

**AAATE**



*International Workshop*

# ***Socio-economic assessment of assistive technology in service delivery practice***

MILANO, ITALY, 25-26 SEPTEMBER, 2008  
POLO TECNOLOGICO  
FONDAZIONE DON CARLO GNOCCHI ONLUS

## **PROGRAMME AND ABSTRACTS**

Nowadays, there is an increasing demand for evidence of the cost-effectiveness of assistive technologies. Policy makers and financing agencies need such information to properly allocate resources, control how efficiently they are used, stimulate the market, identify priority areas for research, understand possible wider implications at an overall societal level; professionals working in health care and social services – within today's climate of accountability calling for evidence based practice - need to know whether their AT choices have proved effective within the rehabilitation programme, useful for the client, and efficient in using resources; industrialists need evidence of the added value their products or services may offer in comparison to those of other competitors; users and user organisations require to be fully involved in decision making processes and bring their expertise in this discussion.

Studies on this subject started to appear in literature quite recently. Most of them are still struggling with fundamental research questions; others work at developing, field-testing and validating specific instruments or methodologies; overall, knowledge has greatly advanced on this topic in the recent years. However, it seems that transfer of such knowledge into policy development and service delivery practice is still in the early stages.

The workshop brings together experts from all over the world that have developed expertise in this subject or are carrying out significant field experiences. The workshop includes invited speakers, round table and discussion sessions. It is intended to give the opportunity to all participants to learn from each other's experience, to investigate how socio-economic assessment mechanisms could be integrated into service delivery practice, and discuss possible roadmaps for all actors involved, including the AAATE, to promote advancement on this topic.

## Thursday September 25, 2008

### **h. 11.30**      **Satellite meetings (restricted)**

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h. 11.00      National contacts pre-meeting (only for AAATE national contacts persons)

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h. 14.00      Welcome and registration

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### **h. 14.30**      **Introductory Session**

\* **Angelo Bazzari** - President of Fondazione Don Carlo Gnocchi Onlus

\* **Representative** of the Regional Government of Lombardy

\* **Renzo Andrich** – Chair of the Workshop

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### **h. 15.00**      **1st Session: Issues and challenges**

**Chairperson: Pierluigi Emiliani** - National Research Council. Firenze (Italy)

This session will discuss general issues and challenges related to the applications of cost effectiveness assessment methods/techniques in service delivery practice, in policies development and in market strategies. The session will include presentations (20' each) by experts offering the research/academy, policy, industry/market and health/social services perspective. A round table will follow giving each speaker the opportunity to comment on each other's viewpoint.

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h. 15.00      Cost-effectiveness of AT: applications and importance in policy development

**Jan Persson**

*Center for Medical Technology Assessment, Linköping University (Sweden)*

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h. 15.20      Evidence of AT outcomes: what can we learn from pharmacoeconomics

**Lorenzo Mantovani**

*International Society for Pharmacoeconomics and Outcomes Research (ISPOR)*

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h. 15.40      The AT cost side: how to measure the social cost of AT interventions ?

**Renzo Andrich**

*Polo Tecnologico Fondazione Don Gnocchi. Milano (Italy)*

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h. 16.00      Outcomes assessment: the missing link

**Gert-Jan Gelderblom**

*Vilans, Hoensbroek (The Netherlands)*

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h. 16.20      Assistive Technology - a bright future in Europe?

**Paul Timmers**

*European Commission, Information Society & Media DG, Unit ICT for inclusion (EU)*

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h. 16.40      Round table

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h. 17.00      Refreshment break

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### **h. 17.30**      **AAATE AGM**

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h. 19.30      Closure

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h. 21.00      Social event: dinner downtown at MamaCafè Restaurant

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**h. 9.00 2nd Session: National experiences**

*Chairperson: Evert-Jan Hoogerwerf – AIAS Bologna Onlus. Bologna (Italy)*

This session will present practical examples of how socio-economic assessment has been implemented in service delivery practice at national or regional level all over the world. Each presentation will be allowed 15'). The purpose of the session is to learn from each other experience and highlight possible critical issues.

h. 9.00 The AT outcome side: what is worth measuring ?

