



Engineering and Physical Sciences  
Research Council

## **KT-EQUAL Workshop 2007**

**SAS Radisson, Birmingham**

**5 October 2007**

### **1. Background**

Over the last ten years the EPSRC EQUAL (Extending Quality of Life) initiative has supported a broad range of research into the contribution that design, technology and engineering can make to social inclusion, especially of disabled or older people. At present the programme consists of three consortia that are due to run until 2011.

From 2001-2004 the initiative also funded an EQUAL network to sustain the burgeoning research community. Related to, but not part of EQUAL is the joint BBSRC-EPSRC activity SPARC that began in 2005 and is currently due to finish in 2008. SPARC holds a wide range of networking events and supports capacity building awards for new investigators.

The response from the community has suggested that it is essential that the programme of networking and workshop events initiated by the EQUAL network and SPARC is continued. Additionally it has been recognised that there is an increasing need to champion the outcomes of EQUAL and EQUAL-related research in order to maximise its impact on society. As a result of this EPSRC is proposing to support a new activity, KT-EQUAL (Knowledge Transfer for EQUAL).

### **2. KT-EQUAL Workshop**

In early October 2007, researchers involved with SPARC, EQUAL or EQUAL-related research were invited to attend a one day EPSRC scoping workshop on KT-EQUAL (a list of delegates is provided in [Annex 1](#)).

The aim of the workshop was:

- To present the proposed structure for KT-EQUAL to the research community, offering them an opportunity to comment and suggest improvements.
- To get the research community's input into the topics and areas that KT-EQUAL should focus its networking and championing activities.
- To canvas views on other elements of support that should be included in the framework of KT-EQUAL.

### **3. Workshop Programme**

The workshop agenda can be found in [Annex 2](#). Details of the sessions are provided in the following sections.

#### **3.1 What is KT-EQUAL?**

The workshop started with an introductory talk by EPSRC outlining the envisaged objectives and structure of KT-EQUAL. As presented, the objectives of the new KT-EQUAL activity were:

- To promote the two-way flow of knowledge between the EQUAL research base and its users and to support processes whereby present and future EQUAL-type research can be well-linked to the problems of EQUAL users.
- To support the follow through to full impact of the outputs of the EQUAL programme.
- To promote EQUAL-type research to a wider set of research communities with the intention of increasing its profile and participation.
- To promote EQUAL-type research to broader policy and user communities with the intension of maximising its impact upon society.

It was proposed that KT-EQUAL would be run as a consortium with:

- A Consortium Director who would be responsible for the overall management and vision of KT-EQUAL.
- A family of networks relating to particular researcher / user communities. Each network would have an appropriate leader who would be responsible for a programme of workshop activity in their topic area.
- A number of "Champions" who would be responsible for promoting EQUAL-type research to a broader range of researchers, users and policy makers.
- Flexibility allowing for the inclusion of other important activities, such as follow-on support.
- A strong advisory group with high user representation and clear links with relevant bodies and charities.
- Strong links with the three existing EQUAL Consortia.

### **3.2 Experiences from the EQUAL Network and SPARC**

Peter Lansley provided extremely useful contextual information during a presentation on his experiences as the Director of both the EQUAL network and SPARC. Some of the main achievements of these activities were highlighted, as well as the important lessons that had been learnt.

Looking to the future the importance of working together as a community, advocacy, as well as maintaining and increasing the research variety were discussed. Other avenues that could be pursued were also identified, for example, engaging with stakeholders such as the other research councils, development agencies and charities.

### **3.3 Networking Activities**

Workshop participants were split into groups and asked to discuss potential networking topics that would represent both existing areas of the EQUAL portfolio and topics likely to become significant in the future.

*Networks were defined as an opportunity to promote two-way discussions between EQUAL researchers, users and stakeholders, with new thinking as the main output i.e. "talking with".*

The suggestions from each group where presented during a plenary session and after clustering and prioritisation, thirteen potential networks were identified:

- [The Older Workforce](#)
- [Mental Capacity](#)
- [Independent Living](#)
- [Livelong Health and Wellbeing](#)
- [Methodologies](#)
- [Rehabilitation and Self-management](#)
- [End of Life Care](#)
- [Oldest of the Old](#)

- [Product Design](#)
- [Intergenerational Issues](#)
- [Exploitation](#)
- [Learning and Knowledge Sharing](#)
- [The Physical and Social Environment](#)

For each of the identified networks participants were then asked to consider:

a) why the topic was important, b) what the priority objectives of the network should be and c) who the relevant stakeholders were. The outputs of this session are shown in [Annex 3](#).

