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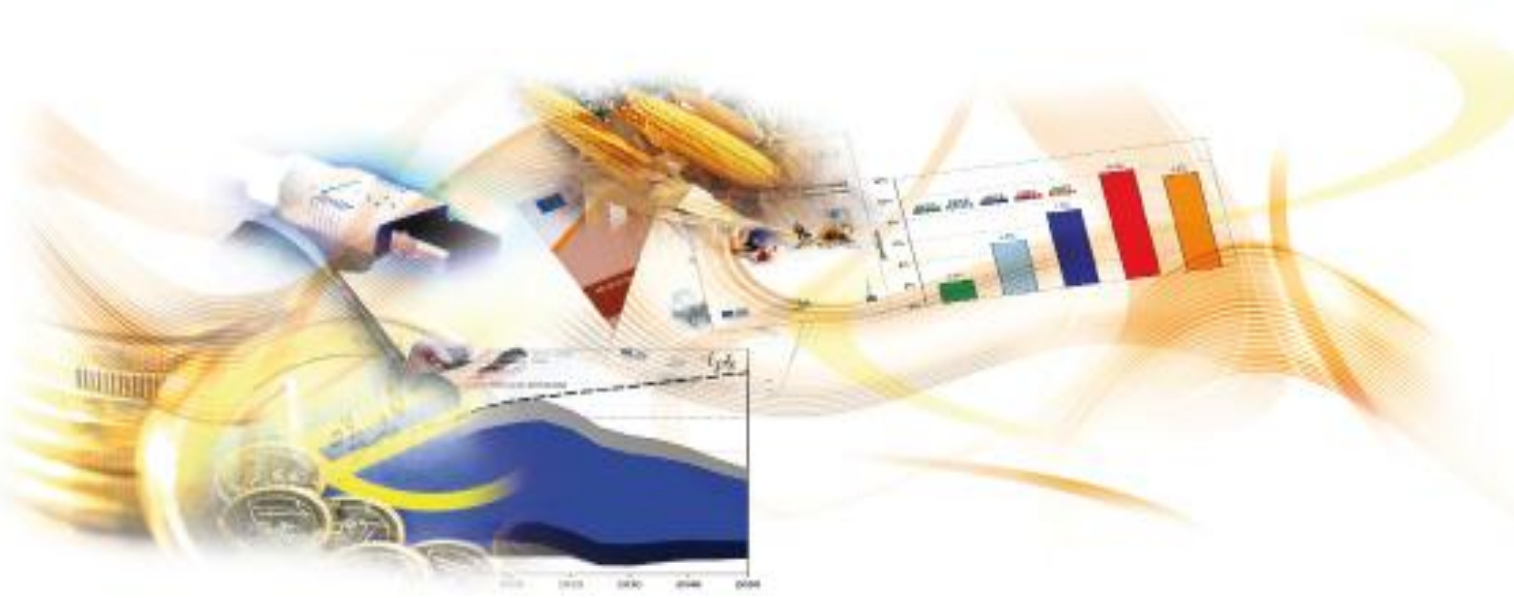

Strategic Intelligence Monitor on Personal Health Systems Phase 3 (SIMPHS3)

Introduction to SIMPHS3 Case Studies

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Abstract
This report is an introduction to the various cases of integrated care and independent living developed in SIMPHS3. It addresses the methodology applied for the field work, and provides further details on the fieldwork activity, together with a brief description of the typologies of health and social care actors interviewed. It also gives an overview of the number of Member States and regions covered in the study, how the cases have been analysed and the actors interviewed. It also presents an overview of the report structure used in all the cases so as to allow comparability. The structured questionnaire and the semi-structured interview key questions used in the field work are presented in the Annex.

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1. Introduction

1.1 Background

The SIMPHS3 research builds on findings of earlier phases of the SIMPHS project. SIMPHS1 analysed the market for Remote Patient Monitoring and Treatment (RMT) within Personal Health Systems (PHS). SIMPHS2 complemented this analysis with an investigation of the demand side, focusing on the needs and demands of healthcare producing units (e.g. hospitals, primary care centres), healthcare professionals, healthcare authorities and patients, and their experiences with PHS.

The outcomes of SIMPHS2 have been published in a series of reports. More specifically, the report on "Evidence Consolidation - Best Practice and Key Drivers of Success" discussed the role of governance, innovation and impact assessment in enabling Integrated Personal Health System (IPHS) deployment. The analysis was taken one step further in a piece of research which identified eight facilitators for IPHS deployment[1] but called for further research. Indeed the lessons learnt from the pioneering countries or regions in the field of integrated care (e.g. Denmark, Scotland) led to the hope that similar experiments would be carried out in different European regions.

