D7.4 Report on the collaboration with BeyondSilos and CareWell

Work Package 7 Synergy Implementation

Version 1.0 / 30th August 2016

Document information

Abstract

This deliverable reports on the various areas and initiatives in which synergy has been implemented between the three projects about ICT enabled Integrated care funded by ICT PSP.

Key words

Synergy, joint activities, knowledge and experience sharing, mentoring, common tools and policies

Organisation responsible

HIM SL

Author(s)

Marco d'Angelantonio (HIMSL)

Mayte Hurtado (HIM)

Adriano Fernandes (Misericordia)

Sonja Müeller (empirica)

Panagiotis Stafylas

Reviewed by

John Oates (HIMSA)

Dissemination level)

P   Public

Version history

Version	Date	Changes made	By
0.1	19/08/2016	Initial outline, completion of several sections	Marco d'Angelantonio
0.2	30/08/2016	Section 5 updated	Panos Stafylas
1.0	30/08/2016	Version for issue	John Oates

Outstanding Issues

None

Filename

D7.4 v1.0 SmartCare Report on the collaboration with BeyondSilos and CareWell

Statement of originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Executive summary

A series of unplanned but very lucky circumstances have led to a situation in which all the main projects funded by the European Union in the area of ICT enabled integrated care have been won by the same set of core partners. This has facilitated a very high level of synergy among all the initiatives addressing the issue of the ageing EU population, and the changes in the care paradigms which are indispensable to cope with the consequences of such ageing: deterioration of the dependency ration, increased prevalence of chronic conditions, higher citizens' expectations about care services, etc.

Synergy has been achieved in a number of areas and through a number of initiatives which can be grouped into the following categories:

- Sharing of a same management team.

- Adoption of the same methodologies and tools.

- Common publications policy.

- Joint development of predictive modelling.

- Cross-project membership of the Committed Regions Board and of the other Advisory Boards.

- Cooperation in the organisation of mentoring activities.

- Networking and knowledge transfer activities.

In some of these activities, the SmartCare Consortium has taken the lead, while in some other (e.g. mentoring activities) it has followed initiatives launched by one of the other projects.

As a result, it is justifiable to say that the three projects have been run as a single, very large project, and that this has allowed the partners and the European Commission to squeeze out of the three projects much more value for money than what one could have expected.

Table of Contents

1 Introduction

1.1 Purpose of document

The deliverable describes all the areas and all the initiatives which have been implemented to exploit all possible synergies among the three projects, SmartCare, BeyondSilos and CareWell, which are all aimed at deploying at scale and evaluating the impact of ICT enabled Integrated Care using a well-established multi-dimensional evaluation model.

The areas and the initiatives mentioned above have been subdivided according to the following categories:

- Management team.
- Methodology and tools.
- Publications.
- Predictive modelling.
- Committed Regions Board management.
- Advisory Boards membership.
- Mentoring activities.
- Miscellaneous networking and knowledge transfer activities.

A separate section has been dedicated to each of these categories

1.2 Glossary

ASSIST   Assessment and evaluation tools for e-service deployment in health, care and ageing
BS   BeyondSilos
CBA   Cost-Benefit Analysis
CW   CareWell
EU   European Union
ICT   Information & Communications Technologies
MAST   Model for assessment of telemedicine
PDCA   Plan-Do-Check-Act
PM   Predictive Modelling
PSP   Policy Support Programme
RAIL   Risks, Actions, Issues, and Learned learned
SC   SmartCare

2 Management Team

The Management Team for all three projects, SmartCare, BeyondSilos and CareWell, is comprised of the same entities, namely:

- HIM SA, supporting the consortia through their expertise in Operations Management, Medical Coordination and Quality Assurance.

- Empirica, supporting the deployment sites through their expertise in requirements and use case definition, process re-engineering, dissemination coordination, and cost benefit analysis.

- RSD, supporting the deployment sites in the evaluation process using the MAST methodology. Part of these activities have subsequently been transferred to HIM SA and HIM SL which work in synergy with one another.

