

# Assistive technologies

## What is their place in the mainstream market?

**In November 2009, KT-EQUAL hosted a workshop in Sheffield about assistive technologies. The main message from the workshop is that there are many different stakeholders with a role to play in ensuring that assistive technologies are re-invented, rebranded and re-launched to match the needs of people living in the 21<sup>st</sup> century.**

The EQUAL programme focuses on extending quality life for older and disabled people. Supported by the Engineering and Physical Sciences Research Council, its researchers have a long history of experimenting with the design and function of different technologies. For example, they have already identified several new ways to make assistive technologies more useful.

Until now, much of this research has been limited to academic journals and conferences, and to developing prototypes. But this is now changing. The time has come for researchers to collaborate with manufacturers and older people, developing new ideas and adapting existing solutions to become more inclusive and appealing.

The workshop aimed to stimulate discussion particularly among people with an interest in this area – including disabled people, older people, manufacturers, researchers, designers, policy-makers and policy implementers. However, in the end the topic is relevant to all of us who wish to live a quality life and a good old age.

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## Introduction to assistive technologies

'Assistive technology' is defined as:

“any item, piece of equipment, product or system, whether acquired commercially, off the shelf, modified or customised, that is used to increase, maintain or improve

functional capabilities of individuals with cognitive, physical or communication difficulties” (described in Cash, M 2003)

“any product or service designed to enable independence for disabled and older people” (Foundation for Assistive Technology)

This includes simple equipment, such as walking-sticks and wheelchairs, as well as very complex devices.

There are many examples of existing technologies and services which fail to meet consumer market expectations. This is partly because of the way items have previously been bought in bulk, through health and social care commissioning, where the main deciding factors have been price and clinical utility. Limited public availability has been another issue, with assistive technologies being distributed only through specialist outlets. This means that manufacturers have had little incentive to improve design, particularly the design of ‘low-tech’ solutions such as mobility aids and bathroom equipment.

But new personalised budgets for social care represent a significant change for policy and practice. People who have social care needs (and who meet the local authority’s eligibility criteria) can now choose the services and goods they want, instead of having these allocated to them. If an assessor agrees that the chosen goods and services meet the person’s needs, and if they are cost-effective, the person can be given money to buy what has been agreed, or a broker can buy them on their behalf.

Pilots are also underway for a similar scheme for health-related goods and services. The scheme will be rolled out nationally if the pilots are successful.

For services to help people with all forms of disability, including age-related disabilities, the implications of these changes are stark. To remain viable, what is on offer has to meet the needs and aspirations of users.

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## Presentations from the workshop

Workshop attendees heard that assistive technologies can make a major contribution to overcoming some of the challenges faced by older and disabled people – but quite often they do not live up to their promise.

## Accounts of issues with assistive technologies

**Christine Barton** provided a graphic description of her disability journey, and the home adaptations and assistive technology she has had to purchase over time to meet her needs, at considerable personal expense.

**Ken Hall** gave a moving account of caring for his late wife who had dementia. The challenges he faced when he helped her with bathing and toileting meant that he had to find his own solutions, some of which were extremely unwieldy. He had not been able to buy suitable equipment.

**John Mitchell** described the need for information so that, as a blind person, he can make the right decisions about what assistive technologies to choose. He also wanted to be able to give feedback to manufacturers about the effectiveness of his purchases.

## New policy

The Transforming Community Equipment Services programme is stimulating change. Led by **Lynne Horn** from the Department of Health, the programme promotes the availability of simple pieces of assistive technology through high-street retailers. People who are eligible for support will receive a prescription and a product catalogue. If the person wants to enhance the service by paying additional costs, they will be able to do so. For complex pieces of equipment, distribution will be managed centrally. Pilots of these new service models are taking place in a number of locations across the country.

**Maggie Winchcombe** reinforced how important it is that health and social care professionals get on board with this new agenda.

## Research and innovation

The mission of the Devices for Dignity ([www.devicesfordignity.org.uk](http://www.devicesfordignity.org.uk)) healthcare cooperative led by **Wendy Tindale** is to foster collaborations between clinicians, researchers and industry in the development of new medical devices. One focus is assistive technologies. The cooperative has already been involved in designing a portable toilet. A video clip of a person with stroke who had stimulated this work highlighted the extremely distressing impact of incontinence due to poor mobility.

**Paul Chamberlain** used current research on bathrooms for people with age-related disability to illustrate how designers, health researchers and older people can work together to identify new solutions and meet needs.

**Ann Pearson** enlarged on the bathroom project and how older people were involved. She described her participation as a community researcher, interviewing older people about their bathrooms.

## Manufacturing and supply

**Nigel Harrison** described some of the challenges facing manufacturers, including getting awareness of products into the mainstream, and the necessary high costs of quality products compared with inferior cheap items.

If awareness can be heightened, the next link in the chain is getting products into high-street outlets. Mangar is a company which has supplied assistive technologies for over 25 years and has previously dealt with local authorities almost exclusively.

**Andrew Stevenson** said that Mangar are having to introduce new strategies so they can supply to retailers such as B&Q. This has involved understanding how the retail sector operates and working with them to establish assistive technologies within their stock, as well as including assistive technologies on their new internet-based shopping sites.

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## What the event demonstrated

Questions and discussion in the workshop emphasised the following points:

- There is a legacy of poorly designed technology and institutional services that need to be updated. The Transforming Community Equipment Services policies are welcomed.
- Many existing technologies are stigmatising. Even though they assist with independence, they do not promote social inclusion.
- Technologies should always have a clear function. It should not be 'technology for technology's sake'.
- Some mainstream technologies, in particular mobile phones, are underexploited by older and disabled people.
- Investment is needed to involve older and disabled people in user-led research into new forms of assistive technology, both simple and complex.

- Although people can make informed decisions about purchase of simple items, more complex technologies will still require a professional assessment.
- There needs to be better information about what is already available and how it can be accessed. The consumer must become informed. Retail also requires better information.
- It is desirable to recycle assistive technologies, but this is fraught with difficulties.
- The challenge for manufacturing and retail is to keep costs reasonable, so that value for money and affordability are promoted – but not to the detriment of quality (including safety).
- A major challenge for manufacturing firms is the need to rapidly develop a business model which can meet the needs of two very different markets: the traditional bulk purchase market of the healthcare providers, which doesn't encourage innovation or quality improvement, and the emerging retail market which operates according to a different set of values.

### Resources and references

Audit Commission (2004): *Assistive technology – independence and well being*. London

Cash, M (2003): *Assistive Technology and people with dementia*. *Reviews in Clinical Gerontology* 13 ,313-319

Department of Health (2007): *Independence, choice and risk: a guide to best practice in supported decision making*.

Department of Health Care network for Personalisation:

[www.dhcarenetworks.org.uk/personalisation](http://www.dhcarenetworks.org.uk/personalisation)

Department of Health Care network for Transforming Community Equipment Services:

[www.dhcarenetworks.org.uk/csed/TransformingCommunityEquipmentService](http://www.dhcarenetworks.org.uk/csed/TransformingCommunityEquipmentService)

Foundation for Assistive Technology: [www.fastuk.org](http://www.fastuk.org)

KT-EQUAL workshop presentations: [www.sparc.ac.uk](http://www.sparc.ac.uk)