### **3.4 Championing Activities**

In the proposed KT-EQUAL structure it was suggested that there should be a number of "Champions" in the KT-EQUAL consortium. These "Champions" would be responsible for a programme of activity aimed at promoting EQUAL-type research to researchers, users and policy makers who were not currently involved or engaged with work in this area. Although the participants recognised the importance of advocacy and the need to raise the profile of EQUAL research, queries were raised about whether employing "Champions" would be the best way to facilitate this. Workshop attendees were therefore asked to consider: a) How Championing should be done and b) what needs to be Championed. The outputs of this session are produced below:

#### ***How should Championing be done?***

- Championing activities should capture and communicate to all stakeholders the key messages from the research community and the KT-EQUAL networks (integrate, translate and disseminate).
- Championing by theme needs to be done at a variety of different levels which will require different sets of skills and approaches (i.e. Vertical integration supported by horizontal consolidation):
  - Increase public awareness by engaging with the general public, the media and users – this requires media skills.
  - Advocating EQUAL research to policy makers and lobbying government (especially at a high level) – this requires political skills.
  - Informing industry, designers, product developers and healthcare practitioners of the outcomes of research – this requires technical skills.
- Championing is a special skill and it requires committed and charismatic individuals. It should be done with passion, however there needs to be a realistic view of the potential limitations of our work. There should be a best practice or exemplars providing guidance to avoid the risk of overselling.
- Different types of people maybe needed to perform the different kinds of championing:
  - In some cases researchers in the field will be best placed to promote their work. Individually many researchers already do this but perhaps it needs more co-ordinated.
  - In other forums active researchers may not be the most appropriate people to co-ordinate the championing activities due to time constraints and lack of experience. There may be a need to buy in expertise, this function is too important to rely on goodwill alone. Where this is the case there should be as short a link as possible to researchers.
  - In each case there needs to be a clear plan and approach.

### ***What should we be Championing?***

- SPARC, EQUAL and EQUAL-related research should be advocated by demonstrating the contribution that it could make in 5, 10 and 50 years time. Government should be steered to prioritise health and wellbeing “investing more ageing less”. Aim to make a difference in practise through policy changes.
- New ways of working in engineering research that forge links between societal needs and deliverable results should be encouraged.
- Help to demonstrate to end-users that technology can help solve problems it does not have to be “scary”, complicated or inaccessible.
- Education is crucial to inspire the next generation of researchers and practitioners, thus helping to maintain the momentum in a small research community.
- The ethos of EQUAL and SPARC should be promoted and integrated into the relevant industries, for example *via* undergraduate and postgraduate exchanges with industry and designers.
- Stereotypes of ageing should be challenged, targeting all the relevant parties, including older people. Ageing is not an illness and will affects us all; therefore topics like: “ageing well”, “valuing ageing”, “positive ageing” should be promoted were the possibilities not the limitations are the main focus.
- Inclusive living is an important theme that involves work relating to social inclusion, planning and inclusive design. This has the potential to enhance the quality of life of people of all ages but requires both education and implementation.
- Independence in long-term disability should be promoted.
- Championing the value of EPSRC EQUAL and SPARC. The marketing and branding of EQUAL and SPARC is valuable.

### **3.5 What else should KT-EQUAL do?**

The proposed structure of KT-EQUAL retained a great deal of flexibility, allowing for the inclusion of other activities that were deemed to be necessary or important by the research community. Due to the emphasis that KT-EQUAL will have on knowledge transfer and exploitation, the consortium is also expected to have a fundamental role in providing follow-on support for projects that have previously been funded through EQUAL and SPARC.