Building on the SIMPHS2 outcomes, SIMPHS3 aims to identify successful cases of integrated care and independent living in European regions and beyond, analyse the factors that have contributed to their deployment, and define best practices and operational guidelines for further implementation in European regions. The research also seeks to assess the role of ICT in facilitating the integration of healthcare and social care.

The SIMPHS3 outcomes contribute to the European Innovation Partnership on Active and Healthy Ageing initiative (EIP on AHA) by supporting the stakeholders involved in their attempts to scale up good practices. More concretely, SIMPHS3 focuses on the activities undertaken in Action Group B3 (replicating and tutoring integrated care for chronic diseases, including remote monitoring at regional level) and those of C2 (development of interoperable independent living solutions, including guidelines for business models). In addition, the SIMPHS3 research took the EIP on AHA Reference Sites as a starting point when identifying potentially successful cases of integrated care and independent living, as described in SIMPHS3 Deliverable D1.1.

1.2 Objective of this report

This report is an introduction to the various cases of integrated care and independent living studied in SIMPHS3. It addresses the methodology applied for the field work, and provides further details on the fieldwork activities, together with a brief description of the typologies of the health and social care actors interviewed. It also gives an overview of the number of Member States and regions covered in the study, how the cases have been analysed and actors interviewed. In addition, it presents an overview of the structure for the case study reports that was used across all cases in order to allow comparability. The structured questionnaire and the semi-structured interview key questions used in the fieldwork are presented in the Annex.

The case reports are presented separately and individually for practical reasons. In addition to the cases reports, a cross-case analysis was carried out and the findings fed into two separate reports, one on models of organisation and the other on guidelines for the implementation of integrated care and independent living respectively.

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[1] Villalba E, Casas I, Fabienne A et al. Integrated Personal Health and Care Services Deployment: Experiences in Eight European Countries. Int J Med Inform. 12 April 2013.

