



Better care through ICT-enabled integration of social and health care

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INDEPENDENT and CommonWell – in a nutshell



- Two projects co-funded under the EU's Competitiveness and Innovation Framework Programme (CIP)
- Supports health and social service innovation activities: Pilots to encourage a better take-up and use of ICT in day-to-day practices



CommonWell

- October 2009 – February 2012
- ICT-enabled cooperation of professional care staff (telecare/telehealth)
- Four pilot sites across the EU (UK/NL/DE/ES)



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- January 2010 – December 2012
- ICT-enabled cooperation of professional carers, family carers and “third sector” players
- Six pilot sites across the EU (IE/UK/NL/ES/GR)

Evaluation approach

- Multi-perspective and multi-method approach
- Mix of design elements to be applied, combining:
 - concurrent/post-hoc
 - before and after
 - repeated measures
 - reference data comparison
 - control group designs
 - qualitative and quantitative

Evaluation framework

Evaluation dimension	Stakeholder perspectives		
	End user/carer	Service provider staff	Organisational
Client impact	X	X	X
Staff impact		X	X
Organisational impact			X
Technology	X	X	X
Integration	X	X	X
Implementation	X	X	X
Global assessment	X	X	X

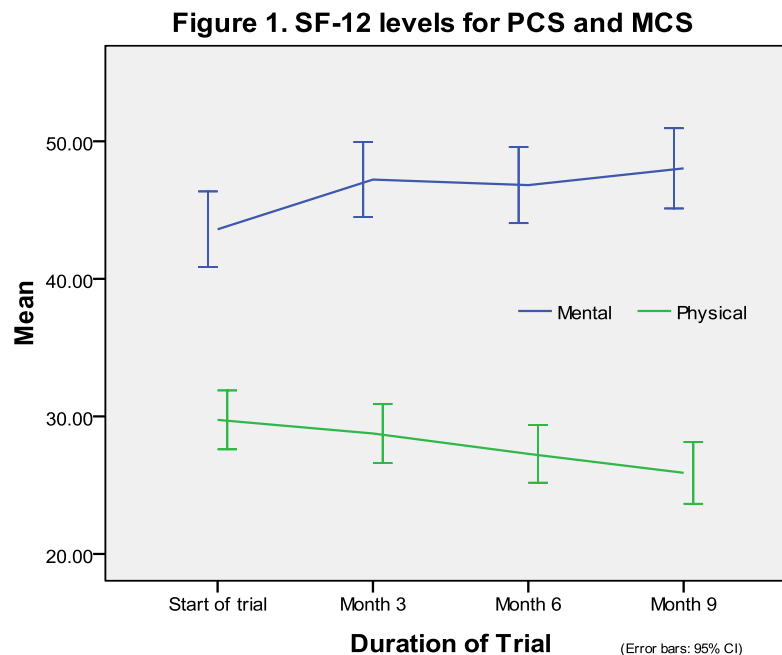
Links to MAST

- **MAST – Model for the Assessment of Telemedicine.**

Domains of MAST	Relevance to CommonWell/INDEPENDENT
Health problems and characteristics of application	Analysis conducted during evaluation planning process
Safety	Included in technology domain of evaluation
Clinical effectiveness	Clinical outcomes where relevant. Mortality, QoL, HQoL, service utilisation
Patient perspectives	Satisfaction, informed consent, disease self-management, ease of use etc
Economic aspects	Separate cost-benefit modelling
Organisational aspects	Work processes, staff impacts, integration, change management, mainstreaming
Socio-cultural, ethical, legal	Conducted during preparatory work of project

Headline results CommonWell

- **Quality of life/self-rated health (NL/UK)**
- UK: overall improvement in SF-12 mental component, deterioration SF-12 physical component.
- **significant (and unexplained) gender differences**



Headline results CommonWell

NL SF 12: no significant difference in SF-12 scores (mental or physical)

- short follow-up period (6 months)
- technical issues affecting responses?
- sample size (129 @ baseline – down to 68 @ 6 months)