Therefore in the penultimate session of the day participants were asked to consider the questions: a) “What else should the KT-EQUAL consortium do?” and b) “How should the follow-on support for previous EQUAL and SPARC projects work?” The results of this session are given below:

#### ***What else should the KT-EQUAL consortium do?***

- Links should be developed with the Technology Strategy board and the relevant Knowledge Transfer Networks (such as the Healthcare technologies KTN) as well as with the NHS and NIHR.
- The consortium should link in with the industry contacts provided by the three EQUAL consortia.
- KT-EQUAL should maintain contacts with industry, overcoming problems associated with engaging with replacement staff when personnel move or leave.
- Help to ensure that the researchers’ and end users’ voices are heard when technology priorities are being developed.

- Link with the relevant charities, NGOs, professional and public bodies.
- The consortium should help to maintain the experience pool in this research community by:
  - Providing a portal that contains the details of all researchers that have been involved in EQUAL and SPARC projects.
  - Recapturing 'lost' researchers who are no-longer doing EQUAL-type research but have experience in this field.
- A mentoring scheme could be set up to capture and pass on to new researchers the experience and expertise of leaders of past and present EQUAL projects.
- Small grants could be provided to facilitate exchange visits and collaboration between different research groups.
- Small travel grants to attend conferences could be issued to encourage new researchers and students to engage fully with the research community.
- Topic driven events should be organised. These may lie outside of the remit of the identified network areas.
- KT-EQUAL should look at assessing the impact of EQUAL and EQUAL-related research on industry, policy and society. Case studies, stories and other anecdotal evidence should be collated to support this.
- Showcase events should be organised to champion and demonstrate the impact of SPARC, EQUAL and EQUAL-related research.

***How should the follow-on support for previous EQUAL and SPARC projects work?***

- KT-EQUAL should assist the two-way flow of knowledge from business to university and from university to business. Mechanisms similar to Knowledge Transfer Partnerships (KTPs) could be used to facilitate this.
- A best practice or exemplars for collaborating with industry could be developed.
- Technology transfer awards could be offered to help develop product demonstrators and invest in producing technological developments in emerging areas.
- Help should be offered in identifying commercial markets, putting together economic arguments and sound business cases. This help could be provided in the form of training for researchers or by supplying independent expertise in this area.
- The use of technology translators should be explored.
- KT-EQUAL could offer support to researchers who are looking to set up spin-out companies – this could be by providing useful links with funders / venture capitalists.
- Follow-on support should allow us to revisit technology and engineering that resulted from earlier EQUAL and SPARC projects but has never been fully developed.

**3.6 Closing Discussion**

In the final session EPSRC gave a presentation on the next steps i.e. the process for putting together the KT-EQUAL consortium. Attendees were informed that a workshop report would be published and that the outputs from the workshop would be used to develop an open call for expressions of interest that would be issued in November. Applications would be invited for:

- The role of Consortium director
- Network Leaders
- Leaders of other activities (this could include championing)

Subsequently the expressions of interest would be used by a panel to identify key members of the consortium. This group would be invited to put together a single consortium bid that would be developed ready for submission and assessment in the spring / summer of 2008.

### **EPSRC Contacts**

Dr Louise Tillman  
Portfolio Manager  
Engineering Programme  
[louise.tillman@epsrc.ac.uk](mailto:louise.tillman@epsrc.ac.uk)  
Tel: 01793 444510

## **ANNEX 1**

### **KT-EQUAL Scoping Workshop**

#### Attendees List

Dr Arlene Astell	University of St Andrews
Dr Andrew Atkinson	London South Bank University
Dr Simon Brownsell	Barnsley District General Hospital
Professor Peter Buckle	University of Surrey
Dr Jane Burridge	University of Southampton
Dr Andrew Clark	EPSRC
Professor John Clarkson	University of Cambridge
Professor Roger Coleman	Royal College of Art
Professor Leela Damodaran	University of Loughborough
Dr Matthew Davis	EPSRC
Dr Nigel Harris	University of Bath
Professor Julianne Hanson	UCL
Dr Peter Hedges	EPSRC
Dr Helen Hunt	EPSRC
Dr Laurence Kenney	University of Salford
Professor Howard Kirby	Napier University
Professor Peter Lansley	University of Reading
Dr Shaun Lawson	University of Lincoln
Dr Joanna Leaviss	University of Loughborough
Dr David Loudon	Glasgow School of Art
Dr Sue Mawson	Sheffield Hallam University
Dr Rachel McCrindle	University of Reading
Professor Gail Mountain	Sheffield Hallam University
Dr Charles Musselwhite	University of The West of England
Ms Judith Torrington	University of Sheffield
Professor Roger Orpwood	University of Bath
Dolly Parkinson	EPSRC
Mrs Verity Smith	University of Reading
Prof Christopher Tweed	Cardiff University
Dr Louise Tillman	EPSRC
Dr Sam Waller	University of Cambridge
Professor Catharine Ward-Thompson	Edinburgh College of Art
Dr Tricia Ware	Sheffield Hallam University
Dr Katie Williams	Oxford Brookes University

