

The Emerging Evidence for Telehealth Interventions: A UK Perspective Medetel April 2010

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telecare services association

Telecare Services Association (1)

- Represents UK telecare and telehealth 'industry'
- 348 members in UK and beyond
 - 243 members managing monitoring and response services
 - 44 supply sector members
 - others with different interests including service commissioners
- Growing attention to telehealth
- Working in closer partnership with colleagues in EU
 - partners in TeleSCoPE project



Telecare Services Association (2)

- Rigorous Service Code of Practice for Telecare
 - audited independently
 - benchmark for service commissioners
 - 133 organisations accredited
- Premier Conference
 - **London** Hilton Nov 15-17 2010
 - forward thinking programme
 - ... embracing telecare and telehealth
 - 800+ participants in 2009!

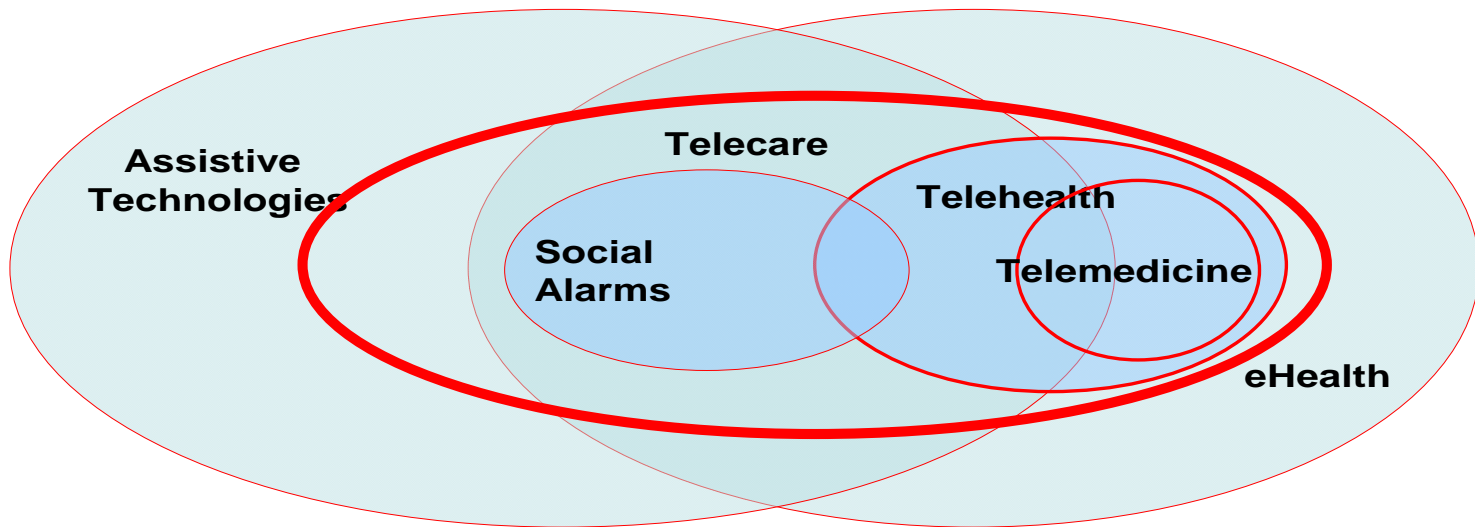


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www.telecare.org.uk

Telecare and Telehealth

Making Sense of the Terminology



TeleSCoPE: Telehealth Services Code of Practice for Europe

- Starts May 2010 led by
 - Health Design and Technology Institute, Coventry University
- Partners in 8 EU countries
- Addressing telehealth in different domains
- Addressing a wide range of user groups in community settings
 - long term conditions such as COPD, CHF, diabetes, stroke, epilepsy, severe mental health, dementia, etc.
 - also people with learning, physical disabilities and sensory impairments, frailty, etc.





- Response and event recognition
 - social alarms, fall detectors and seizure detectors
- Medication compliance
 - pill dispensers and automated prompting
- Disease management
 - vital signs monitors
- Care management
 - including use of activity monitoring
- Health and fitness
 - including use of telephone and video consultation, health coaching
- Enhancing the home
 - including use of environmental controllers and home adaptations

A New Telehealth Evidence Database



www.medilinkwm.co.uk

www.researchatinsight.org



INSIGHT SOCIAL RESEARCH LTD

- Medilink West Midlands
 - not for profit organisation based in Birmingham
 - research and service / project management
 - iHouse (smart home – see opposite)
- New database to be launched in summer 2010
 - of telehealth technologies
 - of evidence regarding their efficacy
 - helping commissioners, policy makers, user organisations
- Research undertaken by Insight Social Research Ltd.

Telehealth Evidence: Key Criteria

■ Database Evidence

□ Relates to TeleSCoPE 'domains'

- embraces telecare and telehealth

□ Derives from robust study / evaluation

- sample size 25+ (allowing for good qualitative input)
- published via sound route (professional / academic journal; government report, etc.)
- 2005 onwards
- resonates with UK experience ... but wider EU relevance



