



Beyond Silos

**The Why and How of ICT in
Integrated Care Service Provision
A European Conference
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Integrating social care, healthcare and the
voluntary sector: CommonWell and
INDEPENDENT

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The concept of 'integrated care'

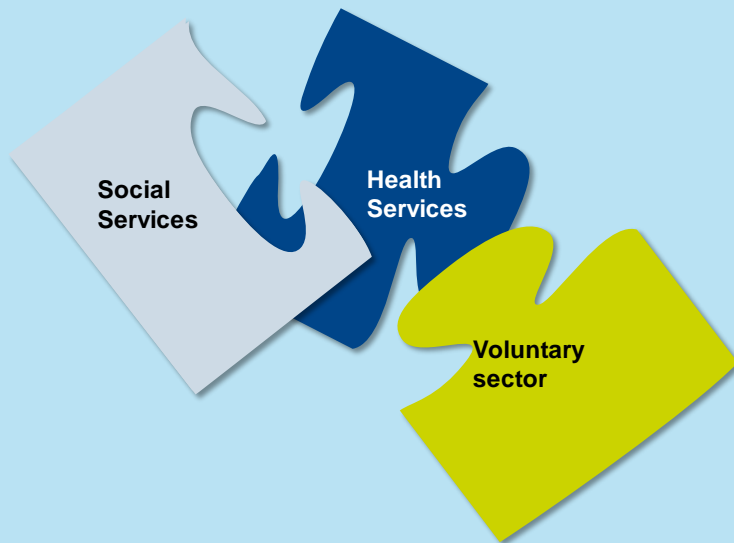
- Yet no standard definition exists
- Generally speaking, integrated care seeks to close the traditional division between health and social care
- Despite recognition of the need for better joined-up support, initiatives tend to be local which often fail to feed back to national policymakers

Why integrate ?

- Better address complexities of older peoples' needs
- Better gear informal and formal care to each other
- Enable better access for vulnerable groups
- Improve system efficiency
- Improve quality of care

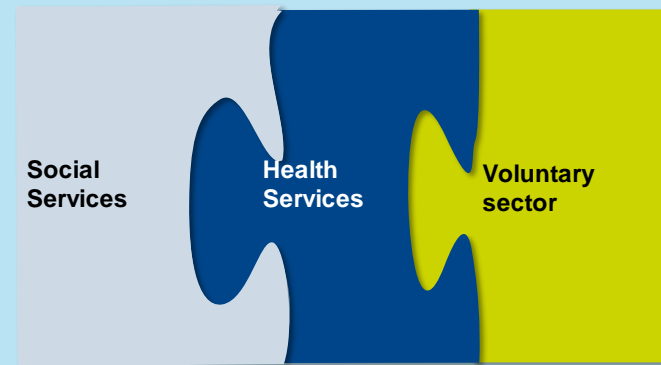
Why integrate?

Today



- Lack of coordination between social, health service and voluntary sector/informal carers
- Duplication of services
- Insufficient economic resources
- Users dissatisfaction

Tomorrow



- Social and health care information transfer
- Improved coordination between services
- Efficient services
- Increase QoL/health/users' satisfaction

Two European projects addressing ICT-supported integrated care provision

- CommonWell & INDEPENDENT



- Both co-funded under the EU's Competitiveness and Innovation Framework Programme (CIP)




- Focus on better joining-up of formal social / healthcare services & strengthening participation of the so called "third sector"
- Service process innovation complemented by adaptation of existing technology according to common principles
- Develop and pilot a set of integrated ICT-enabled services combating common threats to independent living
- Robust evaluation and Cost-Benefit Analysis

CommonWell- Overview

 CommonWell	
Duration	40 months
Start	1st October 2008
Cost	~5 M € (50% funding EU Competitiveness and Innovation Framework Programme)
Pilots	Services provided in 4 locations to different target groups