**Jeffrey Jutai**

*University of Western Ontario and Lawson Health Research Institute. London (Canada)*

h. 9.15 Assistive Technology in the Ordinary Living. Cost and benefit studies.

**Ulf Keijer**

*Royal Inst. Technology, School of Architecture and Built Environment. Stockholm (Sweden)*

h. 9.30 Issues with cost-effectiveness analyses of AT based on the ICF

**Ingrid Schraner**

*School of Economics and Finance and Social Justice and Social Change Research Centre, University of Western Sydney (Australia)*

h. 9.45 Economic models for AT service delivery

**Valerio Gower and Massimo Memmola**

*Polo Tecnologico Fondazione Don Gnocchi, and Cerismas Milano Catholic University (Italy)*

h. 10.00 Assistive products in Home Assistive Services: analysis of costs and benefits

**Ricard Barberà**

*Biomechanics Institute of Valencia, Universitat Politècnica de Valencia (Spain)*

h. 10.15 AT-ISI: a tool for quantifying mobility-related AT devices and services

**James Lenker**

*University of Buffalo (USA)*

h. 10.30 Willingness to Pay for Technology: Findings from an Irish Pilot Study

**Aoife Callan**

*Irish Centre for Social Gerontology. Galway (Ireland)*

h. 10.45 Questions time

h. 11.00 Refreshment break

**h. 11.30 3rd Session: The way forwards**

*Chairperson: Renzo Andrich – Polo Tecnologico Fondazione Don Gnocchi. Milano (Italy)*

This session will consist of a free discussion facilitated by study questions. All participants will have the opportunity to contribute. The session will attempt to identify recommendations for possible future actions at national, European or international level that can help improve the quality of AT service delivery systems. The session will also investigate on possible roles the AAATE might play in this field.

h. 12.30 Closing remarks

\* **Anna-Liisa Salminen** - President of the AAATE

\* **Representative of the Italian Ministry of Health**

\* **Furio Gramatica** – Chief Scientific Officer Polo Tecnologico Fondazione Don Gnocchi

h. 13.00 Lunch

**h. 14.00 Post-meeting events**

h. 14.00 Visit to facilities of Fondazione Don Carlo Gnocchi (Assistive Technology Service, Smart Home, Biomedical Technology Department)

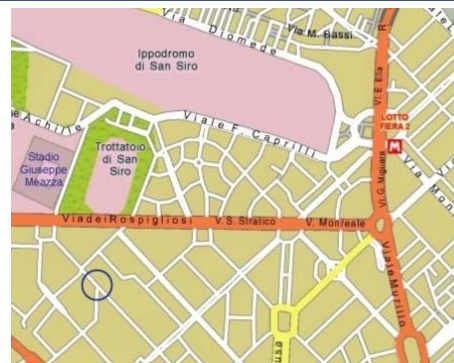
h. 16.00 Conclusion

## Practicalities

### Venue of the Workshop

Centro IRCCS S.Maria Nascente  
Fondazione Don Carlo Gnocchi Onlus  
Via Capecelatro 66, I-20148 Milano

*Location: near San Siro football Stadium and Racecourse*  
*Nearest Metro Station: Lotto*  
*(10' by bus 49 or 20-25' walk)*



*The workshop is held in the premises of the Don Gnocchi Foundation – a large rehabilitation hospital based in Milano, Italy - and is organized by its Biomedical Technology Department (Polo Tecnologico). It will start on Thursday 25 September at 2 pm and end on Friday 26 September at 1 pm. The AAATE General Assembly will be held on Thursday evening, while a guided visit to the Don Gnocchi facilities – for all those interested – will be organized soon after the workshop on Friday from 2 to 4 pm.*

### Venue of the social event

Mamacafè Restaurant  
via Caminadella 7, 20123 Milano

*Location: near St.Ambrogio Basilica and Catholic University*  
*Nearest Metro station: S.Ambrogio*  
*(10' walk)*



### Secretariat

Mrs Cristina Magrone  
Ph +39 02 40308305 fax +39 02 4048919 email [cmagrone@dongnocchi.it](mailto:cmagrone@dongnocchi.it)