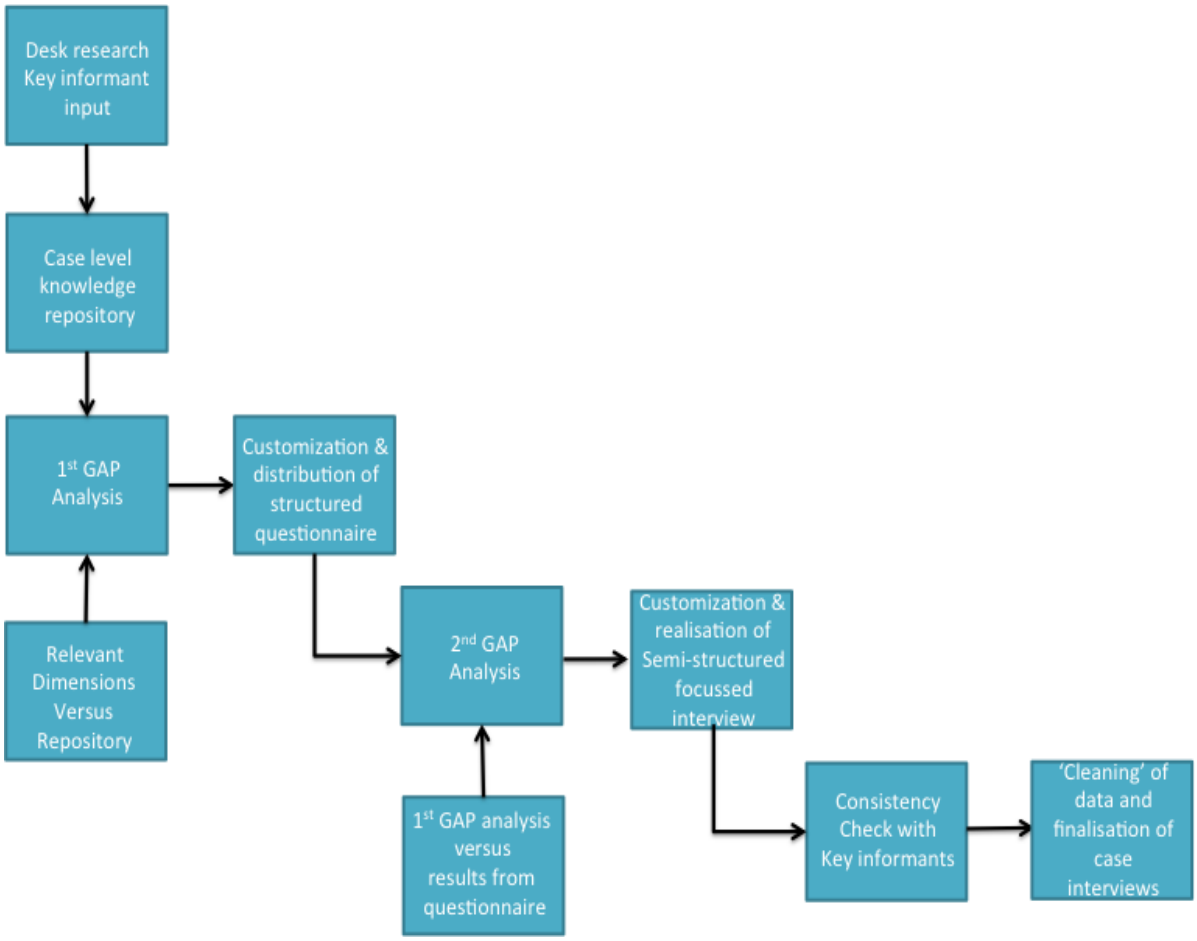
2. Fieldwork activities

2.1 Approach

As explained in the SIMPHS3 methodology report (see SIMPHS3 Deliverable D1.1[2]), we intended to characterise each case according to eight dimensions of analysis, using data collected through desk research and complemented by interviews.

The figure below illustrates the data gathering procedure followed during the first phase of implementation of the fieldwork activity, which foresaw two types of interviews: structured and semi-structured. This approach was used in 16 of the 24 cases analysed.

Figure 1 - Data gathering procedure



In each case study, the researcher responsible for carrying it out first gathered secondary sources in addition to those already gathered during the implementation of WP1. More specifically, these sources were gathered by the literature review and additional field work that served to identify the first 16 cases (see SIMPHS3 Deliverable D1.1 Section 2.1.2). They include:

- Statistics (i.e. official statistics on the geographical areas where the case study takes place and statistics gathered *ad hoc* on dimensions of the case study).
- Documentation (i.e. administrative documents, internal reports, evaluation studies commissioned by one or more organisations that form part of the case study).
- Archival records (i.e. computer files and/or paper records).

[2] http://publications.jrc.ec.europa.eu/repository/bitstream/JRC92703/jrc92703.pdf

- Physical artefacts (for instance a tool or technological instrument used to measure activities and/or outcomes).

Where needed key local informants were contacted to increase the number of secondary sources, even if these were only available in the local language of the case. All the information collected formed part of the initiative's initial knowledge base and was included in the case study reports.

The remaining cases were studied using desk research and semi-structured interviews, most of them in combination with site visits.

All the case reports have been double checked by the key informants and/or experts interviewed.

2.2 Case studies

Table 1 provides a list of the 24 cases studied in SIMPHS3. 16 of these cases were selected following the review of EIP on AHA initiatives and reference sites. The remaining 8 were selected from scientific or grey sources and also in answer to specific client requests (See SIMPHS3 Report on the methodological set-up for the SIMPHS3 research[3] for more details).

Table 1 - Case studies overview

Case	Region	Brief description
FIRST WAVE		
ARIA	Emilia-Romagna (Italy)	Implementation of integrated home care services for COPD patients.
BLMSE	Skåne Region (Sweden)	Improving cooperation between home care, elderly home care, primary care and hospital care to better coordinate care of the elderly
BSA	Badalona, Catalonia (Spain)	Integrated care organisation offering health and social care services.
CARTS	Cork and Kerry South-West Region (Ireland)	Screening, triage, assessment and treatment to reduce risk of frailty and adverse outcomes in community dwelling older adults
eTrikala	Trikala municipality, Thessaly Region (Greece)	Telehealth/telecare services for chronic patients and the elderly and social services to all citizens.
ETXEAN ONDO	Basque Country (Spain)	Integrated person-centred care model for the elderly
GESUNDES KINZIGTAL	Kinzigtal region, Baden-Württemberg (Germany)	Integrated care and preventive services offered to the population covered by the health insurances AOK and LKK, based on a shared savings contract between Gesundes Kinzigtal and AOK/LKK.
INAA	Twente (Netherlands)	Helping the elderly to live independently for longer periods in their own environment.
MACVIA-LR	Languedoc-Roussillon (France)	Innovative solutions through living labs to improve care for chronic patients
NEXES	Barcelona, Catalonia (Spain)	Integrated care services for chronic patients based on structured interventions addressing prevention, healthcare and social support.
OULU SELF-CARE	Northern Ostrobothnia, Oulu (Finland)	Cloud services that can support integrated care services and allow the elderly to monitor their own well-being and manage their own health.
PDTA	Brescia/Lombardy (Italy)	Anticipatory care planning to manage patients with chronic diseases (e.g. Dementia, Alzheimer)
SAM:BO	Region South Denmark (Denmark)	Encouraging local health and social care actors to launch integrated health care initiatives through shared agreement protocols of collaboration.

