies.

Additionally this scenario is subjected to changing political will, in which there is scarcity of long-term vision owing to the difficulty of planning beyond the four-year duration of the legislative period.

Positive responses to scenario 1

1. Universal coverage is guaranteed to all the citizens regardless their income level
2. Assistance quality is protected by the public administration
3. The infrastructure and staff is already existing and it can be used and adapted to new needs
4. It is the model which integrates better the different territorial, social and health mechanisms
5. There is confidence and proximity to the GPs, the people who know better patients and their social and health needs
6. Technology can be a great ally, in fact there are positive experiences, like intelligent pillboxes. However, e-medicine and monitorization are distant realities at the moment

Negative responses and concerns related to scenario 1

1. The financial feasibility of the system is questionable. There are more and more elderly people and fewer and fewer human and economic resources. It is not a competitive model
2. It is a scenario easily conditioned by the political will and its fluctuations
3. Owing to the influence of political will there is a lack of long-term vision
4. Public Administration is very bureaucratic which can cause slow responses to citizen demands and slow down processes of adoption and/or implementation of new measures, changes and innovations
5. Data Protection Law causes legal barriers, thus a legal framework to guarantee the access to data must be put into practice
6. How can the access to teleassistance, social networks and the Internet be guaranteed to a population mainly digital-illiterate? The State can implement scales but elderly people have very diverse needs which are difficult to standardize

Dilemmas in scenario 1

- Adverse reaction of elderly people in general towards new technologies. Technology is cold and cannot solve elderly people's solitude like humans.
- Current tendency is that of privatisation of services not the reverse

Other issues regarding scenario 1

- There is a need to create a public-private consortium to confront the model funding.

Differences from the groups

All the groups agreed on the unfeasibility of this model in the future, especially the group B members, and that it is the most equitable of all.

Scenario 2: Freedom of choice

General response to scenario 2

It is a model that complements that of scenario 1 and the State should regulate it. The desirable option would be the State having a public minimum system of teleassistance and whoever wanted more services should opt for private options.
Public sector should regulate and private sector should develop the services and technology for it to be feasible.

Positive responses to scenario 2

1. The minimum services for the citizens are guaranteed so nobody is left aside
2. Competence and innovation is stimulated, which boosts better and cheaper technology services. This also contributes to minimize resource waste
3. On the contrary to the former scenario, it offers a high degree of autonomy and freedom to choose. Patients feel more mighty since in the end they choose what, how and when.
4. It facilitates diversity and flexibility of services adapted to the different needs of the people
5. It offers the possibility of the creation of a complementary economic sector in the field of health

Negative responses and concerns related to scenario 2

1. There is a risk of bad practices in both the firms, which must offer a quality system, and the users, who can abuse the system
2. If the minimum coverage is not enough it can cause an increase of inequalities since people with high purchasing power would have access to higher quality technology than people with lower purchasing power
3. At the moment this scenario needs a lot of staff and it is expensive.
4. It can provoke isolation and diminish human contact
5. It is difficult to control by the public administration due to shortage of resources

- Dilemmas in scenario 2Definition of what is basic and what it is not. Who is doing this task? There is a risk that the basic is reduced to the minimum.

- Who should certify the necessary quality standards in the service and access to the technology?
- Technology must facilitate people's autonomy but it can be seen as intrusive. It should thus be considered what it is to be gained and what it is to be lost.
- Users' privacy and data management by the firms is a relevant question.

Other issues regarding scenario 2

- The collaboration between public and private sector is essential.
- A good regulatory framework is needed.
- A code of ethics and responsibility must be followed by all and protected by the public administration.
- Public sphere must be referential, not the private one because in this last case the tendency would be to cut services.

Differences from the groups

All the groups agreed that this model causes inequalities according to the different economic resources of the people, that is, wealthy people get better services than poorer ones. The group A (public administration representatives) stressed the difficulty of the public administration to control the provider firms whereas the group representing the latter (group B) mentioned that an ethical and legal framework by the State is necessary to avoid abuses.

Scenario 3: Volunteering community

General response to scenario 3

It is the most economic and humanitarian of the three proposed scenarios, being it idyllic and the most pleasant of the three for patients, users and providers.
It is also a complement of the other two and it should be stimulated.
For it to be established a change of mentality is essential, but it is not a sustainable scenario per se.

Positive responses to scenario 3

1. It is the most economic and the only possible in case of a deep and protracted economic crisis.
2. It is the most human too and it fosters community participation.
3. It sets out the concept of productive ageing, making the collective feel useful.
4. It works more easily in small settings.
5. The technology is customized, that is, application of new technologies as a mean of aid but without dehumanizing.