### Accommodation

*Those who need assistance in finding hotel accommodation may contact the following Travel Agent:*  
**Raumflug Viaggi**  
*Via Capecelatro, 75, 20148 Milano, ph +39 02 40093806 Fax +39 02 40093807 e-mail [raumflug@tiscali.it](mailto:raumflug@tiscali.it)*

### Attendance Certificate

*Each participant will receive an attendance certificate at the end of the workshop.*

### Workshop Chair

Dr Renzo Andrich  
Polo Tecnologico Fondazione Don Carlo Gnocchi Onlus  
Via Capecelatro 66, 20148 Milano Italy [renzo.andrich@siva.it](mailto:renzo.andrich@siva.it)

## Abstracts of the presentations

### Cost-effectiveness of AT: applications and importance in policy development

**Jan Persson**

*Center for Medical Technology Assessment*

*Department of Medical and Health Sciences, Linköping University (Sweden)*

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#### *The need for rational policy development*

The escalating progress in technological advances and changes in demographics as well as citizens' attitudes and demand for services are factors that have put a hard pressure on the health care system. Only a small part of new innovations can be adopted. The need to allocate resources in an efficient way is increasingly crucial. Basic principles for such prioritization are based on ethical values as well as knowledge of effectiveness and cost-effectiveness.

#### *Evidenced based AT service delivery*

In the field of medicine the evidence base is rapidly expanding. The conscientious explicit use of current evidence in decision making forms the basis for EBM. Meta-analysis of previous studies, reported in the Cochrane and other data bases, provide input in decision making. Through analysis of cost per quality adjusted life years gained (QALYs), ranking based on cost-effectiveness is possible and forms a base for priority setting in health care. A variety of reasons are behind the lack of good evidence for judging the value of AT. This will be discussed at the workshop together with a report of state of the art regarding cost-effectiveness. To summarize, available studies often show that AT delivery is very cost-effective, although the studies are weak. This means a dilemma, where EBM may hamper innovation in the AT field. On the other hand, more studies, better methods for decision making (probabilistic modelling) and revision of evidence grading (see the GRADE system) may support the AT field. It is therefore necessary to discuss how to develop the policy making process. Crucial issues are interaction between researchers and policy makers, stronger involvement from AT developers and manufacturers on the issue of diffusion of innovation, and development of criteria for adoption and implementation of innovations.

### Evidence of AT outcomes: what can we learn from pharmacoeconomics

**Lorenzo Mantovani**

*International Society for Pharmacoeconomics and Outcomes Research (ISPOR), and*

*Center of Pharmacoeconomics Federico II University of Naples (Italy)*

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The aim of health professionals is to provide patients with the best possible care. Unfortunately, in doing this, they face financial and economic difficulties: the demand for health care – because of past successes and because of the emergence of effective new technologies – has often exceeded the available financial and human resources. As a result, health care interventions have been evaluated not only for their quality, safety

and effectiveness, but also for their costs, with the aim of investigating their efficiency. Economic evaluations put into relation costs and consequences of health care programmes and calculate indices of efficiency.

There are three main techniques used in full economic evaluations of health care programmes: cost effectiveness analysis (CEA), cost utility analysis (CUA) and cost benefit analysis (CBA). All techniques address the issue: “which is the cost to reach a unit of effect?”. The main difference among the techniques is the unit of measurement used to quantify the effects. In a CEA, effects are expressed in natural units, such as death avoided or life year gained: a cost per life year gained is a common result of a CEA. In a CUA the effect of health care are usually measured in terms of quality adjusted life years (QALY's), a single index which incorporates information on both quantity and quality of life. A cost per QALY gained is a common result of a CUA. In a CBA, also effects are turned into monetary values, using appropriate, complex methods. A cost to benefit ratio or a net cost are common results of a CBA.

Based on the above, applications of health economic concepts and methods to Assistive Technologies will be discussed.

