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Exchanging Knowledge \mid Extending Quality Life
The Challenges of Multidisciplinary working

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24th January 2013
• “believe that novel multidisciplinary research is needed to solve many, if not all, of the next decades major research challenges”
• “stimulate multidisciplinary approaches to research”
• “working with researchers and users to identify important research questions” e.g.
• “how does the UK cope with its ageing population?”
• http://www.rcuk.ac.uk/research/multidis/default.htm
The Sandpit

• NDA - New Dynamics of Ageing
• ESRC, EPSRC, BBSRC, MRC, AHRC
• Nutrition and Ageing - aka “Life in the kitchen”
• Jan 2008 - Northampton
• 21 researchers, 5 days
• At stake £2million - NDA £1m, EPSRC £1m
The process

• Identify key issues in nutrition and ageing
• Foster multi-disciplinary research
• Find others with similar interests and complimentary skills
• Lunch time on Wednesday - nail colours to the mast
The problem

• Current figures suggest that 30% of older people are malnourished

• Current methodologies are inadequate for integrated and extended assessment of nutrition, cognitive, physical and mental health in older people
The project

Two aims:

1. Improve methods for collecting nutritional information from older people using advanced technology to overcome limitations of current pen and paper methods.
The project

Two aims:

2. Develop a comprehensive assessment package integrating nutritional intake with information on health status; ADL; cognition; and mental health to improve the targeting of interventions.
NANA: Holistic approach

- Nutrition
- Physical function
- Cognition
- Mental health
The team

Psychology, University of St. Andrews
  Arlene Astell, Laura Brown, Lin Maclean

Human Nutrition, University of Sheffield
  Liz Williams, Sarah Forster, Claire Timon

HCI, University of Reading
  Faustina Hwang, Alan Godfrey

Medical Engineering, University of Bath.
  Tim Adlam, Hassane Khadra, Simon Halsey
The plan

• Phase 1: User Needs Analysis

• Consultation with a broad cross-section of older people, family caregivers and health professionals who work with older people, to establish what technical approaches would be useful and acceptable to all groups.
The plan

• Phase 2 - Development of Integrated Measurement Toolkit:
  1. Iterative development of assessment technology lead by Engineering and Software Development.
  2. Dietary assessment techniques lead by Nutrition
  3. Cognitive and mental health measure lead by Psychology
  4. Physical function across disciplines
The plan

• Phase 3: Full Validation of the Assessment Toolkit.

• Comparison of the new integrated assessment with traditional 'pen and paper' methods with volunteers having the equipment installed in their homes.
Challenges

• How to get 11 people working together
• Over the first year identified the following key issues:
  • Communication
  • Confidence
  • Respect
• Developed a project management model built around these
Advisory Panel

• Stakeholder representatives to:
• Actively contribute to the project
• Provide sounding board/feedback
• Real-world perspective/reality check
• Getting it out to intended end-users
• Contribute to future developments
Lessons

• Whole project approach
• Need to be proactive
• Provide channels of communication
• Deal with difficult situations
• Importance of social interactions
• Build relationships
• Get everyone on board - joint ownership
COBALT

• Challenging Obstacles and Barriers to Assistive Living Technology
• Working in partnership with wide range of older adults and health and social care staff
• Psychology – St. Andrews
• Human Computer Interaction – Reading
• Human Nutrition – Sheffield
• Ageing – AgeUK (London)
- Investigating Ambient Assistive Living (AAL) technology for people with mild cognitive impairment
- Focus on cognitive stimulation and social participation
- Medical Engineering – Toronto Rehab
- Occupational Therapy – Karolinska Institute
- Gerontology – Simon Fraser (Vancouver)
- Psychology – St. Andrews (Sheffield)
Multidisciplinary approaches to dementia

• Making sure all people are involved – people with a diagnosis, their families and staff
• Three groups each with different needs and perspectives.
• Working within existing teams - obstacles and barriers
• Extending teams – finding and bringing in complimentary skill sets
• Other models for getting people together – hold your own workshop, conference or sandpit
Contact

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