Assistive Technology R&D

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So what’s Assistive Technology?

- Assistive Technology (AT) is any product or service designed to enable independence for disabled and older people.

- (King's Fund consultation, 2001)
So what’s Assistive Technology?

- **Physical needs**
  - Mobility, Wheelchairs, Special Seating, Walking Stick
  - Allows Switch, Eye Gaze, Head-tracking

- **Sensory Needs**
  - Hearing aids, magnifier, Braille, Voice recognition, Text-to-Speech, Navigation systems
So what’s Assistive Technology?

• Communication needs
  – Communication aids, symbol-based systems, synthetic speech

• Cognitive Needs
  – Memory Aids, Alarm systems, Pendant Alarms, Falls Detectors, Smoke, Gas & Water (Flood) Detectors

• Special Educational Needs – dyslexia, autism, dyspraxia
So what’s Assistive Technology?

• Emotional & mental health needs
  – Smartphone support for mental health
  – Monitoring of mood and behaviours
  – Encouraging independence
So what’s Assistive Technology?

- It also includes:
  - More sophisticated support of vulnerable groups (e.g. telecare)
  - People living at home with LTC’s (telehealth)
  - Ambient Assisted Living – Home or Away
  - Brain computer interfaces
  - Robotic assistants at home
So what’s Assistive Technology?

• It also includes
  – Tap turners
  – ‘Magiplug’

• Doesn’t always have to be high-tech!
So what’s Assistive Technology?

• Some people call it:

  • Adaptive technology
  • Personalised technology
  • Etc etc etc…
A little bit about FAST

- www.fastuk.org
- Founded in 1997 to promote AT
- Online database of Research
- ~1500 Projects
- Also list Events, Jobs
- Policy Newsletter
- R&D Newsletter
A little bit about FAST

• Annual Parliamentary Report for DH
• Since 2001
• Analysis of what is going on in Research
• Showcase good Projects
• Examines current govt policy
A little bit about FAST

• Resources about –
• Workforce development
• Service standards
• Managing Memory
• Ageing & Active Living
• Accessing AT information
Research and Development in Assistive Technology?

• Covers many of the areas mentioned
• Always changing in focus
• Once a very wide remit of research
• Across physical, sensory and cognitive needs
Research and Development in Assistive Technology?

• Change because of Demographics

• Keeping people supported, but at home
• Particularly that of the ageing population
• And LTC’s – Stroke, Diabetes, COPD, Sensory

• Still good work being done but some narrowing of focus
Research and Development in Assistive Technology?

• Just Checking
Research and Development in Assistive Technology?

- Mylife Project
Research and Development in Assistive Technology?

- Freedom to Roam Project
Research and Development in Assistive Technology?

- Wii Star Project – Stroke Rehabilitation
Research and Development in Assistive Technology?

- SRS Project – Robots!
Funding

- Primarily obtained through the state
- DH directly
- NHS
- RCUK
- mainly EPSRC
- EU – Horizon 2020
- Local government
- TSB – Technology Strategy Board
Measuring success?

• 1500 projects on FAST website
• About 30 tangible products/services
• Is that bad?
• Purpose of R&D to make products?
• Or to stretch boundaries?
• Blue skies R&D?
• Or should we be ‘innovative’ and focus on products?
• Be more commercial?
Measuring success?

- Funding has become more difficult to get
- More pressures to achieve what?
- What happens after prototype?
Dissemination

- The need to let others know
- Routes to publicity
- Not just journals!
- Not just academic conferences!
- Social media – Twitter, Facebook, Blogs
Thank you!

Any Questions?

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