Deliverable D 7.2:

Report on Learning Session I on sustainability and business models

WP 7: Sustainability and business models

ACT@Scale

Advancing Care Coordination and Telehealth @ Scale

This publication arises from the ACT@Scale (Advancing Care Coordination and Telehealth deployment at Scale) Programme which has received funding from the European Union, in the framework of the Health Programme under grant agreement 709770.
The ACT@Scale programme is fully aligned with the European Innovation Partnership in Active and Healthy Ageing objectives to deploy integrated care for chronically ill patients.

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Short description of the Deliverable:

Work package 7 (WP7) of the Advancing Care Coordination and Telehealth deployment at Scale (ACT@Scale) project, aims to collect and evaluate financial models supporting implementation and scaling up of care coordination and telehealth programs. It does so by applying a collaborative methodology (PDSA – Plan, Do, Study, Act) to improve performance of four key drivers of change (stakeholder and change management, service selection, sustainability and business models, and citizen empowerment).
This deliverable presents the results of the first learning session from the programs that have selected sustainability and business models as one of their improvement areas.

REVISION HISTORY			
REVISION	DATE	COMMENTS	AUTHOR (NAME AND ORGANISATION)
V1.0	1/12/2016	First version including all program	Maarten Lahr, UMCG

Executive Summary

The aim of the ACT@Scale project is to work together with all programs on the implementation and scaling up of projects based on a collaborative methodology.

Therefore, the PDSA methodology (Plan – Do – Study – Act) has been selected for the purposes of this project. PDSA is a cycle based methodology for improvement, which provides a framework for iterative assessment of changes over time but restricted to a 12 month period.

The framework of the methodology proposed for ACT@Scale is depicted in figure 1.

Three phases can be distinguished within the PDSA cycle:

1) A **baseline phase** to agree on methods and indicators across regions and programs. Per program there will be two improvement cycles in which a PDSA cycle will be deployed. The results are initially discussed locally, after which transferability sessions are held in other regions.

2) A **learning cycle** which will consist of a learning session with local stakeholders (regional meeting) to discuss the PDSA cycle within the period of regional implementation (1 year). Implementation of the specific topic will be guided by the WP leader, always supported by the WP3 leader (evaluation).

3) A **coaching cycle** in which lessons learned are discussed. The timeframe is similar to that of the learning cycle. During the end of the project activities on dissemination and transferability will be performed and communicated.

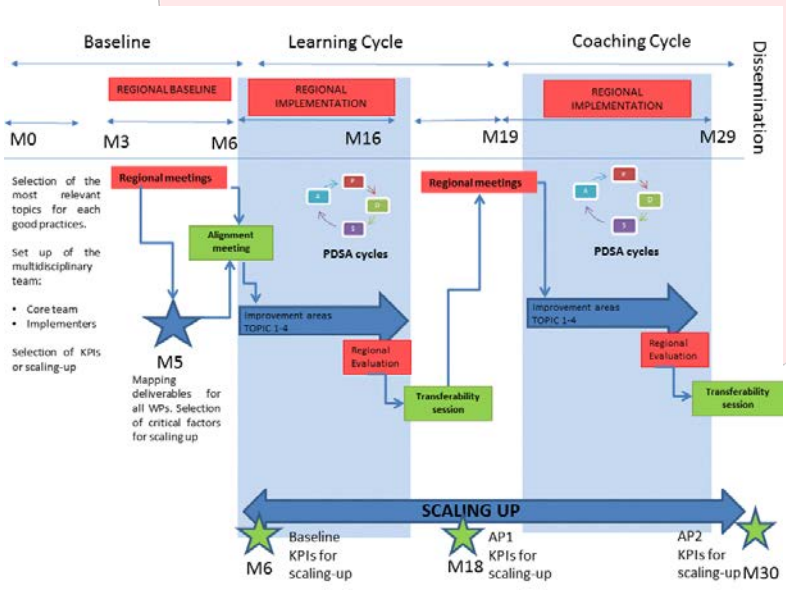

Figure 1 ACT@Scale adapted collaborative methodology

As shown above, each program has completed the baseline phase and have started with the regional implementation project. The following activities are carried out:

1. Discuss and select drivers (stakeholder management, service selection, sustainability and business models, citizen empowerment) which are pivotal in the scaling-up of each program.