The team members of the three projects are:

Project role	SmartCare	BeyondSilos	CareWell
Medical Coordination (HIM)	Paolo da Col	Paolo da Col	Panos Stafylas
Operations (HIM)	Mayte Hurtado	Mayte Hurtado	Mayte Hurtado
Quality Assurance (HIM)	John Oates	John Oates	John Oates
Change Management (HIM)	Wouter Keijser (1)	Wouter Keijser (2)	Wouter Keijser (3)
Requirements and use case definition (EMP)	Lutz Kubitschke	Sonja Müller	Jess Vogt
Process re-engineering (EMP)	Lutz Kubitschke	Ingo Meyer	Jess Vogt
Cost-Benefit analysis (EMP)	Ingo Meyer	Ingo Meyer	Reinhard Hammerschmidt
Dissemination coordination (EMP)	Sonja Müller	Sonja Müller	Malte von Tottleben
Site Evaluation (RSD)	Anne-Kirstine Dyrvig Panos Stafylas Paolo Da Col	Signe Daugbjerg	Signe Daugbjerg
Pathway implementation	IFIC	TSB with external mentoring from IFIC as uptake from SC learning	Kronikgune with uptake from SC learning
Guidelines for Deployment	FVG with support from management team	Kinzigtal with support from management team	IFIC with support from management team

(1) Doing site visits as part of SC WP7 Synergy Implementation / Change management Tool Box tasks: sites to be visited are FVG, South Karelia, Kraljevo and Scotland.

(2) Doing site visits as part of SC WP7 Synergy Implementation / Change management Tool Box tasks: sites to be visited are Amadora, Campania, Kinzigtal, and Sofia.

(3) Doing site visits as part of SC WP7 Synergy Implementation / Change management Tool Box tasks: sites to be visited are Veneto, and Lower Silesia.

3 Methodologies and tools

3.1 Redesign of pathways

In all three projects, the approach has been the same, and has used SmartCare as trailblazer in the pathway implementation. All three projects began with requirements and use case definition, then with process re-engineering, to finish with the redesign of pathways to be implemented, showing these in a graphical visual manner.

3.2 ASSIST tool

In all three projects, the approach to business case modelling is the same; this is based on the analysis of service costs and benefits to different actors, taking into consideration the sources of financing and the modelling of the service concept to ensure economic viability. Based on an analysis of the service framework conditions, the costs and benefits to the different stakeholders are identified, suitable indicators are developed, indicators values are collected, and a cost-benefit analysis (CBA) is carried out. The analysis is being done in the three projects using the ASSIST (Assessment and evaluation tools for Telemedicine) tool which has been specifically designed for preparing the CBA of eCare services.

3.3 RAIL tool

The RAIL (Risks, Actions, Issues, Lessons learned) site operations monitoring tool is used to record all risks, issues, actions in response to the risks encountered and issues that arise, and finally to register lessons learned. This tool is supported by Google Docs spreadsheets and was designed by SC WP6 leader (Aragón), and transferred for usage by the other two projects. Each project has used their project design and selected the domains to be monitored; in the SC and BS these are the same and in CW there are some differences. This is because the latter has a more health oriented approach to integrated care than the other two.

3.4 MAST methodology

In all three projects the approach to the evaluation of the various trials conducted is the same, and is based on the MAST multidimensional evaluation methodology, originally developed under contract with the European Commission (MethoTelemed project) and based on HTA (Health Technology Assessment). In the framework of SC, the MAST methodology, originally developed to assess telemonitoring interventions, has been extended to encompass ICT supported integrated care. For each of the three projects, a centralised database has been implemented in Arsenàl.IT (in-house telemedicine competence centre for eHealth) having care of keeping a similar design.

This will allow carrying out the analysis at three levels: local site level, individual project level, and all three projects cross-data comparison level. The last level within the framework of SC is limited to the cross-comparison of baseline data, because BS and CW are still running, and the results of the analysis for these will only be available in the 1st quarter of 2017.