## **ANNEX 2**

**EPSRC**

Engineering and Physical Sciences  
Research Council

### **KT-EQUAL Scoping Workshop**

**Friday 5<sup>th</sup> October 2007, SAS Radisson, Birmingham**

- |              |  |
|--------------|--|
| <b>10.00</b> | Registration and coffee  |
| <b>10.30</b> | Introductions <ul style="list-style-type: none"><li>• What is KT-EQUAL?</li><li>• Peter Lansley - <i>Experiences from the EQUAL Network and SPARC.</i></li></ul> |
| <b>11.00</b> | Networking and Championing – Part 1<br><i>Discussion of potential topics / ideas for Networks and Championing Activities.</i>                                    |
| <b>12.00</b> | Tea and coffee   |
| <b>12.15</b> | Networking and Championing – Part 2<br><i>Clustering and prioritisation of topics.</i>   |
| <b>13.00</b> | Lunch  |
| <b>13.45</b> | First Open Market Session<br><i>Exploration of the themes identified during the morning session.</i>   |
| <b>14.30</b> | Second Open Market Session<br><i>Exploration of the themes identified during the morning session.</i>  |
| <b>15.15</b> | Tea and coffee   |
| <b>15.30</b> | Structure and support<br><i>Discussion on what else KT-EQUAL should do and the arrangements for follow-on support.</i>   |
| <b>16.00</b> | Round-up   |
| <b>16.45</b> | Close  |

## **ANNEX 3**

**DISCLAIMER:** Discussions on these Network topics was held during an Open market session, contributors may therefore not have been involved in all of the discussions presented here.

<b>1. The Older Workforce</b>		
<b>Why is it important?</b>	<b>Priority objectives</b>	<b>Who should be involved?</b>
<ul style="list-style-type: none"> <li>- Changes in demographics are leading to an ageing population and workforce.</li> <li>- Socio-economic pressures mean that people need to work longer e.g. pensions, benefits.</li> <li>- Ageing related health issues are impacting workers e.g. reduced mobility.</li> <li>- Lack of access to employment for the older worker is also an issue.</li> <li>- Older workers are necessary for a sustainable economy.</li> <li>- Societal issues e.g. work ethic.</li> </ul>	<ul style="list-style-type: none"> <li>- Establish and raise awareness of the value of the older worker.</li> <li>- Influence company level change.</li> <li>- Increase the mobility of older workers.</li> <li>- Address the gap between those that purchase work equipment and those that use it.</li> <li>- Improve the health of older workers.</li> <li>- Address the need to redesign the workplace.</li> <li>- Design of work packages /tasks to suit the older worker.</li> </ul>	<ul style="list-style-type: none"> <li>- CBI</li> <li>- Industry bodies</li> <li>- SMEs</li> <li>- Unions</li> <li>- Research community</li> <li>- Relevant government bodies</li> <li>- Large organisations</li> <li>- Users (i.e. the older worker)</li> <li>- Design professions e.g. architects and engineers</li> </ul>
<b>Contributors:</b> Peter Lansley, John Clarkson, Peter Buckle, Joanna Leaviss		