2. Define interventions to be carried out within each driver.

    a. Collect information and define actions to support the proposed changes for successful scaling-up of selected drivers in each program.
    b. Agree on interventions to be implemented regionally, to be carried out in the learning cycles.
    c. Documentation on the progress and success of the interventions.

3. Define the key performance indicators

This document includes the programs which have selected 'sustainability and business models' as a driver for scaling up.

Each program has identified the multidisciplinary team, improvement areas, interventions with their specific goals and key performance indicators. These elements are worked out below per program.

Content

Introduction

This document presents the report on Learning session I of each programme which has chosen "Sustainability and Business Models" as a driver to facilitate the up-scaling process. The reports describes the tasks performed during the baseline phase, mainly the distinct steps defined for the route maps: topic selection, creation of multidisciplinary team, identification of improvement areas, set up of objectives, definition of change interventions and building of the evaluation framework.

The programmes that have selected " Sustainability and Business Models" driver are:

- Collaborative self-management services to promote physical activity (AISBE-PA) (Catalonia)
- Community-based Collaborative Management of Complex Chronic Patients (AISBE-CCP) (Catalonia)
- Effective cardio, telemonitoring for heart failure patients (NNL CARD TH) (Northern Netherlands).
- Asthma COPD Telehealth service (NNL RESP TH) (Northern Netherlands).
- Embrace, an integrated elderly care model (NNL IL IC) (Northern Netherlands).
- Weigh to a Healthy Pregnancy Programme (NIRE PREG TH) (Northern Ireland) and
- COPD telemonitoring services (NIRE RESP TH) (Northern Ireland)

Collaborative Methodology: Baseline Regional Report - Community-based Collaborative Management of Complex Chronic Patients (AISBE-CCP) (CAT CHRON CM) and Collaborative self-management services to promote physical activity (AISBE-PA) (CAT-CHRON LS)

The first phase of the collaborative methodology in ACT@Scale project is the baseline phase. The below template documents the information collected during the session.

Two Catalan programs are discussed here together, as they share a similar approach on sustainability and business models.

1. Multidisciplinary team (number and profile)

The current multidisciplinary team works in full alignment with the different AISBE committees addressing the organisational change between specialized & community-based care in the healthcare sector of Barcelona-Esquerra.

The multidisciplinary team is composed by different members, the functions and roles are:

- *Organiser:* two members with skills in leading team dynamics
- *Clinical experts:* six healthcare professionals with expertise in integrated care
- *Technology experts:* three professionals with expertise in information and communication technologies (ICT)
- *Decision makers:* one decision maker representative of the Healthcare Directorate of AISBE
- *Project Manager:* one project manager of the CCP program
- *Total participants:* 13

2. Improvement areas

The improvement areas selected are:

- Both scalability and large scale adoption of some of the already mainstream integrated care services cannot rely on current one provider-oriented business models.
- There is a clear need for novel incentives and innovative business models ensuring sustainability of the integrated care services that have already shown healthcare value generation, as well as potential for both scalability and transferability at health system level.

3. Objectives

Agree and describe the progress you want to achieve on each improvement area.

- Assessment of novel reimbursement initiatives and bundle-based business models aligned with the report Hernandez C. et al. IJIC 2015.

4. Change package (interventions)

The interventions/changes to be carried out have to be defined:

- Develop specific ideas for changes that lead to scaling up within the selected drivers in each good practice,
- agree on interventions,
- document the "change package".

Initial deployment in AISBE. An initial six-month co-design cycle (PDSA) (end of 2016) cycle will be undertaken only in AISBE healthcare sector.

5. Key Performance Indicators

Using WP4 indicators as a reference the following KPIs relating to scaling up, programme and process will be collected during the project.

The key performance indicators are similar for all programs and are listed in Appendix 1.