## The cost side: how to measure the costs of AT interventions

**Renzo Andrich**

*Polo Tecnologico Fondazione Don Carlo Gnocchi Onlus. Milano (Italy)*

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The overall cost of an AT intervention includes product costs (related to purchasing, fitting, using and maintaining the selected AT product) and process costs (related to assessing the client, selecting and delivering the AT product, training the user, following-up, fulfill the related administrative procedures). For a proper understanding of the economic impact of an AT intervention, both components should be analysed in term of “social cost”. The presentation elaborates on the concept of “social cost” as the main indicator of the economic impact of an AT intervention, depicts a possible mathematical model, and describes how alternative AT solutions can be compared in terms of their social cost.

Product costs can be easily estimated by means of the SCAI (Siva Cost Analysis Instrument). It takes into account all costs borne during the product lifecycle including the human assistance – whether formal or informal – needed to operate the device. The social cost of the same AT device may be very different if used in different contexts. A recent study<sup>1</sup> investigated on the possibility to infer repeatable social cost figures for various categories of AT equipment. The first finding is that – not surprisingly – most AT solutions, though very expensive in terms of initial purchase price, lead to considerable savings in social costs, due to the reduced assistance burden. The second major finding is the marked variation in the social costs of different individual cases where similar AT solutions were implemented, suggesting difficulty in establishing repeatable social cost figures for a given device. As a matter of fact, the social cost depend on the individual context of the implemented AT solution, and on its inter-relationship with the other AT solutions composing the whole individualised AT programme.

Process costs can be analysed by tracking the costs borne by all actor involved (the user, the professionals involved, the Bodies responsible) through the various stages of the process: the *initiative*, the *assessment*, the *prescription*, the *authorisation*, the *decision*, the *delivery/verification*, the *use training*, the *follow-up*. A case

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<sup>1</sup> Andrich R, Caracciolo A (2007): Analysing the cost of individual assistive technology programmes. *Disability and Rehabilitation: Assistive Technology*, 2007; 2(4):207-234

study will be presented to show how these costs can be calculated and lead in certain cases to figures that are sometimes of the same magnitude of the product costs or even higher. Process costs are seldom considered as an issue in most AT public service delivery systems: today cost containment strategies are mainly based just on purchase prices negotiation. Conversely, maximising the process efficiency (e.g. by simplifying procedures) and increasing the process effectiveness (e.g. by ensuring high-quality assessment when selecting the product, and monitoring the product when in use to detect the outcome) may also lead to significant savings in AT interventions, while increasing the user's satisfaction and reducing the risk of device abandonment.

## Outcomes assessment: the missing link

**Gert Jan Gelderblom**

*Vilans, Hoensbroek (The Netherlands)*

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Many technologies that mature in the mainstream consumer market can be adopted for applications offering specific support to people with impairments. Part of these applications are indeed developed from a technology driven perspective in academia or Research & Technology Organisations. Unfortunately, most of these applications never outgrow the stage of prototyping. Although the needs of end users are the motivation for initiating such technology development, in practice most of these applications will never benefit the population intended for. This holds true for many domains of technology from high end to low end technologies. After concluding initial usability tests, systems should be evaluated in field trials and ideally subjected to clinical trials.

However, as the comparison with most interventions in healthcare runs dry regarding the methodology to be applied for such testing, the domain of Assistive Technology (AT) faces a major challenge in developing a common methodology aimed at establishing the outcomes of assistive technology. But with the methodology the awareness for the need for such research needs to rise in order to convince policy makers and financiers of AT of the socio-economic need for providing effective AT devices.

To illustrate the role of outcomes research in the acceptance of AT within the established financing structures two examples will be presented. In the first example the research into cost-effectiveness of a robot manipulator is placed in the process towards final acceptance of the device in the Dutch healthcare insurance system. In the second example the absence of cost-effectiveness insights for devices supporting the use of therapeutic elastic stockings led to rejection of the devices despite very strong indications of major potential effects on financial savings and increased independence and user participation.

The lack of financing for provision of AT devices should rather be seen as a consequence of the absence of outcomes research instead of vice versa.