4   Publications

Within the WP7 Synergy implementation activities, an Inter-Project Scientific Faculty has been set up as an *'Informal but agile academic platform focused on producing collective scientific papers'* in an aim to coordinate common publications among the three projects.

The planned publications are listed below:

#	Proposed title	Planning	Status
Main scientific papers			
Paper #1	DG Connect funded projects on information and communication technologies (ICT) for old age people: Beyond Silos, CareWell and SmartCare.	Fall 2015	Submitted → Accepted → In press (in: *J Am Med Dir Assoc*.)
Paper #2	Implementing e-health enabled integrated care for independent living of European elderly: organisational and human factors in a pan-European multi-centre prospective cohort	Summer 2016	Initiation phase (Feb '16)
Paper #3	Results and impact Paper: Projects outcomes.	Fall 2016	
Scientific Papers on EIP eHealth 'Change Management'			
Paper #4a→c	Change Management Papers: key implementation experiences and best practices		
Paper #4a	Indicators and interventions for collaborative excellence during sustainable implementation of e-health enabled integrated care: systematic review.	Fall / winter 2016	
Paper #4b	E-health enabled integrated care implementation for European elderly: a Best Practices based Road Map for Sustainable Implementation	Fall / winter 2016	
Paper #4c	Physician leadership in e-health enabled integrated care implementation	Winter 2015	Submitted (to: *Leadership in Health Services*)

Another common activity is the common Publications Policy which has been approved and adopted by the three Consortia. A copy of this is attached as Annex 1 to this report. The SC Consortium considers that such a Publications Policy could be recommended by the European Commission to future projects.

5 Predictive modelling

This activity is being done in both SmartCare and CareWell. In the case of SmartCare, it is led by HIM S.L. with support from the Basque Country, and in CareWell, the other way around. The approach is slightly different, but the aim is to see the impact of its application in those regions most mature for its implementation.

In SmartCare, the application of predictive modelling (PM) in two of the project deployment sites (FVG and Aragón) is aimed at validating the fact that a mathematic model can predict the outcome of a ICT enable intervention with a good level of accuracy based on the experimental data from another region and an understanding of the parameters which influence the outcome. The identification of these parameters requires the access to data from a large number of sites and the possibility to analyse the difference in outcome of similar interventions in different contexts. This opportunity has been offered by the expected wealth of data collected in the three projects.

In CareWell, on the other hand, the predictive modelling approach is aimed at extrapolating experimental results obtained in a trial which normally has a rather short follow-up period to predict the longer term impact of an intervention. A prototype has been constructed for the Basque Country and it is currently applied in Aragón for further validation. The predictive models developed in CareWell are aimed to become a tool in support of the Deming's plan-do-check-act (PDCA) cycle to manage continuous improvement in integrated interventions over the long.