Negative responses and concerns related to scenario 3

1. Family support is in crisis nowadays and it is expected to worsen in the future. Society is less and less prone to devote to a cause in exchange of nothing.
2. There exists the risk that families in the end are the ones assuming elderly people's care, thus being forced to take over too many tasks, turning the situation into an unfeasible one.
3. Volunteers are not medical professionals and their knowledge, advice and care could not be the most adequate in many cases. Medical professionals cannot be substituted by volunteers.

4. It is difficult to assess and to control the quality of the service and the received assistance
5. In rural communities this method would be nearly impossible to implement owing to scarcity and ageing of population.

Dilemmas in scenario 3

- The standardization of the system is quite complex owing to the huge variety of services and situations that this scenario enables
- Volunteering versus professionalization, that is where the limit between them should be established
- Family and social values are in crisis

Other issues regarding scenario 3

- Volunteers must be well trained, a "Volunteers Plan" should be established

Differences from the groups

Group C (representatives of medical sector) was a bit critical with this scenario outlying the obvious difference between the volunteers' and professionals' work.

General response to the scenarios

All the groups perceived the advantages and disadvantages of each scenario and concluded that the most desirable option would be a mixed one integrating aspects of the 3 and respecting 3 basic and inalienable principles:

- Universal coverage
- Freedom of market and election
- Regulation by the State

Only one group (group E: representatives of old people) put forward that dementia cases are difficult to be addressed by teleassistance. The emotional part is not covered.

Analysis and synthesis of visions and recommendations from Spain

All the 5 groups expressed similar or complementary visions mainly from the point of view of the elderly people or general citizens.

Overview of visions

Recognition and acknowledgement of individual needs

Visions

"I would like the assistance to be personalised, with quality and adapted to each user's profile, allowing as much as possible independence at home".

Recommendations for these visions

- Teleassistance should provide suitable services adapted to each person.
- Elderly people should always be listened.

Self determination, autonomy and freedom of choice

Visions

"I want to be able to decide how to live my old age with enough quality according to my needs and interests".

Recommendations for these visions

- The right of elderly people to freely choose services and benefits must be respected and guaranteed by public administrations and service providers.
- A mentality change towards a society where elderly people are not passive subjects and more self sufficient should be encouraged through educational and increasing awareness policies. The education system should incorporate the concept of life cycle as a natural thing, so that people's emotional capacity could be developed to facilitate future decision-making in old age.
- Healthy ageing and prevention should be promoted: *"health starts with yourself"*.

Guaranteed basic care provision

Visions

***"Health must be universal without regard to each person's economic resources"* Recommendations for these visions**

- The right to health to elderly people must be guaranteed by the public administration.
- It is important that the access to its services and benefits is easy to simplify people's life.

- Rules and standards avoiding social exclusion (for instance, poor citizens or digital-uneducated ones) must come from the public administration.
- Tax incentives or grants would help.

Participation and inclusion

Visions

"A change in society is necessary"

Recommendations for these visions

- Elderly people should be listened instead of being told what they need. They must be part in the process of creation of new social and health services.
- The necessary measures must be adopted so that elderly people decide where they wish to live and what services they are going to enjoy.
- The technological gap should be addressed with training and information so that the users with limited knowledge or little resources are not left aside.
- Public administration must be more pro-active and less bureaucratic. It should pave the way so that the society can enjoy the best conditions of life possible.
- Professionals and elderly people alike should participate in the process of creation of new applications.

Technology as support

Visions

"The model to be implemented cannot be dehumanised"

Recommendations for these visions

- The presence of technology in geriatric care must be encouraged, not as a substitute of health professionals but as a complement to them.
- Technology must be developed bearing in mind the final user from the beginning. It must be easy to use, understandable and accessible. For this it is important that both professionals and elderly people can participate in the process of creation of new applications.
- People should be informed and become aware of the existing technology and its advantages.
- Technology should be standardised and it must be supported through investments and implementation, be them public or private.
- Technology should contribute to the reduction of economical costs.

Quality assurance

Visions

Not a specific vision was offered for this but a few recommendations.

Recommendations for these visions

- High quality standards and flawless ethics must be required to the provider firms dedicated to the sector.
- Health professionals should act as prescriptors of the existing technology and public administration should assume the necessity of implementing the best technologies.
- Technological solutions have to be designed to the service of people to improve their well-being. They must guarantee assistance, privacy and freedom of election.