[3] See footnote 2

SOLE/FSE	Emilia-Romagna (Italy)	Interoperable infrastructure enabling the development of integrated care services for the whole population of the region.
SPARRA	Scotland (United Kingdom)	Local integrated care initiative which uses a population pre-screening model to measure patients' risk of emergency admission in hospitals in order to deliver anticipatory care planning..
TDP	Scotland (United Kingdom)	Funding and stimulating the implementation of telecare projects in the local community by health partnerships throughout Scotland.
SECOND WAVE		
ACTION	Borås municipality, Western Sweden (Sweden)	Self-care and family care support service provided through ICT installed at patients' homes
DiabMemory	Breitenstein, Lower Austria (Austria)	Remote monitoring of diabetes patients using mHealth
DREAMING	Barbastro, Aragon (Spain)	Remote monitoring services to help the elderly live independently
Getafe's Integrated Care Programme	Madrid (Spain)	Integrated care programme for older in- and out-patients
MOMA/Maccabi	Israel	Care model based on a multi-disciplinary 24/7 advanced technology call centre for treatment of various chronic diseases (including remote monitoring)
Healthcare PPI	Galicia (Spain)	Public Procurement of Innovation projects and experiences developed in the healthcare system of Galicia
Renewing Health	Carinthia (Austria)	Pilots to integrate telemonitoring solutions with existing systems for diabetes type 2 and COPD patients and assess impact of the system
VHA	USA	Integrated care model for elderly veterans and their caregivers

2.3 Fieldwork implementation

The first phase of the fieldwork started in March 2014 with the analysis of the secondary sources for the construction of the first 16 case studies and the identification of the stakeholders involved. A structured questionnaire was also developed and the related interviews were carried out. The semi-structured interviews for the final validation of the case studies were conducted between April-June 2014. In July, the findings related to each case study were consolidated and an initial draft for each initiative was prepared. In addition, some considerable effort was spent on collecting additional material from the interviewed experts and on interacting with the key informants, in order to complete the data collection and finalise the case study reports.

The fieldwork activities were completed for 15 of the 16 cases. The exception was the T4H case (Czech Republic), for which it was possible to collect only limited information. This fact and the lack of relevant key informants hampered the development of a full picture for this case. However, on the basis of the information collected and with the support of integrated care experts working in Eastern European countries, it could be assumed that there was no significant evidence of the impacts of the case and a general low level of deployment was to be expected. Therefore, we decided to look for another case at a more advanced stage of development. To increase the number of countries involved in the research, excluding the Eastern Countries where integrated care developments seemed to be immature, we searched for examples in Southern Europe, for example in Greece. Here, the profound structural socio-economic transformation in response to the economic crises has given an important stimulus to the development of innovative and more integrated health and social care solutions. As a result of this search, a new case of telehealth/telecare and social care services provision in the Greek region of Trikala was included.

The second wave of fieldwork resulted in an additional nine cases being proposed for inclusion in the study (See SIMPHS3 Report on the methodological set-up for the SIMPHS3 research[4]). This phase started in July 2014 and ended in March 2015. Out of the nine cases proposed, three had to be replaced for different reasons including lower levels of deployment than initially assessed, lack of response from the stakeholders involved, the minor role played by ICT or the discontinuation of the services after completion of the pilot phase. As it became increasingly difficult to identify replacement cases, one case was dropped (TK) and two were replaced as follows: Ambient Assisted Living Puglia (IT) was replaced by the Healthcare Public Procurement of Innovation initiative in Galicia (Healthcare PPI) and CommonWell was replaced by the Integrated Care Programme for Older In- and Out-patients at the University Hospital of Getafe.

2.4 Typologies of Actors interviewed

Table 2 provides evidence of the number and types of stakeholders interviewed during the first wave of fieldwork.

Table 2 - Number and types of stakeholders interviewed

Case study	National government	Regional government	National health organization	Local public health organization	Primary care representative	Secondary care representative	Private health organization	Insurance company	University/ research centre	Social care	Project manager	ICT company/ ICT professionals
FIRST WAVE												
ARIA (IT)				1	1							
BLMSE (SE)			1	2	1							
BSA (ES)		1				2						1
CARTS (IE)							1		2			
eTRIKALA (EL)						1			1			1
ETXEAN ONDO (ES)		1								1	1	
GESUNDES KINZIGTAL (DE)					1		1					
INAA (NL)					2	2						
MACVIA-LR (FR)						2			1			
NEXES (ES)		1				2						
OULU SELF CARE (FI)		1				1					1	
PDTA (IT)				1	2	1						
SAM:BO (DK)		2							1			
SOLE/FSE (IT)		1			1	1						1
SPARRA (UK)			2	1								
TDP (UK)												
SECOND WAVE												
ACTION (SE)										1		1
DiabMemory (AT)						1		1	1		1	
DREAMING (ES)				1							1	
Getafe's Integrated Care Programme (ES)		1				1					1	

[4] See footnote 2

MOMA/Maccabi (Israel)			1			1			1		1	
Healthcare PPI (ES)		3										
Renewing Health (AT)		1			1						1	
VHA (USA)			1			2			1			

The above table shows that a wide range of different health and social care actors were interviewed, such as:

- National and regional governments
- National and local health organisations
- Primary and secondary care representatives
- Private health organisations
- Health Insurance companies
- ICT companies / ICT professionals
- Universities and research centers.