Collaborative Methodology: Baseline Regional Report – Effective cardio, telemonitoring for heart failure patients (NNL CARD TH).

The first phase of the collaborative methodology in ACT@Scale project is that of the baseline. Below template to document the information to be gathered.

1. Multidisciplinary team (number and profile)

The multidisciplinary team is composed by different members, the functions and roles are:

- Treant hospital group, location Scheper Emmen, department of cardiology responsible for initiating and monitoring patients enrolled in the program.
- Insurance companies proving financial support for implementation of the program.
- Philips Home Healthcare providing the telemonitoring system and devices for selfmanagement, as also financial support for implementation.

2. Improvement areas

The various organisations working together within the program have defined several improvement areas that include development of sustainable financial models to ensure future implementation and scaling up. The improvement areas in which the efforts will be put on during the PDSA cycles are:

- Misalignment of funding schemes for implementation of telemonitoring systems.
- Structural funding models to support implementation of telemonitoring systems in daily clinical practice.
- Detailed description of patient and financial flows before and after implementation of the program.
- Comparability of obtained results with other initiatives.

3. Objectives

The following objectives on each improvement area have been identified by the group as those they wish to progress through the PDSA learning cycles.

- Provide insight and develop schematic descriptions of patient and financial flows, including who benefits and who pays for the service.
- Compare current financial models to other comparable initiatives.
- Investigate alternative financial models.

4. Change package (interventions)

The following proposed interventions will be carried out and will be further refined once the first PDSA cycle starts.

1. Develop detailed flow schemes of current patient and financial flow.
2. Evaluate observed barriers and develop improvement approaches.
3. Collect indicators that provide information about patient and financial flow systems.
4. Investigate alternative, comparable programs and funding schemes for telemonitoring including best practices.
5. Study the cost-effectiveness of the current program.
6. Design and investigate alternative funding models.

5. Key Performance Indicators

Using WP4 indicators as a reference the following KPIs relating to scaling up, programme and process will be collected during the project.

The key performance indicators are similar for all programs and are listed in Appendix 1.

Collaborative Methodology: Baseline Regional Report (Northern Netherlands) – Asthma COPD Telehealth service (NNL RESP TH)

The first phase of the collaborative methodology in ACT@Scale project is the baseline phase. The below template documents the information collected during the session.

1. Multidisciplinary team (number and profile)

The multidisciplinary team is composed by different members, the functions and roles are:

- Certe and other large laboratories providing the initial assessment of patients referred from the GP offices.
- Primary care offices screening potential asthma and COPD patients.
- Secondary care professionals performing online assessment of the results collected at the laboratories.
- Educational institutes participating to develop education and training modules for professionals working in the program.
- University Medical Center Groningen, department of General Practice for(scientific) evaluation of the program.

2. Improvement areas

The different organisations collaborating in the program have defined improvement areas that include convincing stakeholders to adopt the AC service and develop sustainable reimbursement models. The improvement areas in which the efforts will be put on during the PDSA cycles are:

- Sustained reimbursement by the insurance companies.
- Lack of a structural financing model for the program.
- Misalignment of funding structures.
- Lack of a detailed overview of patient and financial flows.

3. Objectives

The following objectives on each improvement area have been identified by the group as those they wish to progress through the PDSA learning cycles.

- Collect and make visible the current financial model underlying the AC service.
- Indicate current barriers and potential for improvement.
- Investigate alternative financial models.

4. Change package (interventions)

The following proposed interventions will be carried out and will be further refined once the first PDSA cycle starts.

1. Collect and develop current patient and financial flow systems.
2. Investigate alternative funding models.
3. Agree on and collect indicators to measure the patient and financial flow.

5. Key Performance Indicators

Using WP4 indicators as a reference the following KPIs relating to scaling up, programme and process will be collected during the project.

The key performance indicators are similar for all programs and are listed in Appendix 1.

Collaborative Methodology: Baseline Regional Report (Northern Netherlands) – Embrace, an integrated elderly care model (NNL IL IC)

The first phase of the collaborative methodology in ACT@Scale project is the baseline phase. The below template documents the information collected during the session.