## Assistive Technology: a bright future in Europe?

**Paul Timmers**

*European Commission, Information Society & Media DG, Unit ICT for inclusion*

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The speech will reflect on the future of the assistive technology field in Europe, based on feedback from policy, research and deployment activities at European level and internationally. The audience will be asked for their advice on action to help making that "a bright future for AT" a reality.

## The AT outcome side: what is worth measuring?

**Jeffrey W. Jutai<sup>1</sup>, Graham J. Strong<sup>2</sup>, Hideki Ariizumi<sup>3</sup>**

*1. University of Western Ontario and Lawson Health Research Institute (Canada)*

*2. University of Waterloo, School of Optometry (Canada)*

*3. Wilfrid Laurier University, Department of Economics (Canada)*

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Traditional approaches to economic analysis focus on cost-effectiveness, cost-utility, and cost-benefit, and make assumptions about the valuation of health and functional states that may not be wholly appropriate for users of assistive technology devices (ATDs). Moreover, these approaches are not well-suited to researching models for predicting ATD use and discontinuance.

This paper describes a dynamic programming approach that is compatible with the Consortium for Assistive Technology Outcomes Research (CATOR) conceptual framework for ATD outcomes research and designed to model the process from device selection through to longer-term outcomes.

In the first phase of our investigation, 226 first-time recipients of low vision assistive devices were assessed bi-weekly for 6 months, then monthly for another 6 months. We were able to demonstrate the feasibility of doing dynamic process modeling and obtaining clinically meaningful results. We showed that the expected returns from device use (in terms of the likelihood of continuing to use the device initially received) were greater early within the first year of device use than later on. This model of the relationship between device history and expected return was better supported by the data than a model that predicted the same returns no matter how long individuals had been using their devices. We were also able to demonstrate dissociation between the effects of low vision rehabilitation on functional vision and psychosocial impact of low vision devices. This is important because it had been assumed that vision status alone should predict device use and associated impact on subjective quality of life. We have learned that the dynamic modeling may be improved in several important ways by including more socioeconomic data on the following variables in the next phase of investigation: (a) socioeconomic status, (b) family circumstances (principally, social support), and (c) financial resources of ATD users.



## Assistive technology in the ordinary living: cost and benefit studies

**Ulf Keijer, Greger Sandström**

*Royal Institute of Technology, School of Architecture and the Built Environment, Stockholm (Sweden)*

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In three municipalities in Sweden ten to twenty elderly with acquired cognitive impairment at each location took part in a project on the introduction of assistive technology to ordinary homes of elderly people.

The project aimed to explore the potential of assistive technology to facilitate the daily life of cognitively disabled persons in their own homes. The technology was intended to support the individual and her capacity, and postpone the need for moving to institutional care. Also a few month of postponement could mean a lot, both to the individual's feeling of being treated well and to the societal concern regarding the lack of enough appropriate accommodation and service for the increasing number of vulnerable older people. The typical participant of the project was a person, 60 years of age or older experiencing obvious problems in her daily life due to initial or more pronounced stages of Alzheimer's disease (dementia) or other cognitive disabilities. The applied technologies varied significantly between the individuals. Also, the project aimed to identify organisational and administrative obstacles for the delivery of appropriate services, and, if possible, to find ways to overcome them.

Cost and benefit studies were carried out attempting to quantify the benefit in monetary terms of different assistive equipments aimed to support the individual living on her own or her close relatives. Expertise in various fields related to this comprehensive area was engaged in a study group during a number of meetings in order to attain consensus on a set of open questions. The main difficulty addressed was how to assess the benefit of a specific technology and assign a specific economic value to it. It became possible to show that the applied methodology was productive of assessing appropriate measures to evaluating the pay-off periods for a number of assistive devices

## Issues with cost-effectiveness analyses of AT based on the ICF

**Ingrid Schraner**

*School of Economics and Finance and Social Justice Social Change Research Centre,  
University of Western Sydney (Australia)*

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In a first part the paper outlines three economically relevant dimensions of AT users, namely whether their impairment is constructed as 'disability' or as 'frail elderly', whether the AT system used is a relatively high-cost or low-cost one, and whether the AT user disposes of the funds to purchase the AT system s/he needs or is dependent on other funding agencies and their decisions as to what can be purchased. These three dimensions form a dice, within which a particular AT user can be positioned, allowing us to identify potential clusters among a number of cases studied.