6 Committed Regions Board management

For manageability reasons, the SC consortia decided to have only nine deployment sites, but not to exclude other regions which had expressed an interest in joining SmartCare. These are hosted under a Committed Regions Board, initially led by AER (Association of European Regions), who, due to economic issues, left project in July 2015, and since then led by Kronikgune, part of the Basque, which is also the Coordinator of CareWell. Through their participation in the Board, these regions have first-hand access to all the methodologies and tools developed by the Project, e.g. for the purposes of implementation requirements elicitation and cost-benefit analysis, as well as to all other outputs generated by SmartCare. Although the Committed Regions are not expected to implement the SmartCare services during the Project lifetime, most of them have completed the templates for requirements and use case definitions developed in the framework of SmartCare, and have embarked on the re-engineering of their care processes. As Figure 1 below shows, practically half of the deployment sites of BeyondSilos and CareWell are also members of the SmartCare Committed Regions Board. This is one of the main reasons why the deployment sites of BeyondSilos and CareWell could go live so much faster than those of SmartCare.
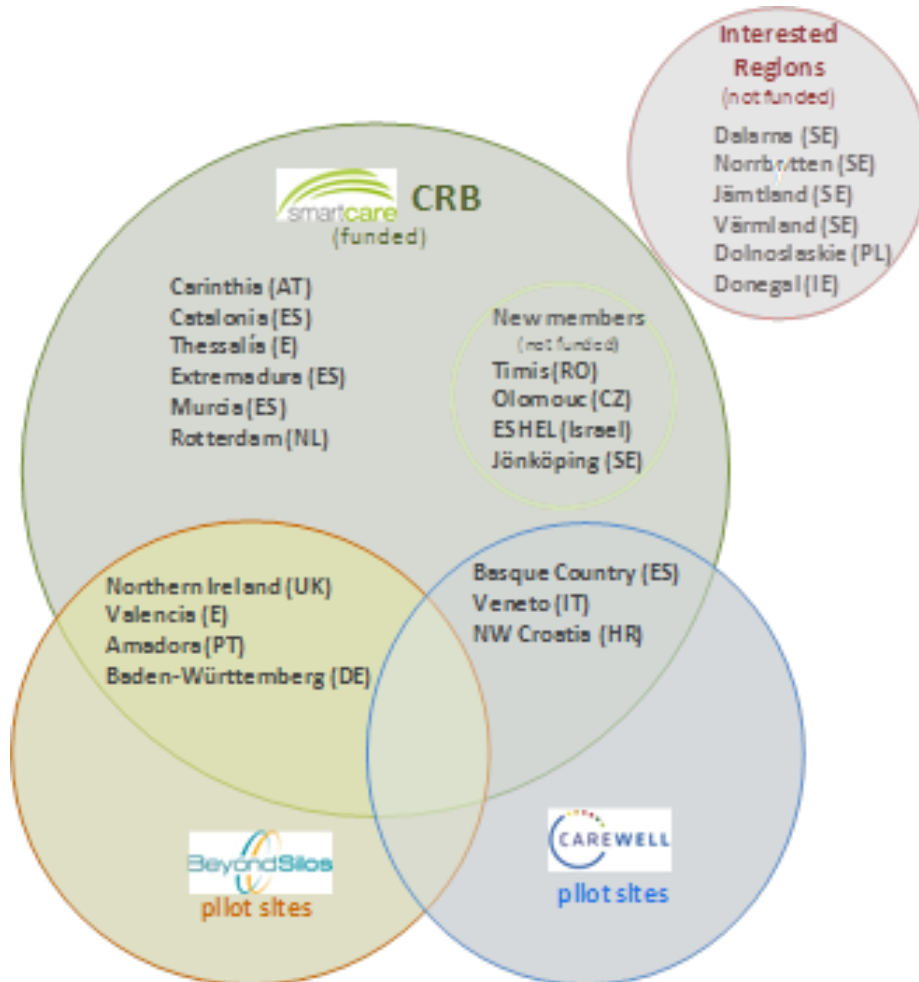
Figure 1: Committed Region Board composition

7 Advisory Boards membership

In SmartCare, there are several Advisory Boards, namely, Users Advisory Board, Internal Scientific Board and Industrial Advisory Board; all the members are also project partners. Both in CareWell and BeyondSilos, the advisory board is external to the consortia, but in an attempt to develop further the synergies among the three projects, an effort has been made to draw members of the latter's Advisory Boards from the SmartCare Consortium as shown in **Error! Reference source not found.** below.

Table 1: Affiliation of the Advisory Boards members for the three projects

		SmartCare	BeyondSilos	CareWell
AGE	Users Advisory Board	X	X	
IFIC	Users Advisory Board	X		X
EPF	Users Advisory Board	X		X
AOK	Users Advisory Board	X	X	
Eurocarers	Users Advisory Board	X	X	
Continua Alliance	Industrial Advisory Board	X		X
U. Montpellier	Users Advisory Board			X
U. Twente	Users Advisory Board		X	
EHR Foundation	Users Advisory Board			X

8 Mentoring Activities

The idea of organising mentoring session in which partners who have acquired particular expertise on a certain topics, highly critical for the successful deployment of ICT enabled integrated care, was elaborated within BeyondSilos, but it has been rapidly extended to the other two projects. This has led to a high level of cross-learning among the three projects. Experts have been drawn from the three consortia, but when it has been felt that there was not enough expertise within the consortia, external experts have been invited, which again as part of further synergies is done in cooperation with the other two projects, as is shown in Table 2 below.