1. Multidisciplinary team (number and profile)

The multidisciplinary team is composed by different members, the functions and roles are:

Healthcare insurance companies and municipalities providing funding for the program and who are collaborating in developing structural financial models.

The elderly care teams (including the case manager) of the Embrace program offering care in the participating regions.

Home care organisations responsible for delivering care at home as part of the program.

Educational institutes participating to develop education and training modules for professionals working in the Embrace elderly care model.

University Medical Center Groningen, department of Health Sciences for (scientific) evaluation of the Embrace program.

2. Improvement areas

The organisations working together within the program have defined several improvement areas that include misalignment of financial models to ensure a sustainable care model and hesitation of stakeholder towards cultural change. The improvement areas in which the efforts will be put on during the PDSA cycles are:

- Lack of structural integration of integrated care models into current routine practice.
- Absence of structural financing of integrated care models for elderly care.
- Misalignment of funding structures.
- Lack of a detailed overview of patient and financial flows.

3. Objectives

The following objectives on each improvement area have been identified by the group as those they wish to progress through the PDSA learning cycles.

- Define and discuss current barriers for the implementation of integrated care models for elderly care into routine practice.
- Compare current financial models to other comparable initiatives for integrated elderly care.
- Investigate alternative financial models.

4. Change package (interventions)

The following proposed interventions will be carried out and will be further refined once the first PDSA cycle starts.

1. Collect and develop current patient and financial flow systems.
2. Investigate alternative funding models.
3. Investigate other, comparable, innovative programs that offer integrated care for elderly.
4. Agree on and collect indicators to measure the patient and financial flow, as also the cost-effectiveness of the program.

5. Key Performance Indicators

Using WP4 indicators as a reference the following KPIs relating to scaling up, programme and process will be collected during the project.

The key performance indicators are similar for all programs and are listed in Appendix 1.

Collaborative Methodology: Baseline Regional Report - Weigh to a Healthy Pregnancy Programme (NIRE PREG TH) and COPD telemonitoring services (NIRE RESP TH)

Two Northern Ireland programs are discussed here together, as they share a similar approach on sustainability and business models.

1. Multidisciplinary team (number and profile)

The multidisciplinary team is composed by different members, the functions and roles are:

Public Health Agency staff involved in project management

Health and Social care staff (dieticians and midwives)with experience in service managing and implementing new organisational models

Weigh to a Healthy Pregnancy Regional Service lead

Decision makers: Project Manager/Representatives of organizations:

2. Improvement areas

The multidisciplinary working team has defined several improvement areas that included some resistance to change, lack of time of professionals to fully engage in use of tools and personalized education material, as well as, misalignment of financial structures to sustain service delivery model. The improvement areas in which the efforts will be put on during the PDSA cycles are:

- Lack of structural integration of CC & TH services into routine practice

- Resistance to change by various stakeholders
- Misalignment of funding structures
- Lack of technical integration of solutions into a patient-centred information management solution
- Hesitation due to misleading evidence on the effectiveness of TH services
- Lack of (big) data for increased reliability in providing TH

3. Objectives

The following objectives on each improvement area have been identified by the group as those they wish to progress through the PDSA learning cycles.

- Consider barriers to the use of TH into routine practice, including stakeholder resistance
- Examine future funding models
- Investigate use of big data to increase the reliability of and potential the use of TH in pregnancy

4. Change package (interventions)

The following proposed interventions will be carried out and will be further refined once the first PDSA cycle starts.

1. Scope barriers and opportunities to the use of TH into routine practice, including stakeholder resistance and innovative practice
2. Investigate future funding models including self-pay
3. Collaboratively agree the indicators to measure the cost-effectiveness and sustainability of the programme
4. Investigate use of big data to increase the reliability of and potential the use of TH in pregnancy

5. Key Performance Indicators

Using WP4 indicators as a reference the following KPIs relating to scaling up, programme and process will be collected during the project.

The key performance indicators are similar for all programs and are listed in Appendix 1.