Headline results CommonWell

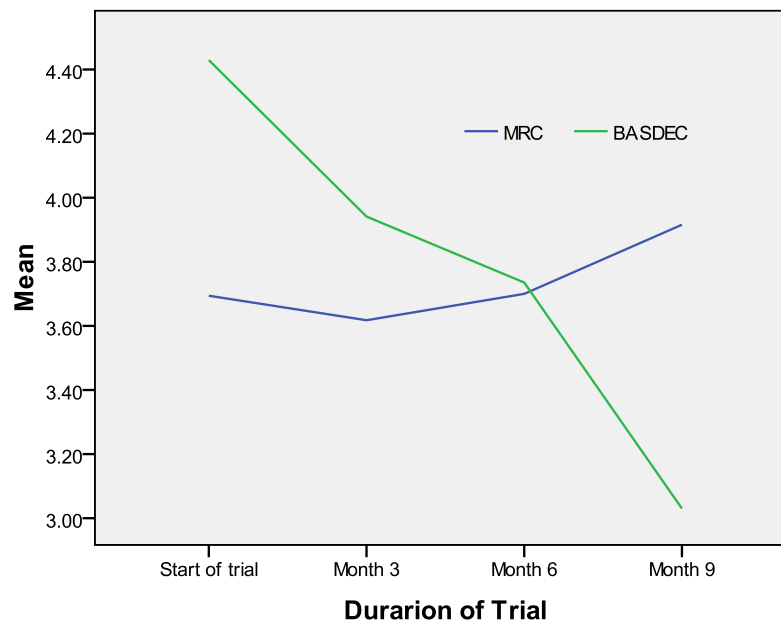
Client outcomes – COPD and depression (UK)

MRC dyspnoea scale: progressive deterioration in COPD

BASDEC depression scale: reduction in depression over time

- *is BASDEC a better measure of psychological impact of Telehealth than SF-12?*

Figure 4. Levels for MRC and BASDEC



Headline results CommonWell

Client satisfaction (ES/NL/UK)

Overall satisfaction very high on the part of clients and carers

Key benefits identified by clients include:

- reassurance
- a sense of security and safety
- feeling looked after, and the
- presence of someone who can help at the other end of the phone
- reduction in anxiety and stress
- increase in confidence.

Headline results CommonWell

Staff impact (ES/DE/NL/UK)

Job performance: positive impact

- improvement in management and care planning process
- increased speed and efficiency
- upskilling, new learning, professional development.

Workload

- initial increase in workload, decreasing over time
- MK staff reported sustained increased workload (technical and admin)
- Andalucía: staff in the health care organisation (EPES) reported increased workload and a range of other issues due to problems with the communication consoles in use.

Headline results CommonWell

Health and social care utilisation (ES/NL/UK)

UK: Client level health and social care utilisation

- Most frequent intervention = patient contacted by phone and advice given
- Clinician self-report hospital admissions avoided (HAA) = 168
 - patient commenced on antibiotics and steroids/medication review
 - definition and interpretation of HAA?
 - number of HAA instances in usual care?

Headline results CommonWell

Health and social care utilisation

Aggregate health and social care utilisation

ES

- average call duration decreased by 67 seconds.
- average number of calls necessary to handle an event reduced from 7 to 4.4.

UK

- increase in phone contacts made by Community Matrons to clients

NL

- no significant effect on mean number of client visits to practice nurse, GP, cardiologist, or hospital admissions

Headline results CommonWell

Organisational impact (DE/ES/NL/UK)

Positive assessment of impact of CommonWell

- improved joint working
- integration across health and social care services
- increased efficiency

Headline results CommonWell

Technology – ease of use (DE/ES/NL/UK)

Mostly easy to use

Certain specific areas of difficulty

- UK: design of thermometer not user friendly
- NL: alarm system difficult to use

Technology – reliability (DE/ES/NL/UK)

Main area of difficulty

- slow system speed
- system freezing/crashing

Headline results CommonWell

Integration (DE/ES/NL/UK)

Positive assessment of integration

- joint working and communication across organisations

Areas for further development

- DE: gap between social care and hospital in terms of discharge planning and notification
- DE: lack of data integration between health and social care systems. Not permitted in DE for health care services to share data with other providers
- UK: delay in setting up integrated data link between health and social care (now in place)
- NL: desire to further develop integrated working, CommonWell = a start.

Headline results CommonWell

Cost-benefit

DE – investment cost reclaimed 1.5 years after pilot. Average SER = 184% over 7 years

ES – investment cost reclaimed 2 years after pilot. Average SER = 54% over 7 years

NL – average WTP = €16.00 per month. Costs recovered via health insurance reimbursement

UK – average WTP = €13.00 per month. Average SER = 28% over 7 years.

General challenges

1. Developing evaluation framework common to all sites while reflecting specific aims and objectives of each site
2. Co-ordinating start dates and timing across sites
3. Developing systems for entering data, translating data and returning for analysis
4. Ensuring rigour and validity in design and analysis

Solutions and positive lessons

1. Buy-in and support from sites facilitates large-scale evaluation
2. Clear evaluation framework enhances both flexibility and comparability
3. Use standardised instruments in parallel with semi-structured qualitative methods
4. Templates and instructions for entering statistical and qualitative data
 - Iterative translation process
5. Qualitative and quantitative standards for reliability and validity



Thank you for your attention

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