Table 2 – Summary of the mentoring session already held

Topics	Mentors		Methodology	Attendance	
	Internal	**External**		**Face-to-Face**	**Webinar**
Sustainability: ICT& Revenue Models	Juan-Carlos Naranjo (TSB) Jordi Piera (BSA)	Leo Lewis (SmartCare & IFIC)	Presentation & debate	19 (18 from BS and 1 from SmartCare & IFIC)	NA
Change Management	Sonja Muller (Empirica) Lucas Donat (La FE) Adriano Fernandes (Amadora)	Wouter Keijser (SmartCare & HIM)	Presentations Case-Studies (La Fe & Amadora) Debate	14 (10 from BS; 3 from SmartCare; 1 from CareWell)	19 (11 from BS; 6 from SmartCare; 1 from CareWell; 1 Evaluation Company)
Stakeholders Engagement	Sonja Muller (Empirica) Adriano Fernandes (Amadora)	Kira Stellato (SmartCare & FVG) Leo Lewis (SmartCare & IFIC)	Presentations, Case-Studies (FVG & Amadora), and debate	17 (16 from BS; 1 from SmartCare)	6 (3 from SmartCare; 3 from CareWell)
Evaluation & ethics	Sonja Muller (Empirica) Ingo Meyer (Empirica) Paolo da Col (HIM SA)	Paolo Squillace (Member of the FP7 Ethics Committee)	Presentations Debate	17 (16 physically present in Sofia, and one through GoToMeeting)	NA

Upcoming Mentoring workshops are the following:

* October-5, Crete (Greece): Up-scaling & mainstreaming guidelines. For this workshop, SC coordinator Matteo Apuzzo (FVG); and Donna Henderson (EIP AHA B3 action group) will be attending as external experts.

9 Miscellaneous networking and knowledge transfer activities

Miscellaneous networking and knowledge transfer have been conducted in collaboration between SmartCare and the other two projects about ICT enabled integrated care. They span a wide array of topics.

9.1 Modalities

Different modalities have been used to achieve networking and knowledge transfer:

- Face-to-face workshops.
- Webinars organised by each of the projects.
- Integrated Care Wiki (set-up by CareWell, accessible to all projects).

9.2 Main activities

Below some of the networking activities performed within the three projects:

Table 3- Main networking and knowledge transfer activities

Topic	Networking modality	Regions involved
Pathway approach & design	Face-to-face workshops (2013) Conference calls (2013)	"1st wave regions"→ "2nd wave regions" (SmartCare)
Successfully planning and implementing capacity building and staff training measures	Webinar organised within the framework of SmartCare (2014)	SmartCare deployment region → Committed regions, other deployment regions
Difficulty to pass from the condition of pilots to a sustainable integrated system	Webinar organised within the framework of SmartCare (2014)	SmartCare deployment region → Committed regions, other deployment regions
Problem of readiness & willingness for (quality) informal care	Webinar organised within the framework of SmartCare (2015)	"1st wave region" → other deployment regions and Committed Regions in SmartCare
Lack of a common integrated framework capable of enabling organisational cooperation	Webinar organised within the framework of SmartCare (2014)	SmartCare deployment region → Committed regions, other deployment regions
Service implementation simulator	Face-to-face workshop (Webinars (2015)	a) Deployment sites / WP leader → Committed Regions (SmartCare) b) Deployment sites Smartcare / WP leader → Pilot sites BeyondSilos & CareWell
Application of EIP AHA B3 Maturity Model	Webinar (June 2016) Desk exercise	EIP AHA B3 → SmartCare Committed Regions

Topic	Networking modality	Regions involved
Real-world implementation of integrated eCare services Obstacles/ facilitators of implementation	Site visits	Range of settings (group and bilateral visits) involving deployment sites from the three projects and Committed Regions from SmartCare