Collaborative Methodology: Baseline Regional Report – Telepsychiatry (RSD MH TH)

During the first six months of ACT@Scale, RSD has experienced certain challenges in the involvement of the identified telepsychiatric service and professionals. These challenges have emerged as the identified service is more mature than what was intended for ACT@Scale. Furthermore, the organisational set up required to participate in ACT@Scale does not exist in the current telepsychiatric service as the service has already moved beyond this stage. The challenges have resulted in a delay in the planned project activities, primarily the Collaborative Methodology.

Currently, RSD is working to engage a different telepsychiatric service and a new set of professionals to be part of ACT@Scale. The new service focuses on the use of telemedicine in diagnosing, treating and monitoring citizens suffering from depression. The involvement of this service will ensure a more coherent contribution to ACT@Scale. However, the schedule for the data collection and the collaborative methodology will be delayed as the new constellation and engagement have to be properly established. If the engagement of the new service is secured, the activities are expected to be initiated in January 2017 and the aim is to be in line with the rest of the consortium by March 2017.

Appendix 1. WP7 Indicators on sustainability and business models.

Background

The specific objective of Workpackage 7 (WP7) is to collect information on current financial models for integrated care and telehealth programs including observed barriers.

The main target will be to gather baseline information on patient and financial flow schemes, and to identify alternative business models for sustainable scaling up of the programs. Finally, validation of business models will occur through the maturity map of the EIP-AHA B3.

The specific objectives of WP7 are:

1. To describe current financial models of the programs within ACT@Scale including barriers and improvement areas.
2. To agree on a common methodology to collect and evaluate patient and financial flows.
3. To design an action plan aimed to increase sustainability of business models.

The indicators and questionnaire described below is intended to be addressed to the programme managers of each of the ACT@Scale programs involved in the project to collect the map of current situation in the area of sustainability and business models.

UP-SCALING INDICATORS

Data input	Topic	Type	Measure	Target for surveys
Scaling-up: Health of a population	Coverage	Databases **Population**	Population size Stratified population Target population Population served Population diagnosed	-
	Coverage	Databases **Individual**	Diagnosis Status in the program Reasons for out	-
	Disease burden:	Databases **Population**	Incidence Prevalence	-
Scaling-up: Per capita costs	Total cost	Databases **Population**		-
	- Utilisation - Unit cost	Databases **Individual**		-

PROCESS INDICATORS

Through a survey to programme managers the following data will be collected and analysed.

	SA	A	N	D	SD
The policy increases efficiency in chronic care					
There are adequate financial incentives for the stakeholder (e.g. patients, providers, insurers) to participate/adopt the policy					
The policy imposes budgetary constraints on the healthcare system					
The policy promotes the integration of financing of different care sectors involved in					

chronic care.	
Risk selection of financially "unattractive" chronic patients to health insurers is decreased following the implementation of this policy	
The growth of the chronic care expenditure decreased after the introduction of this policy	

Care consumption is collected? Yes □ No □

What were the total costs of the program (in 2015)?

What were the average costs of the program per user (in 2015)?

	Rank importance from 1 (least) to 5 (highest)
Is integrated CC&TH delivery embedded in your strategic plan?	
What is your organizations' mission and vision? Does it need to change to included integrated care elements? (please elaborate in text box).	
Do you have a business plan for growing your integrated care program? (please elaborate in text box).	
Do you know how much money your organization needs to make in order to support your integrated care vision? (please elaborate in text box). Do your administrative policies support integration? (Confidentiality policies, Billing and reimbursement policy, Ethics policy) (please elaborate in text box).	
Are you billing for all possible behavioral health services provided? Primary care visits? (please elaborate in text box).	

Have you walked through your workflow and identified who, can pay for each step of your process – with your clinical and billing staff at the same time? (please elaborate in text box).	
Does your integrated care program include benchmarks for integration activities? (please elaborate in text box).	
Have you identified the baseline caseload for both primary care and behavioral health clinicians? (please elaborate in text box).	
Are your clinicians seeing enough patients to meet the financial need? (please elaborate in text box).	