<b>2. Mental Capacity</b>		
<b>Why is it important?</b>	<b>Priority objectives</b>	<b>Who should be involved?</b>
<ul style="list-style-type: none"> <li>- Living with learning disabilities, mental health problems and dementia are a long-term problem.</li> <li>- Changes in social attitudes are leading to greater inclusivity.</li> <li>- New technologies can provide more independence.</li> <li>- Availability of new drug treatments and pharmacological management.</li> </ul>	<ul style="list-style-type: none"> <li>- Maximising and extending peoples' autonomy and ability to make decisions for themselves.</li> <li>- Offer the independence to travel and transport.</li> <li>- Maintain the independence of the person and their family, friends and colleagues.</li> <li>- Enabling people to be safe within their home and the external environment through innovations in technology.</li> <li>- Forward / long-term planning: prevention of deterioration, consider social / financial costs, prepare for changes for individuals and policy.</li> </ul>	<ul style="list-style-type: none"> <li>- People with cognitive impairments and their families</li> <li>- Specialists from memory clinics</li> <li>- People with technical / ICT skills</li> <li>- Paid and unpaid carers</li> <li>- Links with clinical trials / research</li> <li>- INVOLVE</li> <li>- Government policy and decision makers</li> </ul>
<b>Contributors:</b> Paul McCullagh, John Clarkson, Roger Orpwood, Gail Mountain, Jane Burridge, Arlene Astell, Peter Buckle, Rachel McCrindle		

<b>3. Independent Living</b>		
<b>Why is it important?</b>	<b>Priority objectives</b>	<b>Who should be involved?</b>
<ul style="list-style-type: none"> <li>- People who suffer from chronic conditions are now being treated at home.</li> <li>- The ageing population means that this will be an area of increasing importance.</li> <li>- Increased standard of living has raised our expectations.</li> <li>- Resources are available to support independent living.</li> <li>- There is a current NHS policy drive in this area.</li> <li>- There is need for user driven innovation – inclusive design.</li> <li>- Critical to have effective user engagement in shaping their environment.</li> <li>- We now have some of the necessary technology to make a difference.</li> </ul>	<ul style="list-style-type: none"> <li>- Understand the changing needs and context of independent living</li> <li>- Understand what responses are required i.e. Design, clinical etc.</li> <li>- Bring producers and users closer together.</li> <li>- Balance the needs of the different stakeholders (users / carers).</li> <li>- Consider the ethics involved in this area.</li> <li>- Enabling autonomy with social connectivity through improvements in design and technology.</li> <li>- Consider the design of living spaces.</li> <li>- Consider travel, transport and driving issues.</li> <li>- Consider the role of usable / wearable devices.</li> </ul>	<ul style="list-style-type: none"> <li>- International</li> <li>- Partners</li> <li>- Carers</li> <li>- Service providers</li> <li>- Leisure industry</li> <li>- Architects</li> <li>- Engineers</li> <li>- Designers</li> <li>- Professional bodies</li> <li>- Users (self-help)</li> <li>- Educators</li> <li>- ICT developers – produce ‘context aware’ systems</li> </ul>
<p><b>Contributors:</b> Gail Mountain, Rachel McCrindle, Peter Lansley, Paul McCullagh, Sue Mawson, Charles Musselwhite, John Clarkson, Roger Orpwood, Sam Waller, Simon Brownsell, Arlene Astell, Leela Damodaran, Jane Burridge, Katie Williams</p>		

#### 4. Livelong Health and Wellbeing

Why is it important?	Priority objectives	Who should be involved?
<ul style="list-style-type: none"> <li>- Public health demands are changing especially with the epidemic of obesity, the increase in the cases of diabetes, changes in diet and work / life balance.</li> <li>- We need environments that will support healthy lifestyles, promoting both mental and physical health.</li> </ul>	<ul style="list-style-type: none"> <li>- Studying the positive aspects of growing older.</li> <li>- Enabling people to maintain activity, i.e. being able to do the things you like.</li> <li>- Enabling access to "nature" and natural environments especially restorative environments.</li> <li>- Understanding social roles in communities e.g. norms, stereotyping and their impact.</li> <li>- Understand the importance of maintaining social networks.</li> <li>- Using creativity – engagement with art, music, gardening etc.</li> <li>- Using positive psychology, looking at independence, autonomy and the perception of control of the surrounding environment.</li> <li>- Look at the role that sexuality plays in lifelong health and wellbeing.</li> </ul>	<ul style="list-style-type: none"> <li>- Health protection agency</li> <li>- Behavioural psychology therapists</li> <li>- GPs</li> <li>- Leisure centres</li> <li>- Entertainment industry</li> <li>- U3A</li> <li>- The media,</li> <li>- Nutritionists</li> <li>- Food manufacturers</li> <li>- Planners and designers</li> <li>- Department of Health</li> <li>- Sport scientists</li> <li>- Schools</li> <li>- CM&amp;S</li> </ul>
<p><b>Contributors:</b> Nigel Harris, Rachel McCrindle, Roger Orpwood, Peter Buckle, Judith Torrington, Jane Burridge, Charles Musselwhite</p>		