INDEPENDENT- Overview

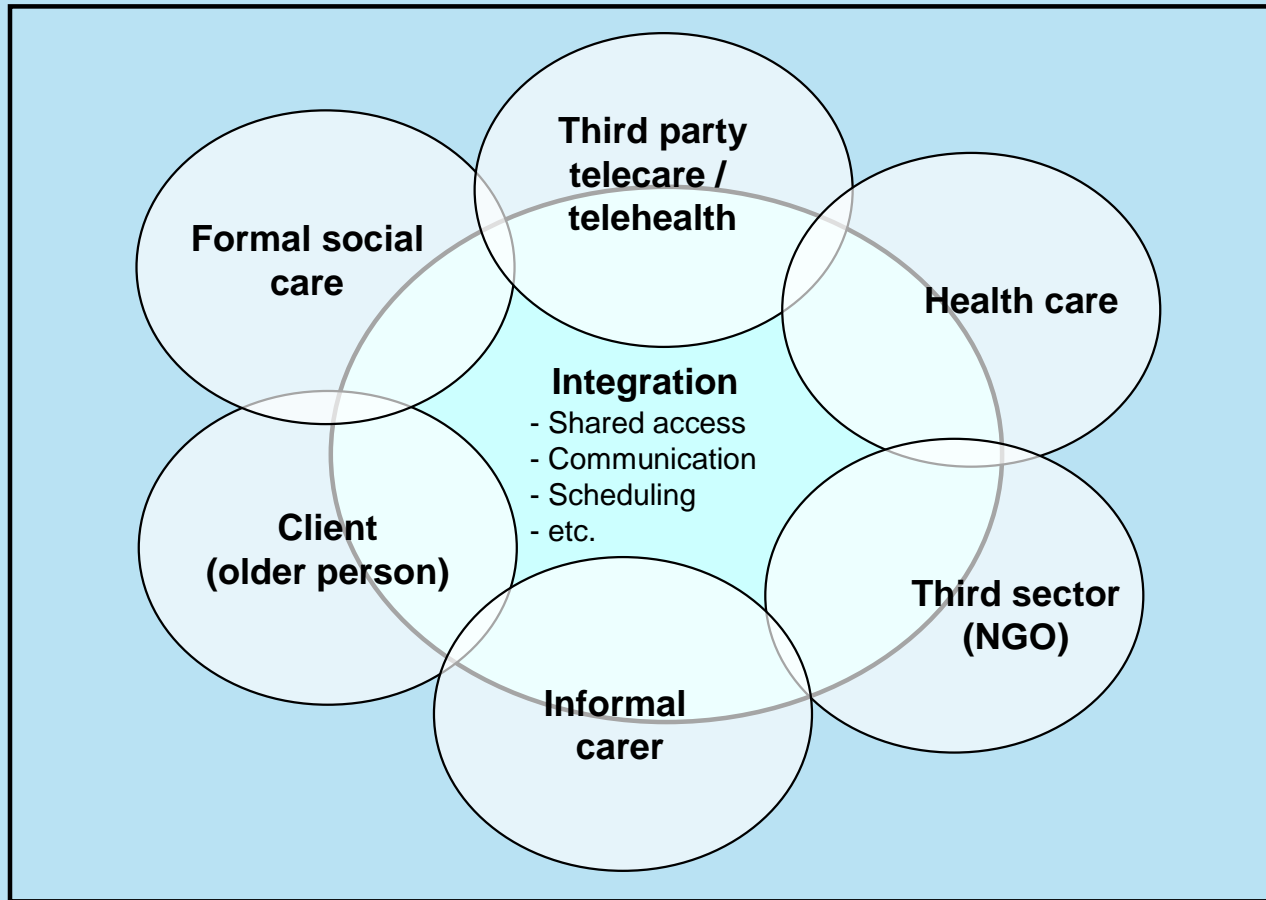
	
Duration	36 months
Start	1st January 2010
Cost	~ 5 M € (50% funding EU Competitiveness and Innovation Framework Programme)
Pilot	Services provided in 6 locations to different target groups



Point of departure

- Joined-up support to older people in the home increasingly considered essential
- Potentials largely unexploited due to organizational silos and missing link into voluntary sector
- Organisational silos reflected in the design and functionality of telecare/telehealth solutions
- A number of providers seeing a need for concrete ICT-supported integrated care services

Integration perspective



The pilots (I)

- Integrated set of ICT-enabled services to be piloted at different sites, thereby taking account of large diversity, both process wise & technology wise
- Pilot sites start from where they are at when developing their digital support infrastructure in line with the project principles
- Common architecture & evaluation framework applied accross all pilot sites

The pilots (II)

