**inTouch – A video link to reduce social isolation for people with dementia**

This 18 month project is part of Research Councils UK’s Digital Economy programme. The work falls within the “Research in the Wild” call, which is focussed on carrying out research with real end-users in order to understand their needs.

The video link system has been built and tested by BIME (the Bath Institute of Medical Engineering) and the research has been carried out in conjunction with the University of Bath and RICE (Research Institute for the Care of Older People).

The purpose of the work is to design and develop a working video link system that can be used independently by people with dementia to contact someone in another household, in order to reduce their level of social isolation. The intention is to enable interactions which have the effect of a “virtual visit” where people might simply spend time together or show things to each other, rather than having to spend the entire interaction having continuous conversations. The project has three parts:

1. **Three focus groups** have been carried out, to gather views about using a video link, with three different groups: (i) people with dementia; (ii) carers or relatives of people with dementia; and (iii) professionals working with people with dementia. These groups demonstrated the preferences, concerns and hopes of the groups about using a video link system to combat social isolation in people with dementia. These groups highlighted concerns about whether people with dementia could use such a system, and that privacy was paramount.
2. **A prototype video link system** has been developed by drawing together (i) a flexible, open-source video link software platform to allow different approaches to be tried out; and (ii) extensive user testing at a local Day Centre, with carefully structured trials of different features of the video link system tried between a person with dementia in one room and a member of Day Centre staff in another nearby room. This testing phase allowed the complete prototype system to be refined, and re-confirmed that people with dementia can certainly communicate across a video link, and can access the technology independently if the system is appropriately designed. The final video link design is based on a touch-screen with a telephone handset, and has only those features that the volunteers found useful. Some other additional features, such as picture-in-picture, were useable but were simply not required; any required adjustment of seating position were more effectively dealt with using conversation than by using an on-screen self-image for guidance.
3. **Home testing** is being carried out between pairs of houses, where a person with dementia lives in one house and a relative lives in another. This is an essential piece of work which will reveal the benefits and challenges of using the inTouch video link system across a broadband internet connection, as well as gaining insight into the scenarios in which people choose to use the system; it is not possible to tell from short tests how often and for how long the system will really be used, and what it might be used for (e.g. functional interactions, truly social interactions, or any other types). We are capturing the success of the system by carrying out semi-structured interviews with the volunteer participants before and after installing the system in each pair of houses, and by using the system itself to ask for direct input from users after each interaction.

The final stage of the project will be to use novel methods to disseminate the findings, not only to the academic community, but to designers of technology for people with dementia and professionals and family members. This will include online video clips to illustrate how to overcome the specific design challenges, and will help to raise awareness of how best to go about designing in this field and highlight just how capable people with dementia can be if technology is appropriately designed for them.