<b>5. Methodologies</b>		
<b>Why is it important?</b>	<b>Priority objectives</b>	<b>Who should be involved?</b>
<ul style="list-style-type: none"> <li>- This is an opportunity to share ideas, data, expertise and best practise.</li> <li>- Better value for money can be offered when methodologies are shared – this avoids unnecessary repetition.</li> <li>- It will help when communicating with users, practitioners and policy makers etc.</li> <li>- This will be useful when the impact and success of this type of research is being assessed.</li> <li>- There is a need to discuss what constitutes “useful” or usable evidence and to produce robust methods that are accepted by all parties.</li> <li>- There is a need for longitudinal studies.</li> </ul>	<ul style="list-style-type: none"> <li>- Learning from each others best practise and mistakes.</li> <li>- Sharing different approaches to user involvement in user-centred design.</li> <li>- Working through ethical issues together.</li> <li>- Facilitating a better understanding of statistical methods and their potential utility (e.g. with the statistics society).</li> <li>- Understanding each others research frameworks, methods and values.</li> <li>- Discuss the best ways to communicate information to different audiences.</li> <li>- Using epidemiological and demographic data to build socio-economic business cases.</li> <li>- Explore the use of new technologies.</li> </ul>	<ul style="list-style-type: none"> <li>- Multitude of academic disciplines</li> <li>- Professional bodies</li> <li>- Public bodies</li> <li>- Institutions</li> <li>- Users and user groups</li> <li>- NGOs</li> <li>- Charities</li> <li>- PhD Students</li> </ul>
<p><b>Contributors:</b> Chris Tweed, Nigel Harris, Jane Burridge, Charles Musselwhite, Lynne Mitchell, Verity Smith, David Loudon, Howard Kirby, Leela Damodaran, Peter Buckle</p>		

<b>6. Rehabilitation and Self-Management</b>		
<b>Why is it important?</b>	<b>Priority objectives</b>	<b>Who should be involved?</b>
<ul style="list-style-type: none"> <li>- An increase in the number of people that suffer long-term conditions means that the idea of self-management and rehabilitation is becoming more important to the NHS strategy. There is a policy drive in this direction</li> <li>- Self-management promotes independence and wellbeing.</li> <li>- Providing people with a choice about the location of the rehabilitation allows them to adjust more readily to change. Self-motivation is also an important factor</li> <li>- Helps to maintain people in their current roles which will minimise the occurrence of depression.</li> <li>- It is possible, some of the technology is available.</li> </ul>	<ul style="list-style-type: none"> <li>- Demonstrating the cost effectiveness and clinical efficiency.</li> <li>- Providing a new model for delivering rehabilitation that will integrate into the current procedures.</li> <li>- Discuss how to design self-monitoring systems that are supportive and usable.</li> <li>- Help to maximise the retained skills / abilities and minimise and mitigate impairments.</li> <li>- Mapping and identifying current expertise and methodologies.</li> <li>- Disseminating techniques and knowledge.</li> <li>- Education of all parties involved e.g. patient, clinics, the workplace and industry.</li> <li>- Examine international issues and current solutions.</li> </ul>	<ul style="list-style-type: none"> <li>- Industry</li> <li>- Patients and carers</li> <li>- The health commission</li> <li>- Service delivering networks</li> <li>- Stroke association</li> <li>-MS society</li> <li>-Professional groups</li> <li>- Occupational therapists,</li> <li>- Physio-therapists</li> <li>- Speech therapists</li> </ul>
<p><b>Contributors:</b> Jane Burridge, Simon Borwnsell, Leela Damodaran, Peter Lansley, Charles Musselwhite, Shaun Lawson, Paul McCullagh, Rachel McCrindle, Roger Orpwood, Sue Mawson, Laurence Kenney, Gail Mountain</p>		