The diversity of stakeholders interviewed helped us obtain a deeper understanding of each of the cases and obtain different perspectives on each of them.

2.5 Geographical coverage

Table 3 below provides an overview of the coverage achieved in the 24 case studies developed. In total 12 EU Member States (plus the US and Israel) were covered, representing a total of 17 European regions. In three of the latter, two cases were studied, which may provide further insights on these specific regions and the factors that have facilitated success. A total of 73 interviews were carried out for the 24 cases. In one case (TDP, Scotland) no interviews could be implemented because of lack of response from the contacted experts. Nevertheless, the amount of data publicly available made it possible to build the case and obtain good insights on the dimensions of analysis.

Table 3 - Overview of coverage

	Coverage	Further information
Number of case studies	24	
Total number of countries	14	Austria; Denmark; Finland; France; Germany; Greece; Ireland; Israel; Italy; Netherlands; Spain; Sweden; United Kingdom; United States
Total number of European regions	17	Carinthia (AT); Lower Austria (AT); South Denmark (DK); Northern Ostrobothnia (FI) Languedoc Roussillon (FR); Kingzigtal (DE); Trikala (EL), Cork & Kerry Counties, South West region (IE); Emilia Romagna (IT); Brescia (IT); Twente (NL); Aragon (ES); Basque Country (ES); Catalonia (ES); Scania (SE); Western Sweden (SE); Scotland (UK)
Number of regions with 2 cases	3	Catalonia (ES): Nexes and BSA Emilia-Romagna (IT): SOLE/FSE and ARIA Scotland (UK): SPARRA and TDP
Total number of interviews	73	73 interviews carried out.

3. Structure applied to the case study reports

Table 4 below describes the structure applied to the case study reports. Each report has 5 chapters and an annex presenting references from the literature reviewed.

Table 4 - Structure of the case study reports

Chapter	Content
Case Outlook	Summary of the main characteristics of the case study.
Background	Outlook on the national health care system of the country in which the case study is located; socio-economic characteristics of the local territory where the case study has been implemented; specific characteristics of the case, with some examples of implementation.
Integrated care analysis	Dimensions of integration (foci; level; breadth; degree); evidence of impact; drivers and barriers; characteristics of the organisations involved in the case study; characteristics of the healthcare professionals participating in the initiative; characteristics of the patients/population addressed; information and communication technologies used; governance mechanisms; organisational process in place; reimbursement models and economic flows implemented.
Transferability	The degree of transferability of the case within the country where it was studied and to other EU28 Member States.
Conclusion	Main conclusions with particular reference to the degree of importance of the 8 facilitators in the design and implementation of the case study.
References	Literature reviewed divided into: scientific literature; documents; statistics.

The first chapter gives an outlook on the case study, briefly describing its relevant characteristics and specificities. The second chapter is composed of three parts which provide relevant background information on the case. The first part summarises the main characteristics of the health and social care system of the country/region concerned. The second part describes the socio-economic characteristics of the region in which the case is deployed, and the last part gives an initial description of the specific characteristics of the case in question.

The third chapter, the core of the report, is divided into eight sections, the first of which outlines the case study in light of the main dimensions of integration, with particular attention given to:

- the type of conditions and target population addressed by the case;
- the level of integration (e.g. funding integration; administrative integration; organisational integration; service delivery integration; clinical integration)
- the breadth of integration that the health and social care actors have achieved in service provisioning (e.g. vertical integration across different tiers of cares; horizontal integration within the same tier of care);
- and the degree of integration so as to understand how deeply organisational structures have been integrated by the different actors.

The second section provides evidence of the impacts achieved by the case study, and the third analyses the barriers and drivers to the development of the case.

The fourth section discusses the key characteristics of the health and social care organisations involved in the case study and the fifth section analyses the information and communication characteristics of the software infrastructure enabling the service delivery processes within the case under study.

The sixth section discusses the governance mechanisms underlying the case study, which actually steer its implementation. A description of the characteristics of the organisational processes underpinning the service provisioning to the targeted population/patients follows in seventh section. Finally the key characteristics of the reimbursement model inherent to each case, and of the economic flows implemented are presented in the eighth section.