Frameworks, organisation, roles and actors

Visions

"Public administration must regulate with a strong and flexible legal framework public and private services in a transparent environment"

"A hybrid model is the option I prefer best"

Recommendations for these visions

- The model should be a mixed one integrating public and private with the support of volunteering.
- Pro-activity in public administration must be fostered.
- Public administration must support research and technology to improve user's life.
- Public administration must create market. For this to be done it is necessary to know which devices or technological advances are useful analysing old people's needs and daily life.
- The model must promote the 5Ps: Prevention, Participation, Pro-activity, Personalization and Prediction.
- Health professionals should have permanent training since information is essential to make decisions and to know in advance the real needs of people.
- To promote volunteering and collaboration among elderly people it is necessary to invest in training and education to obtain a change of mentality.

Alignment with national policies

The visions are in line with the national and regional policies in the defence of a hybrid model in which the public administration makes the regulation and funding and the private firms provide the services.

Inequalities and crisis

The mentioned right to health to citizens independently of their economical situation is indeed guaranteed by the public administrations but in the last years, within the current context of crisis, it has been jeopardized with the introduction of measures like copayment. This could lead in the future to an increasing of the inequality among citizens with different income level and even provoke regional and municipal inequalities.

Paternalism

The main difference between the recommendations and the reality lies in the proposal of a change in society and mentality. Though it has been mentioned in laws, reports, etc the concept of healthy and participative ageing, the fact is that elderly people are not fully listened and taken into account. In this regard, the Spanish society still remains quite paternalistic. This is curious in a country where the grandparents are an indispensable agent in the care and rearing of children owing to the absence of policies reconciling family and professional life.

Appendix A: List of participants in the scenario workshop

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						Phases 1 & 2	Phase 3
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(The moderators-rapporteurs are marked in grey shadow).

Appendix B: Summary of visions and policy recommendations from the workshop

Group 1

VISION 1: The system, public administration must regulate public and private healthcare services in a transparent environment.

Decisions, policies and / or tools for vision 1:

- Transfer of information to a quality public service.
- Encourage pro-activity in public administration.
- Having a mixed model that integrates public and private services.

VISION 2: A change in society is necessary.

Decisions, policies and / or tools for vision 2:

- Recognize that health begins at home.
- Training and education in schools: teaching children and teenagers that one day they too will need help.
- Integrate retirees in decision making and thus benefit from their experience.
- Promoting respect for human dignity.

VISION 3: The model to be implemented cannot dehumanize.

Decisions, policies and / or tools for vision 3:

- Develop policies consistent with the real needs of people.
- Listen to what elderly people want rather than telling them what they need.
- They should be involved in the creation process or the creation of new health services.
- Technology must advance in a rational manner and should treat people as people, not as objects. It is therefore important that professionals and elderly people participate in the processes of creation of new applications based on geriatric care.
- Older people should be treated as people.
- It should be taken the necessary measures to enable people to decide where they want to live when they grow up and what services they are going to have.
- The model should promote '5P': prevention, participation, pro-activity, personalization and prediction.

Group 2

VISION 1: MY OLD AGE

- With autonomy, with privacy, without invasive technologies because when we talk about new technologies an excessive intrusion is confirmed.
- With the support of management companies dedicated to teleassistance to provide for a better patient care.
- With guaranteed quality services and constantly evaluated. Making use of a verified technology.
- With the promotion of personal autonomy. Elders should remain in their surroundings wherever possible.
- With a proper service suiting the elders' needs, without excess but without scarcity.
- With access to services regardless of the economical resources.

VISION 2: ADMINISTRATION

- Must be brave to overcome the reluctance to the introduction of new technologies by the health and social sectors.
- Must be one step ahead. It should not become a drag on the development of new technologies to facilitate the users' life. Administration has to go in parallel with the investigation, cannot paralyze it nor put a spoke in the wheels.
- Must standardize technology and have a firm commitment to it, investing in research and implementation of technology.
- Must listen to the citizens, those truly responsible for their old age and who know better than anyone their needs, rather than the companies providing services.
- The public system has to lead the model whereas the private enterprise has to approach it.
- A high standard of quality and flawless ethics to companies in this sector is demanded.
- A firm commitment to teleassistance and telemedicine is required owing to the advantages in terms of improving health and reducing costs.
- It is required that the technological gap is covered, with training and information so that the user with limited knowledge or little resources is not left aside.
- Administration has to generate market and ensure strict compliance with rules and standards that will not allow that social exclusion.