<b>7. End of Life Care</b>		
<b>Why is it important?</b>	<b>Priority objectives</b>	<b>Who should be involved?</b>
<ul style="list-style-type: none"> <li>- Good end of life care is not necessarily available to all older people.</li> <li>- There is still ageism in the provision of care.</li> <li>- It is fundamentally important to both the older person and their family and friends.</li> </ul>	<ul style="list-style-type: none"> <li>- Exploring what qualifies as a good death?</li> <li>- Investigate the support that is available for older people who want to be diagnosed and treated at home.</li> <li>- Look at the role of carers / national health in this situation.</li> </ul>	<ul style="list-style-type: none"> <li>- Hospices and NHS</li> <li>- Carers and patients</li> <li>- Researchers</li> </ul>
<p><b>Contributors:</b> Verity Smith, Arlene Astell, Roger Orpwood, Andres Atkinson, Julienne Hanson</p>		

<b>8. Oldest of the Old</b>		
<b>Why is it important?</b>	<b>Priority objectives</b>	<b>Who should be involved?</b>
<ul style="list-style-type: none"> <li>- With life expectancy increasing, this is a growing area of concern.</li> <li>- There is currently a lack of information available about the need and wishes of the "oldest of the old."</li> <li>- Family members and carers will also be becoming older.</li> </ul>	<ul style="list-style-type: none"> <li>- Emphasise the importance of treating older people as individuals, taking into account their different backgrounds and experiences.</li> <li>- Important to be able to identify and cater for their needs in order to improve their quality of life.</li> </ul>	<ul style="list-style-type: none"> <li>- Service providers</li> <li>- Planners</li> <li>- Demographers</li> <li>- Older people</li> <li>- Researchers</li> <li>- Designers</li> </ul>
<p><b>Contributors:</b> Charles Musselwhite, Arlene Astell, Rachel McCrindle, Gail Mountain, Verity Smith, Judith Torrington</p>		

<b>9. Product Design</b>		
<b>Why is it important?</b>	<b>Priority objectives</b>	<b>Who should be involved?</b>
<ul style="list-style-type: none"> <li>- Many older people become frustrated with both everyday and specialist products due to unintentional design exclusion.</li> <li>- There is a need to mainstream low cost inclusive design solutions as well as better products (removing the stigmas associated with ageing).</li> </ul>	<ul style="list-style-type: none"> <li>- Providing training and support for industries, companies and designers.</li> <li>- Assess business impact for alternative design decisions so industry can make an informed decision.</li> <li>- Develop and communicate a business case.</li> <li>- Influence purchasing decisions for major companies.</li> <li>- Share learning on testing and evaluation.</li> <li>- Improve the availability of usable consumer information.</li> </ul>	<ul style="list-style-type: none"> <li>- Design industry</li> <li>- Researchers</li> <li>- Engineers</li> <li>- End users and associations</li> <li>- Health and social care practitioners</li> <li>- Legal / British standards / ISO</li> <li>- Large scale customers e.g. Government</li> </ul>
<p><b>Contributors:</b> Gail Mountain, John Clarkson, Joanna Leaviss, Sam Waller, Tricia Ware, Leela Damodaran</p>		