The fourth chapter analyses how the case study in question could be transferred to other local contexts within the country and also to what extent it could be transferred to other EU28 contexts, providing a qualitative estimation of the economic effort needed for transfer to take place.

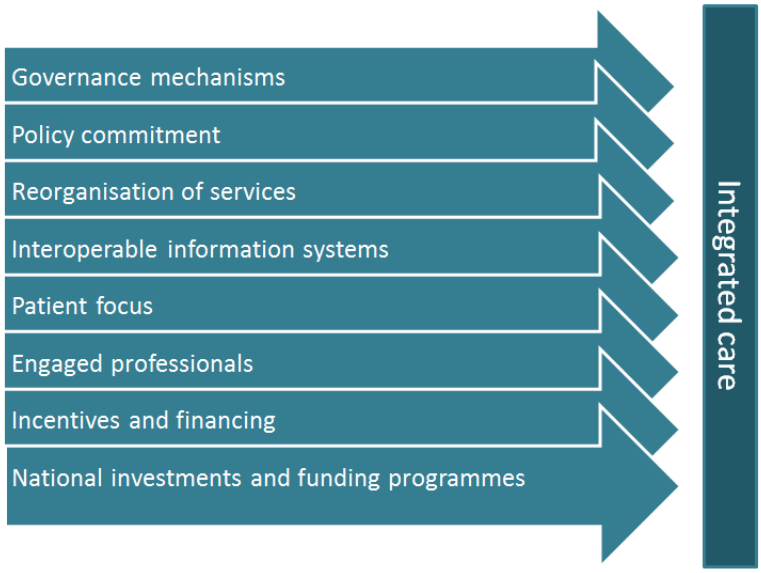
The last chapter offers conclusions and summarises the lessons learned from each case study, paying particular attention to the extent to which eight main facilitators have contributed to the deployment of the initiative. These facilitators were identified at the end of the SIMPHS2 project through the qualitative analysis of 27 telehealth, telecare and Integrated Personal Health System (IPHS) projects, implemented across 20 regions in eight European countries. The analysis in SIMPHS2 was based on Suter's[5] ten key principles for successful health systems integration. The eight main facilitators identified among these as necessary for successful deployment and adoption of telehealth, telecare and IPHS in European regions were:

- Reorganisation of services
- Patient focus
- Governance mechanisms
- Interoperable information systems
- Policy commitment,
- Engaged professionals
- National investments and funding programmes, and
- Incentives and financing.

For each case study, a graph was prepared based on the model below. The length of each arrow varies in each case study, and illustrates the relative importance of the respective facilitators.

[5] E. Suter, N.D. Oelke, C.E. Adair, et al., Health Systems Integration – Definitions Processes & Impact: A Research Synthesis, Canadian Institutes of Health Research (CIHR), 2007.

Figure 2 – Facilitators of Integrated Care



Annex 1 – Structured Questionnaire

Block 1. Dimensions of integration (measuring deployment level)

Q1. The **Target group(s)** of the Integrated care services is/are on:

1. Entire population
2. Vulnerable subgroups (e.g., the frail elderly and persons with disabilities)
3. Patients with complex illnesses (e.g., chronic conditions, some cancers)
4. Other (specify)

Additional comments[6]

Q2. The **Target pathologies** of the Integrated care services is on:

1. Life style and disease prevention
2. Chronic disease (e.g., COPD, Cardiovascular disease)
3. Cognitive impairment (e.g. Alzheimer, Dementia, Mental health)
4. Frailty
5. Comorbidities
6. Other (specify)

Additional comments

Q3. The **Main focus of the Integrated care services** is on:

1. Preventive care management
2. Chronic Disease management
3. Inbound and outbound health and Social services integration
4. Homecare management
5. Other (specify)

Additional comments

Q4. In the provision of care services what type of integration occurs:

1. Back-office and support functions are coordinated across all units involved (functional integration);
2. There are relations among different organisations (organizational integration);
3. There are provider relationships within and across organisations (professional integration)
4. Services are coordinated in a single/seamless process across time, place, and discipline (service/clinical integration)
5. Shared mission, work values and organizational/professional culture (normative integration)
6. Policy and incentives are aligned at organisational level (Systemic integration)

Additional comments

Q5. The **level of integration** of your case could be considered as:

1. Funding integration
2. Administrative integration
3. Organizational integration
4. Service delivery integration
5. Clinical integration

Additional comments

[6] In the structured questionnaire we will leave a box for the respondent to add any comment under each question. Use as many space as need it.