Group 3

ASPECT 1:

Universal and of easy access and understanding

- Health must be universal, i.e. the Administration must ensure that it reaches all the older people.
- It is important that access is easy, as well as the services and benefits. There is no need to complicate the life of the elderly but trying to make it all more enjoyable and manageable.
- The decisions and policies to achieve this reality must come from the public administration.

ASPECT 2:

A hybrid model

- The natural evolution in Spain, which is already taking place, it is towards a model in which the public health coexists with the private (copayment) and in which volunteerism is gaining strength.
- Before this reality, the Administration must grant, contract or reach agreements with private centres for improving the services offered.
- To promote volunteerism or collaboration among older people it is necessary to invest in training and education, to provoke a change of mindset. Tax incentives also help.

ASPECT 3:

The role of technology

- Should push for increased presence of technology in the geriatric care, not as a substitute for health professionals, but if as a complement.
- Today are using technologies from 30 years ago, the industry is not being able to deploy the existing technology, which is great, because there is no market.
- To generate a market there is a need to investigate first on what devices or technological advances are useful and which are not analyzing the day-to-day running of the older people and their needs. On the other hand, the technology must be developed taking into account the end user from the start and it should be easy to use and to understand and accessible.
- Once there is a good offer, you must create the demand. We need to sensitize and inform people of the existing technology and its advantages. On the other hand, healthcare professionals should also act as prescribers of the existing technology and public administrations must realize the need to implement better technologies.
- When there is already a good supply and demand, the industry will begin to receive returns on their investment and new businesses will be created, which will compete with the already existing, lowering the prices and improving the existing technologies.

ASPECT 4:

Freedom and self-sufficiency

- Older individuals should be free to choose services and benefits. In addition, they must be as self-sufficient as possible.

- These changes require in the first place, a change of mentality: we must move from a society where the elderly expect to be cared for to another where they are most active and self-sufficient.
- One of the main steps to achieve this change is to empower more prevention than cure. For example, a drop in the tub can produce a permanent loss of self-sufficiency and follow-up care; in this case, the best prevention is to change the tub for a shower.

Group 4

VISION 1:

"It would be necessary a preparation and ongoing training of users and practitioners. And that the technology was customized and humanized. Information is essential for decision-making".

Decisions, policies and/or instruments for vision 1:

The educational system should incorporate the life cycle as a natural thing, promoting and addressing all aspects of healthy aging. And undertake an informative plan for decision-making, for people to know the wills in advance.

VISION 2:

"I would like to see the assistance to be customized, of quality and that fit for the profile of each user. I would like, to the possible extent, remain independent in my house".

Decisions, policies and/or instruments for the vision 2:

The portfolio of teleassistance services should be personalized, humanized and of quality. In addition, it should be adapted to the user's profile, allowing above all his independence at home.

VISION 3:

"I would like to be able to monitor the patients in an integrated manner in the system and with added value for a social and health objective".

Decisions, policies and/or instruments for the vision 3:

Change management should be supported through the administration with a public-private support in order to manage the patients' data of the patients in an integrated manner, using only the necessary data to give a good service and not to jam it with unnecessary data.

Group 5

VISION 1:

An elderly man: *"I want to be able to decide how to live my old age in terms of quality of life according to my interests and needs, and on the basis of a few established standards"*

Decisions, policies and/or instruments for vision 1:

- There should be a single clinical history.
- There should be an educational and sensitization policy for the society.
- There should be a single funding.
- New professional figures of emotional support should be promoted.
- There must be monitoring mechanisms to ensure compliance with the law.

VISION 2:

A person working in the sector of the care for the elderly: *"Technology provides a double objective: care for the elderly and support to the caregivers"*

Decisions, policies and/or instruments for the vision 2:

- There must be policies recognizing and protecting the benefits that technology can give to caregivers.
- Adapt technologies to the needs of the elderly.

OTHER VISIONS

- Normalize from the school the old age stage in order to develop our emotional capacity to be able to make the right decisions in advance.
- People should grow old with decision-making capacity and with the help of new technologies.
- Heterogeneity of the ageing population.
- New solutions and services for mental illness and neurodegenerative disorders with the aid of new technologies and the volunteerism.
- The ICT would have to be of support and adapted to the needs of people.
- Provision of services: people have quality of life and well-being. They must have the capacity to make choices.
- New technologies must resolve the needs of the clients (elderly) and family. They must suit their needs. Freedom to customize.
- Strong and agile legislative framework. Public health should be the reference service.
- Design technological solutions to the service of the people by improving their welfare. They must ensure attention, enable to make choices and ensure privacy.
- Technologies should not be used to replace the current model but rather to help to reduce the social, family and health costs. Technologies should give assistance and not only monitoring.

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