<b>10. Intergenerational Issues</b>		
<b>Why is it important?</b>	<b>Priority objectives</b>	<b>Who should be involved?</b>
<ul style="list-style-type: none"> <li>- Our life course involves many different stages.</li> <li>- People take on multiple roles either caring or being cared for during their life and all these categories need to be examined.</li> <li>- Different generations are failing to connect and communicate and often see technology as an added barrier.</li> </ul>	<ul style="list-style-type: none"> <li>- Enhancing interactions between older and younger generations (including within the workforce).</li> <li>- Creating opportunities for positive interaction and co-habiting of space (real and virtual)</li> <li>- Demonstrate that technology doesn't need to be a barrier between the generations but can be used to help communicate and provide care.</li> <li>- Explore how the multi-cultural society that we live in effects these intergenerational issues.</li> </ul>	<ul style="list-style-type: none"> <li>- Users of all generations</li> <li>- Designers</li> <li>- Computer designers</li> <li>- Social scientists</li> <li>- Public bodies</li> <li>- Education, care providers etc.</li> </ul>
<p><b>Contributors:</b> Gail Mountain, Sue Mawson, Tricia Ware, Shaun Lawson, Rachel McCrindle, Catherine Ward-Thompson</p>		
<b>11. Exploitation</b>		
<b>Why is it important?</b>	<b>Priority objectives</b>	<b>Who should be involved?</b>
<ul style="list-style-type: none"> <li>- There are potentially important socio-economic benefits to this research.</li> <li>- It is crucial that "ideas" and "concepts" that result from the research are implemented in the design of technology, services, policy etc.</li> <li>- The research community is motivated by the impact it makes on society.</li> <li>- If there is little exploitation of this research you could ask – what is the point?</li> </ul>	<ul style="list-style-type: none"> <li>- Larger scale evaluations are needed to help quantify the markets.</li> <li>- Providing support for moving from a "proof of concept" to a "product" that could be taken on by industry.</li> <li>- Look at effectiveness / cost effectiveness of technologies.</li> <li>- Identifying and supporting industry champions.</li> <li>- Retaining the knowledge-base in industry despite personnel changes.</li> <li>- Engaging with health and social care purchasers and commissioners.</li> </ul>	<ul style="list-style-type: none"> <li>- Department of Health</li> <li>- Knowledge transfer organisations e.g. Healthcare technologies KTN</li> <li>- Technology Strategy Board</li> <li>- Spin-out organisations</li> <li>- Research funding agencies</li> <li>- Knowledge users e.g. designers, industry and management</li> </ul>
<p><b>Contributors:</b> Charles Musselwhite, Gail Mountain, Roger Orpwood, Roger Coleman, Peter Buckle</p>		

## 12. Learning and Knowledge Sharing

Why is it important?	Priority objectives	Who should be involved?
<ul style="list-style-type: none"> <li>- There is a need to reduce the “ivory tower” vision of universities. Universities need to be re-introduced into the community.</li> <li>- At the moment there are not enough educational programmes using the current knowledge in this field.</li> </ul>	<ul style="list-style-type: none"> <li>- Changing the perceptions and myths surrounding ageing.</li> <li>- Overcoming language and knowledge barriers.</li> <li>- Consolidating the knowledge base and making it accessible to industry / designers.</li> <li>- Develop methods for training industry and educating people.</li> <li>- Help academics link to the appropriate industrial contacts.</li> <li>- Influencing management programmes, design education and health education.</li> </ul>	<ul style="list-style-type: none"> <li>- Health and Social service users and providers</li> <li>- NIHR</li> <li>- Knowledge users</li> <li>- Professional bodies</li> <li>- Industry bodies</li> <li>- Regulators</li> <li>- Policy makers</li> <li>- Charities and NGOs concerned with older people</li> <li>- Older people with a variety of backgrounds and needs.</li> </ul>
<p><b>Contributors:</b> Verity Smith, Peter Buckle, David Loudon, Roger Coleman, Charles Musselwhite</p>		

## 13. The Physical and Social Environment

Why is it important?	Priority objectives	Who should be involved?
<ul style="list-style-type: none"> <li>- Public health concerns are growing.</li> <li>- Rapid changes are occurring in the built and natural environment.</li> <li>- The surrounding environment needs to support a safe, healthy and sustainable lifestyle for all – including older and disabled people.</li> <li>- The built environment, transport and travel systems need to be usable and accessible to people with different requirements.</li> <li>- The environment should promote social inclusion.</li> </ul>	<ul style="list-style-type: none"> <li>- Create enabling environments.</li> <li>- Adapting, recycling, refurbishing or improving existing buildings to cater for the needs of older and disabled people.</li> <li>- Looking at mental wellbeing in the context of the physical and social environment.</li> <li>- Examining coping strategies and risk management for both young and older users</li> <li>- Creating safe and secure environments (perceptions and reality).</li> </ul>	<ul style="list-style-type: none"> <li>- Users</li> <li>- Architects</li> <li>- Engineers</li> <li>- Planners</li> <li>- Designers</li> <li>- Urban sociologists</li> <li>- Developers</li> <li>- Estate managers</li> <li>- DCLG</li> <li>- Local government</li> <li>- Professions</li> <li>- Lobbyists</li> <li>- CPRE</li> <li>- TCPA</li> <li>- CABE</li> </ul>
<p><b>Contributors:</b> Katie Williams, Chris Tweed, Lynne Mitchell, Andy Atkinson, Julienne Hanson</p>		