Q6. The **breath of integration** of your case could be defined as:

1. Horizontal integration wherein similar organizations/units at the same level join together (e.g., two hospitals)
2. Vertical integration, which involves the combination of different organizations/units at different levels (e.g., hospital, community health centre, home care agency and nursing home)
3. Full integration which refers to a "new" entity that consolidates responsibilities, resources and financing in a single organization or system in order to deliver and pay for the entire continuum of care

Additional comments

Q7. The **degree of integration** of your case could be described as:

1. Providers work together on an ad hoc basis within major system constraints (low degree of integration);
2. Communication, information-sharing and collaboration are facilitated through coordination based on structured, inter-organisational mechanisms while eligibility criteria, service responsibilities and funding remain separate (medium degree of integration)
3. Full integration which refers to a "new" entity that consolidates responsibilities, resources and financing in a single organization or system in order to deliver and pay for the entire continuum of care

Additional comments

Block 2. Impacts

Q8. As a result of your integrated care case have you measured a positive impact on any of the following:

1. Hospitalization reductions (Average Length of stay; planned and unplanned Admissions; Emergency visits; bed days reduction)
2. Mortality rates
3. Process outcomes (provider monitoring, compliance and adherence to guidelines)
4. Functional status and health outcomes
5. Patients satisfaction
6. Patients quality of life
7. Sustainability of heath care system for insurances and health care organizations
8. Quality of work for health and social care professional improvement
9. Cost reduction (diagnosis cost, operating cost of clinical services; administrative cost; home care services cost)
10. Cost-effectiveness

Additional comments

Block 3. Policy and governance settings

Q9. Which of the following **governance mechanisms** have been more important to foster integrated care in your case

1. There are inter-professionals teams across the continuum of care.
2. There is a clear legal framework covering liability issues
3. There is a strong, focused, diverse governance represented by all stakeholders
4. There is an organisational structure that promotes coordination across settings and levels of care

Additional comments

Q10. Which of the following **policy commitments** have been more important to support integrated care

1. Policy leaders foster a cohesive culture enabling the care continuum
2. Policy leaders provide organisational support demonstrating strong commitment
3. Policy leaders facilitate the participation of all the stakeholders
4. Policy leaders foster innovation within the health system
5. There is policy leadership pushing for integrated care

Additional comments
i

Q11. Which of the following **incentives and financing issues** facilitate integrated care service delivery in your case

1. Service funding and incentives are aligned so as to facilitate integrated care
2. Funding mechanisms promote inter-professional teamwork
3. There are national investments and funding programs to ensure adequate resources for sustainable change and up-front costs
4. There are funding mechanism to ensure equitable funding distribution for different services or levels of services.

Additional comments

Q12. How are the provided services reimbursed:

1. Fee for service;
2. Pure capitation model;
3. Risk adjusted capitation;
4. DRG;
5. Bundled payment;
6. Payment for outcome;
7. Payment for coordination;
8. Other (specify)

Additional comments

Q13. Was the current form of reimbursement introduced ad hoc for the provision of integrated care:

1. Yes;
2. No;
3. Do not know;
4. Other (specify);

Additional comments

Q14. Is the current funding/reimbursement:

1. Mainstreamed into the statutory NHS/Insurance system;
2. Provided on the basis of an ad hoc contract or decree subject to renewal;
3. Provided as part of a national stimulus package bound to expire;
4. Do not know;
5. Other (specify);

Additional comments

Q15. In the provision of the services is there any form of risk/revenue sharing collaboration with private sector providers:

1. No;
2. Yes, but only for the ICT components of the services;
3. Yes, both for ICT components and for clinical aspect of the services;
4. Do not know;

Other (specify);

Additional comments

Q16. Please use the scale below to indicate the extent to which you agree with the following statements about the barriers that limited or hampered the full potential for the deployment and/or impact of the initiative

a. Lack of or insufficient legal and regulatory framework (i.e. lack of legal certainty on liability; privacy and ethical issues)
   1. Completely disagree
   2. Mostly disagree
   3. Slightly disagree
   4. Slightly agree
   5. Mostly agree
   6. Completely agree

Additional comments

b. Insufficient national investments and funding programmes to ensure adequate resources for sustainable change and up-front costs
   1. Completely disagree
   2. Mostly disagree
   3. Slightly disagree
   4. Slightly agree
   5. Mostly agree
   6. Completely agree

Additional comments

c. Lack of common outcome oriented incentives schemes for care managers and healthcare and social care professionals involved
   1. Completely disagree
   2. Mostly disagree
   3. Slightly disagree
   4. Slightly agree
   5. Mostly agree
   6. Completely agree

Additional comments

d. Lack of innovation in reimbursement models
   1. Completely disagree
   2. Mostly disagree
   3. Slightly disagree
   4. Slightly agree
   5. Mostly agree
   6. Completely agree

Additional comments

e. Insufficient policy support limited the full potential for the deployment and/or impact of the initiative
   1. Completely disagree
   2. Mostly disagree
   3. Slightly disagree
   4. Slightly agree
   5. Mostly agree
   6. Completely agree