The second part briefly presents the approach to ICF-based cost-effectiveness analyses of AT systems, which is currently undergoing a pre-pilot in Australia. We first define effectiveness as the activities & participation

achieved by the AT user based on the environmental factors present in a particular situation. We then identify the costs of having provided environmental facilitators and removed environmental barriers in this current situation. Our cost-effectiveness analysis then compares effectiveness and costs in the current situation of a particular AT user with those in a situation where s/he has optimal assistance (based on what is technically possible today).

Having outlined the basic approach, the presentation then highlights the conceptual movement that starts with the AT user at the centre of the analysis and his or her activities and participation. The movement is presented as one from a particular activity and participation to others that are also achieved, and from there to other persons who benefit from the same facilitators provided and barriers removed.

The third part briefly highlights some of the key conceptual achievements of an ICF-based cost-effectiveness analysis, in particular its ability to overcome some of the limitations of cost-utility and cost-benefit analyses of AT devices and systems, which tie these forms of economic analyses to normalisation and a medical model of disability.

## Economic models for AT service delivery

**Valerio Gower<sup>1</sup>, Massimo Memmola<sup>2</sup>**

<sup>1</sup> *Polo Tecnologico Fondazione Don Carlo Gnocchi Onlus. Milano (Italy)*

<sup>2</sup> *CERISMAS, Faculty of Economics, Catholic University of Milano (Italy)*

Correspondence address: [vgower@dongnocchi.it](mailto:vgower@dongnocchi.it)

The presentation will offer a preview of the findings of a Study carried out on behalf of the Italian Ministry of Health. A systematic method has been developed to help the National Health Service Ministry to take decisions on the reimbursement amount for each item of the National List of AT products eligible for provision (“Nomenclature”). The method is different for custom-made products (es. individualized orthoses) and for off-the-shelf products (eg. a standard wheelchair).

For custom-made products a spreadsheet has been developed - based on a mathematical model – able to track all physical production factors (eg. time spent by each worker, components and other resources used), value them according to given parameters, add appropriate indirect costs and markup and eventually lead to the product price. The definition of the reimbursement amount involves three steps: the manufactured fills-in the spreadsheet, leading to a proposed price; the Ministry carries out random audits on a sample of manufacturers, by means of on-site visits where the production cycle is observed to check whether it is consistent with the data declared in the spreadsheet; decision is finally taken as whether to accept the proposed price or redefine it on the basis of the audit.

For off-the-shelf products, a price monitoring system has been developed and implemented on the national information database of assistive technologies ([www.portale.siva.it](http://www.portale.siva.it)). The company responsible for the Italian market of each product listed in the database is required to declare – besides the technical data - the product configuration in terms of “Nomenclature” codes and the related prices to the public. Printouts can be obtained from the database showing comparative overviews for each “Nomenclature” code, with the products characteristics and prices distributions. In this way the Ministry avails a transparent tool to negotiate the purchase price of the product, based on comprehensive knowledge of the market prices.

For off-the-shelf products that need individual customization, the cost of the related professional work is calculated separately (through a method similar to the custom-made products).

## Assistive products in Home Care Services: analysis of costs and benefits

**Ricard Barberà<sup>1</sup>, Rakel Poveda<sup>1</sup>, Lucía Fernández<sup>1</sup>, Francisco Ródenas<sup>2</sup>, Jorge Garcés<sup>2</sup>**

<sup>1</sup>*Instituto de Biomecánica de Valencia. Universitat Politècnica de València (Spain)*

<sup>2</sup>*PoliBienestar. Universitat de València Estudi General (Spain)*

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The aim of this presentation is to comment the main results of the project DISAD, funded by the Ministry of Labour and Social Affairs, Secretary for Social Security. During this project the Incorporation of Technological Assistive Products in the extension of Home Care Services were analysed, considering different levels of capabilities (Barthel Scale) and degrees of intervention in the home environment (including low and high cost elements).