Pilot site	Actors involved	Service description	Project
Geldrop	Municipal social carer Pulmonologist Physiotherapist Family carer	Targeted at COPD patients, better coordination of actors involved through EHR, remote exercises for COPD patients	INDEPENDENT
Trikala	Municipal telecare centre General practitioner Family carer, community service providers, psychologists	Support cooperation of community services and family carers, joint access to EHR, enabling psychological counselling	INDEPENDENT
Malaga	Regional telecare centre Regional telehealth centre, Family carer	Closer integration of social care and healthcare services, call transfer, data sharing	INDEPENDENT

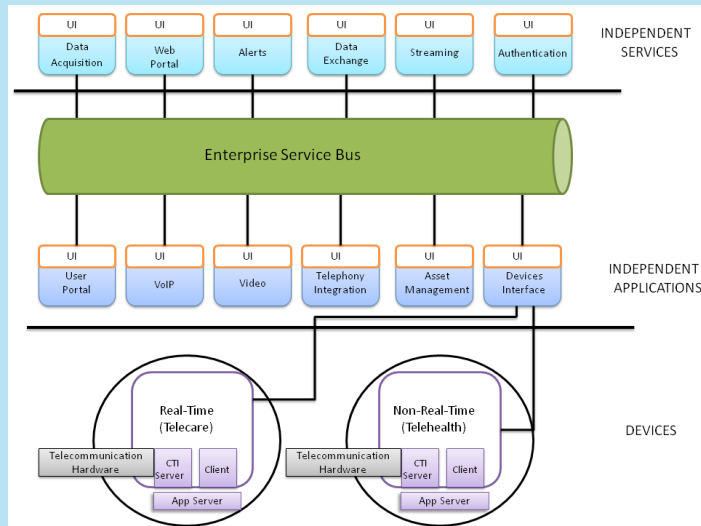
The pilots (III)

Pilot site	Actors involved	Service description	Project
Milton Keynes	Municipal social carer Family carer Voluntary workers	Informal carers and people in need of care can track, monitor and request support from CarersMK, video-supported conversations with CarersMK, widens scope for information advice from informal care organisations	INDEPENDENT
Dublin	National telecare centre Voluntary care organisation Social care provider	Collaboration between Alzheimer Society and Emergency Response through case management tool, allowing advanced care planning as needs are evident	INDEPENDENT
Hull	Municipal social carer Municipal telehealth centre Family carer, voluntary workers Housing association, GPs	<u>Sheltered homes:</u> MUD, monitor for own benefit, monitor chronic condition, informal carer access <u>Private homes:</u> Motiva platform, social function added, relatives and voluntary workers' access	INDEPENDENT

The pilots (VI)

Pilot site	Actors involved	Service description	Project
Malaga	Social care provider, telecare service centre Emergency services, hospital	Instant communication and data transfer between health and social care providers	CommonWell
Bielefeld	Social care provider, telecare service centre Emergency services, hospital	Improvement in information exchange on hospital admissions and discharge	CommonWell
Milton Keynes	NHS, social care provider, community matron, community nurses	Management for older people suffering of Chronic Obstructive Pulmonary Diseases	CommonWell
Veldhoven	Social care provider, GPs, case managers, heart failure nurse	Management for older people suffering of Chronic Heart Failure	CommonWell

Architecture



- Reference architecture
- Open interoperation and granting access to the telecare and telehealth platform to other stakeholders
- Standards observed

Service models and requirements

- Investigation of functional/ non-functional requirements
 - Analysis of legal / regulatory environment in pilot countries
 - Development of use cases for each site
 - Development of service process models
 - Iterative development process and service design
- „Evolutionary“ process towards joined-up service models rather than “revolutionary switch-over”

Use case example

Mildred's family are reassured that her care is co-ordinated and that intervention will be timely and appropriate

Mildred Jones, age 72, lives alone, poor health and mobility . Frequent falls

Community Alarm Installed linked to 24/7 Control centre with Telecare sensors

Mildred calls the community alarm service when going away. This data transfers to CSO so no unnecessary visits are made by clinicians



