ATHENE: Assistive Technologies for Healthy Living in Elders: Needs Assessment by Ethnography

Aims

To produce a richer understanding of the complex and diverse living experiences and care needs of older people.

To explore how industry, health and social care providers can work to create more useful and useable assistive living technologies.
Aims

To produce a richer understanding of the complex and diverse living experiences and care needs of older people.

To explore how industry, health and social care providers can work to create more useful and useable assistive living technologies.
Methods

40 people aged 60-98 (recruited via NHS, social care and third sector) were visited at home several times.

Used ethnography, including cultural probes, to build a detailed picture of participants’ lives, illness experiences and use (or non-use) of technologies.

Hosted workshops to provide opportunities for participants to share experiences.
Supporting bricolage

Participants needs were diverse and unique

Each had multiple, mutually reinforcing impairments (e.g. tremor and visual loss and stiff hands) that were steadily worsening, culturally-framed and bound up with the prospect of decline and death

Installed assistive technologies met few participants’ needs

Successful technology arrangements were often characterised by pragmatic customisation, combining new with legacy devices by the participant or someone who knew and cared about them – ‘bricolage’
Bilal has recently had a landline phone and broadband connection installed. Two of his nephews work in IT; they organised the connection, set up a gmail account, taught Bilal how to use his iPad, laptop and Skype, and are available to fix any problems. His iPad was purchased by a friend and given to him while he was on the stroke unit. He has hundreds of apps and appears to use them competently; many are games or for drawing, and he also has exercise video apps for his arms and legs.

(From case summary of Bilal, age 70, right-sided hemiplegia, stroke)
Eddy [son, carer] used to have a baby monitor which provided some reassurance if Geraldine tried to get up at night or became distressed, but this broke and has not been replaced. The (non-functioning) receivers and speaker still sit in Geraldine’s room. He thinks a similar device (perhaps with video) would make a big difference to their lives... Perhaps it could be fixed so his face could appear on Geraldine’s TV screen. [...] Eddy bought a laptop five months ago and has plans to set it up so that Geraldine can view old photos (which he plans to scan in). He saw a documentary once that said old people with dementia get a lot out of looking at old photos. However, this task has taken low priority and the laptop is currently still in the box.

(From case summary of Geraldine, white British, age 98, severe dementia)
Useable technology solutions often characterised by:

- a high degree of personalisation and adaptation
- most often done by the user or by a member of their informal care network
Supporting bricolage

• How can we assure reliability of technologies subject to the manipulations of bricoleurs, when people’s well-being (and lives) may depend on them?

• Who are the bricoleurs of assistive technologies and what does it take to be one?

• What kinds of skills, what degree of familiarity with the user and context are important, and how can these be mapped onto the available human resources?
Bricolage draws attention to how ‘ageing in place’ is socially and collaboratively accomplished – ‘co-produced’ – by the efforts of both formal (e.g. ALT installers, health and social care departments, call centres) and informal (e.g. family, friends, neighbours) networks of carers.

We need to recognise that ALTs are elements of collaborative networks, tying patients, technology suppliers, family and informal carers, and health and care service providers together.
Co-producing Ageing in Place
Co-design workshops

Ten co-design workshops with service users, their carers, service providers and technology developers:

Four main themes:

- Knowledge and awareness
- Customisation and adaptation
- Information sharing and co-ordination
- Ongoing social support
Conclusions

Ageing in place is socially and collaboratively accomplished – ‘co-produced’ – by the efforts of formal and informal networks of carers and older people themselves.

Technology suppliers and social care providers need to rethink and work together more effectively to support the involvement of users and their networks of informal carers in co-production processes.