One of the key points has been to identify groups of user's needs, related to activities of daily living, not attended by the Home Care Services and where the incorporation of Technological Products could have a greater impact. The selected activities of daily living (ADL) have been: showering and bathing, toileting and transfer to and from a wheelchair. For these three activities three levels of intervention are analysed. From all the possible scenarios we have selected three in order to calculate risk and uncertainty: Actual Net Value and Internal Rate of Return.

## AT-ISI: a tool for quantifying mobility-related AT devices and services

**James Lenker<sup>1</sup>, Laura Shoemaker<sup>1</sup>, Marcus Fuhrer<sup>2</sup>, Jeff Jutay<sup>3</sup>, Louise Demers<sup>4</sup>, Frank DeRuyter<sup>5</sup>**

<sup>1</sup>*University at Buffalo, Buffalo, NY (USA)*

<sup>2</sup>*National Institutes of Health, Damascus, MD (USA)*

<sup>3</sup>*University of Western Ontario, London, ON (Canada)*

<sup>4</sup>*University of Montreal, Montreal, QC (Canada)*

<sup>5</sup>*Duke University, Durham, NC (USA)*

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This session will describe a related experience of CATOR, the Consortium of Assistive Technology Outcomes Research, which is based in the United States and Canada. Conducting socio-economic assessments of AT interventions requires valid methods for measuring AT devices and services, which can then be associated with overall costs. To address this need, we are developing the Assistive Technology Intervention Specification Instrument (AT-ISI), a tool for systematically quantifying mobility-related AT devices and services.

The AT-ISI is being developed over 4 project phases:

1. Achieve a classification of mobility-related AT devices.
2. Achieve a classification of mobility-related AT services.
3. Develop v.1.0 of the AT-ISI for quantifying mobility-related devices and services.
4. Pilot testing and psychometric evaluation of the AT-ISI at selected service delivery sites.

The AT-ISI will offer three benefits:

1. Mobility device researchers will have a common terminology for reporting interventions in a manner that facilitates comparison with other studies evaluating socio-economic outcomes;
2. Mobility device researchers will have a tool for developing AT treatment protocols and assessing the fidelity with which the protocols are administered; and
3. Others may emulate our methodology to develop versions of the AT-ISI that are appropriate for other AT device types (e.g., augmentative and alternative communication) and associated services.

We face 4 challenges that are perhaps common to our colleagues in other countries:

1. Identifying an optimum granularity of our tools – i.e., one that allows detailed specification of AT interventions without placing undue burden on clinical staff.
2. Evaluating the reliability and validity of our tools.
3. Appropriateness of our tools in multiple clinical AT settings (e.g., hospital, outpatient center, work setting, and school district).
4. Generalizability of our tools to countries outside of the U.S.A. and Canada.

## Eliciting Preferences for Technology in the Care of Older People in Ireland

**Aoife Callan, Eamon O'Shea**

*Irish Centre for Social Gerontology, National University of Ireland, Galway (Ireland)*

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In Ireland, as within Europe, informal care has been the cornerstone in long term care provision for older people. The evident changing demographics and increasing female participation in the labour force, however, indicate that reliance on informal care will no longer be a sustainable model of long-term care. As a result, Ireland is looking to innovative solutions, such as Information Communication Technologies (ICT), to assist with the care of older people.

This paper presents the findings of a social-audit of randomly selected participant groups representative of the general population in Ireland. The purpose of the audit was to identify public attitudes to ICT based technology interventions in the care of older people and to test methodological issues associated with stated preference techniques. Each group was presented with scenarios that offer different possible future government actions relating to the care of older people. The scenarios included; a family care grant program, a home care package program and a number of technology based programs covering physical, psychological and social needs. Participants were then asked to state their preferences concerning those actions and asked to value the actions through a dichotomous choice willingness to pay question.

Findings indicate a positive willingness to pay for the technology based programs with strong preferences for the falls prevention technology over cognitive or social connection technology. Participants displayed weak preferences for either of the human care programmes. Findings also suggest that scope effects, information bias and convergent validity should be given strong consideration with regard to evaluating technology using stated preference techniques.