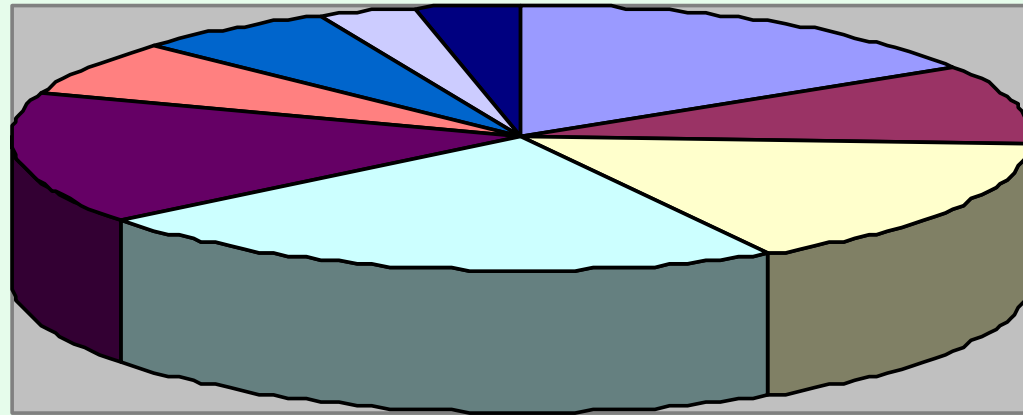
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Telehealth Evidence Gathered (1)



- 30 studies
 - published sources in medium of English
 - 23 of which 2008 onwards; 4 'reviews'
- Most focus on services rather than technologies
 - with links to particular conditions
- Based on practice and pilots in
 - UK (19)
 - USA (4)
 - Italy (2)
 - Australia, Germany, Canada, Korea, Ireland (1 each)

Telehealth Evidence Gathered (2)



- CHF (5)
- COPD (3)
- CHF+COPD (LTCs) (5)
- Generic (7)
- Diabetes (5)
- Dementia (2)
- Frailty / Falls (2)
- Learning Disabilities (1)
- Epilepsy (1)

Note: One study embraces LTCs and Frailty

Telehealth Evidence:



- Generic studies
 - mostly relate to 'telecare' in UK
 - reflects policy emphasis on telecare in UK
 - noteworthy is work in Scotland [*]
- Topic areas
 - services using vital signs monitoring [*]
 - several studies
 - telephone and video-based services
 - information transfer and health coaching [*]
- Related 'theme'
 - self management versus 'control' by others
 - diabetes, epilepsy [*]
 - benefits to users and carers [*]

Telehealth Evidence: UK Scotland Telecare Programme ⁽²³⁾



- Telecare services
 - to 7,900 people thro' specific programme (2007/08)
 - delivered via 32 local partnerships
- Outcomes based on Partnership reporting
 - reduction in hospital admissions (18)
 - speedier hospital discharges (20)
 - avoidance of care home admissions (23)
 - £11 million overall savings
- Source
 - Beale, Sanderson and Kruger (2009)
 - study for Scottish Government

Telehealth Evidence:

UK South East Essex Study (COPD) ⁽¹²⁾

- Service to 53 people with COPD
 - using vital signs monitors
 - daily information to NHS Direct
- Outcomes based on user experience and feedback from community Matrons
 - positive impact on quality of life (73%)
 - reduced face to face contact for users and healthcare staff
 - reduction in admissions
 - reduction in visits to A&E (hospital)
 - extrapolated cost savings of £1.2million over three years.
 - indicator £10.4million saving annually per person with COPD.
- Source
 - Single and Donnelly (2010)

Telehealth Evidence:

US Iowa Study (CHF) ⁽¹⁶⁾

- Service to 148 people
 - via telephone, videophone or 'normal' service
 - weekly contact by nurses for 90 days after hospital discharge
 - average age 69
- Outcomes from nurses assessment and responses to questions
 - no difference in hospital admissions
 - no increase in patient confidence
 - greater understanding shown by 'intervention' groups.
 - telephone and videophone use recognised as option
- Source
 - Wakefield et al (2009)
 - study for US Veterans Health Administration

Telehealth Evidence: UK INPUT Diabetes Study ⁽⁰⁸⁾



- Potential service to 25 people with Type 1 Diabetes
 - for users with insulin pumps (c.8,000)
 - exploring option for downloading information to help management of condition
- Outcomes based on telephone interviews
 - users very 'motivated and pro-active'
 - all preferred managing themselves
 - remote monitoring seen as 'handing over their self-management to someone else'.
- Source:
 - Wilson (2009)

Telehealth Evidence: Ireland Epilepsy Study ⁽⁰⁴⁾



- Service to 45 adults and children with epilepsy
 - relating to bed epilepsy sensor devices
 - remote monitoring
- Outcomes based on personal interviews and postal survey
 - improved quality of life (53%)
 - Improved home environment (74%)
 - huge benefits to carers as well as people with epilepsy
 - concerns re. call routing
- Source:
 - Fisk (2009)
 - study for Fold Ireland & Brainwave Ireland

Telehealth Evidence: Some Observations

- Evidence base still limited
 - especially so when breadth of applications is considered
 - focus on long-term conditions (and monitoring) ... generally older people
 - growing attention to tele- and videophone mediated services
 - focus on coaching and prompting ... all ages
- Outcomes show
 - savings e.g. in relation to hospital admissions
 - people at home are better able to manage
 - improved quality of life
 - importance in meeting key government agendas (at all levels)
 - differences in user views regarding technologies and services
 - scope for further self management subject to service and technology configurations

Telehealth Evidence: The Agenda Going Forward

- Many more authoritative studies needed
 - despite the recession
 - ... because help deliver financial as well as user / carer benefits
- Urgency by which new evidence is needed
 - because of technological change
 - impact of smart metering, set top boxes in the home
 - impact of mobile technologies and new 'apps'
 - Because of social need
 - addressing wider issues of engagement and social inclusion.
.. in context of support at home, rather than in institutions.



Thank You!

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