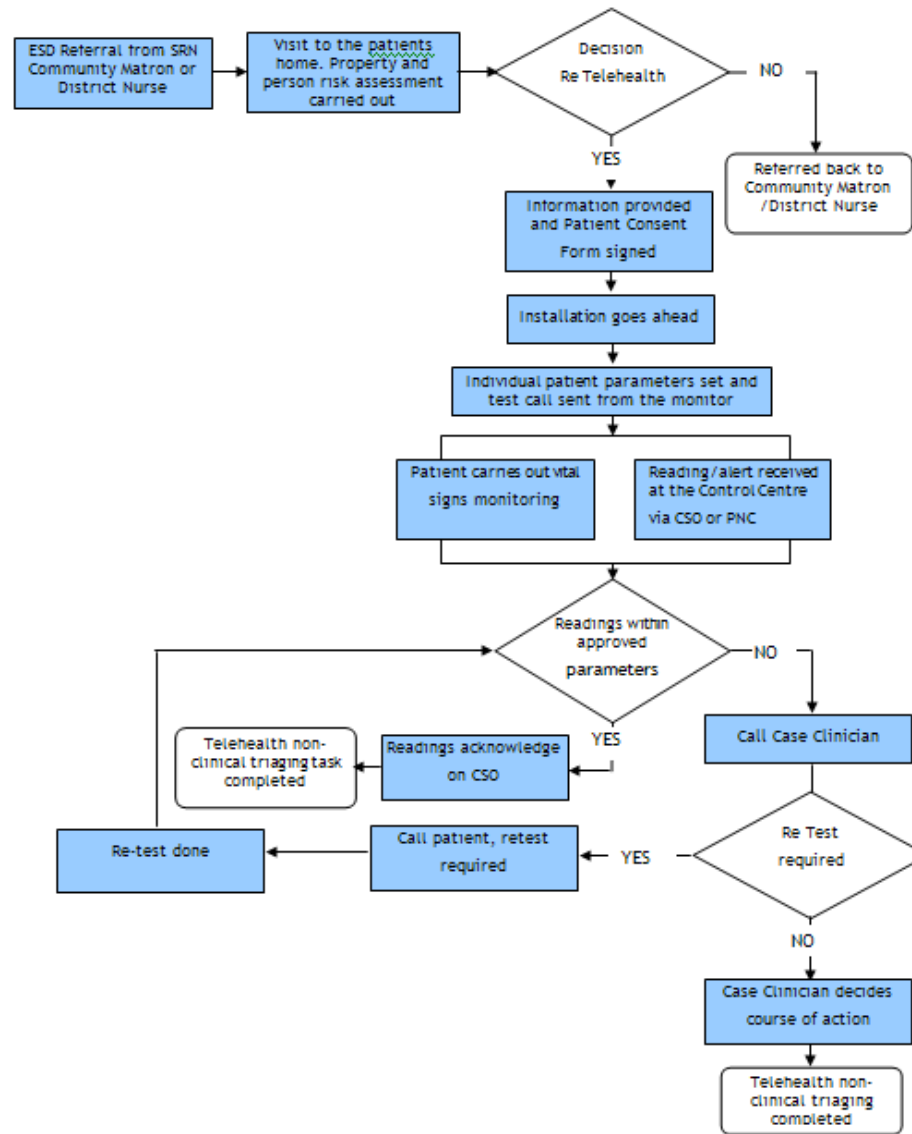
Primary condition - COPD , admission to hospital

Information linked from PNC database to new interface with CSO to give holistic view

Unit installed. parameters set for vital signs and readings commence on a daily basis

Referral made for Telehealth by hospital ESD and information passed to Community matron .

Service process model



Evaluation

Multi-perspective, multi-method evaluations advocated (Heathfield et al 1998)

- Organisational, social and ethical dimensions should have equal focus along with cost-effectiveness and clinical outcomes
- Recommendation: evaluations based on integrated set of methods and strategies AND flexible enough to fit specific projects (Fortin et al 2004)

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

Ensuring sustainable service development

Achieving sustainable services

Analysis of framework conditions

- Legal and regulatory analysis
- Four pilot countries
- Other key markets

Business case modelling

- For wider service provision at the four sites
- Viability assessment
- Cost-Benefit Analysis

Targeted dissemination to policy makers

- In the four pilot countries and other countries



Link to other project activities

Development & implementation


- Applications / components
- Services

Field trial evaluation

- Analysis of
- service costs
 - service benefits

Advisory Boards

- Public Policy Advisory Board
- User Advisory Board



Enlargement of service provision at the four sites beyond pilot scope

Explore potential for provision of CommonWell services in other regions

Project consortia

- Expertise covers the service value chain, technology / process design and evaluation
- Service providers, technology providers / integrators, research institutes