Additional comments

Block 4. Organisation and professionals

Q17. Please use the scale below to indicate the extent to which you agree with the following statements:

a. The service was re-organised to ensure cooperation between tiers of care
   1. Completely disagree
   2. Mostly disagree
   3. Slightly disagree
   4. Slightly agree
   5. Mostly agree
   6. Completely agree

Additional comments

b. The service was re-organised to ensure cooperation between health and social care
   1. Completely disagree
   2. Mostly disagree
   3. Slightly disagree
   4. Slightly agree
   5. Mostly agree
   6. Completely agree

Additional comments

c. The service was re-organised to ensure access to a care continuum with multiple points of access
   1. Completely disagree
   2. Mostly disagree
   3. Slightly disagree
   4. Slightly agree
   5. Mostly agree
   6. Completely agree

Additional comments

Q18. Which of the following initiatives focused on **health professionals** apply in your case:
1. Physicians are the gateway to integrated healthcare delivery systems
2. Nurses play a pivotal role
3. There is a stimulating learning culture and continuous improvement engaging health professionals
4. Health care professionals engagement is regulated by contract through an incentive scheme based on agreed integrated care outcomes

Additional comments

Q19. Please use the scale below to indicate the extent to which you agree with the following statements about the barriers that limited or hampered the full potential for the deployment and/or impact of the initiative:

a. Health and/or social care professionals resistance to technology
    1. Completely disagree
    2. Mostly disagree
    3. Slightly disagree
    4. Slightly agree
    5. Mostly agree
    6. Completely agree

Additional comments

b. Resistance from care managers and/or healthcare and/or social care professionals to be involved
    1. Completely disagree
    2. Mostly disagree
    3. Slightly disagree
    4. Slightly agree
    5. Mostly agree
    6. Completely agree

Additional comments

c. The re-organisation of the service increased the workload for professionals
    1. Completely disagree
    2. Mostly disagree
    3. Slightly disagree
    4. Slightly agree
    5. Mostly agree
    6. Completely agree

Additional comments

d. Incentives for professional were misaligned
    1. Completely disagree
    2. Mostly disagree
    3. Slightly disagree
    4. Slightly agree
    5. Mostly agree
    6. Completely agree

Additional comments

Block 5. Patients

Q20. Which of the following **patient engagement** initiatives apply your case:

1. There is a patient-centred philosophy, focusing on patients' needs
2. There are self-management support methods for patients as a part of integrated care
3. There are different channels, including the Internet, to provide understandable and patient-centred information
4. There are different channels, including the Internet, to facilitate patient engagement
5. There are different channels, including the Internet, to support informal carers

Additional comments

Q21. Please indicate the extent to which you agree with the following statement "Patient resistance to technology represented a major barrier and limited the full potential for the deployment and impact of the initiative"

1. Completely disagree
2. Mostly disagree
3. Slightly disagree
4. Slightly agree
5. Mostly agree
6. Completely agree

Additional comments

Block 6. ICT

Q22. Which of the following initiatives related with **Information and Communication Technologies** apply in your case:

1. There is a state-of-the-art information systems to collect, track and report activities;
2. There is an interoperable information systems to collect, track and report information
3. There is an interoperable information system to enhance communication and information flow across the continuum of care
4. There is an Electronic Health Record shared across the continuum of care;
5. There are Telehealth or Telecare systems to support health professionals and patients;
6. There are Independent living systems to support health professionals and patients

Additional comments

Q23. Please indicate the extent to which you agree with the following statement: "Lack of IT interoperability limited the full potential for the deployment and impact of the initiative

1. Completely disagree
2. Mostly disagree
3. Slightly disagree
4. Slightly agree
5. Mostly agree
6. Completely agree

Additional comments

Semi-structured interview key questions

1. How would you define integrated care services? What are the dimensions of integration in your case?
2. What are the main advantages of integrated care services in your case? Have you measured the impact of your intervention?
3. Integrated Care Service is currently a top priority in health policy and in the agenda of health management. What integrated care services prevailed in your case?
4. What are the main health and social institutions that have been involved in the provision of services?
5. Are there other organisations that are at the institutional level not associated with health or social services? (e.g. NGOs, service providers from the private sector, etc.)
6. Which organs are responsible for the coordination and control of activities related to the provision of services?
7. Which institutions will pursue the goals and / or provide the financial resources for service delivery?
8. How will services be refunded?
9. Are there any special incentives for health and social services, and health and social professionals?
10. Health professionals and patients play an important role in the integrated supply services. How were they involved in your experience?
11. ICT support integrated care services, how has ICT facilitated the implementation of the initiative in your case?
12. How could integrated care services be established in other national or EU28 MSs contexts?

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