



**JADE
CARE**

Joint action on implementation
of digitally enabled integrated
person-centered care

D4.2 BLUEPRINT ON LEARNING FROM GOOD PRACTICES

Agenzia Nazionale Per I Servizi Sanitari Regionali (AGENAS)

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Table of contents

EXECUTIVE SUMMARY	7
STRUCTURE OF THE DOCUMENT	8
INTRODUCTION	9
CONTEXT	9
JADECARE JOINT ACTION.....	10
ABOUT THE BLUEPRINT.....	10
PART 1 – JADECARE METHODS AND MEANS	12
1.1 ORIGINAL GOOD PRACTICES	13
1.2 NEXT ADOPTERS.....	16
1.3 IMPLEMENTATION STRATEGY	19
1.3.1 <i>Pre-implementation</i>	19
1.3.2 <i>Implementation</i>	21
1.3.3 <i>Post-implementation</i>	23
PART 2 – GUIDELINES FOR GOOD PRACTICE TRANSFER	24
1.4 METHODOLOGY	24
1.4.1 <i>Data collection</i>	26
1.5 RESULTS	27
1.5.1 <i>Weaknesses</i>	27
1.5.2 <i>Strengths</i>	28
1.5.3 <i>Facilitators</i>	30
1.5.4 <i>Inhibitors</i>	31
1.5.5 <i>Lessons learned</i>	33
CONCLUSIONS ON THE TRANSFER EXPERIENCE IN JADECARE	36
1.6 RECOMMENDATIONS.....	38
LIMITATIONS	42
APPENDIX	43
1.7 ANNEX 1: RESULTS OF THE SURVEY TITLED: THEMATIC WORKSHOPS FOLLOW UP: NAWG MEMBERS SURVEY.....	43

Table of abbreviations

JA	Joint Action
CCUH	Childrens Clinical University Hospital
CF	Core Features
CFIR	Consolidated Framework for Implementation Research
CIPH	Croatian Institute of Public Health
EU	European Union
GDPR	General Data Protection Regulation

ICT	Information Communications Technology
JADECARE	Joint Action on Digital Enabled integrated person-centred CARE
LAP	Local Action Plan
LCFs	Local Core Features
LGPs	Local Good Practices
M&M	Mix and Match
NA	Next Adopters
NAWG	Next Adopters Working Group
NGO	Non-Governmental Organization
oGP	Original Good Practice
PB	Policy Board
PDSA	Plan, Do, Study, Act
PREMS	Patient-Reported Experience Measures
SCS	Servicio Cántabro de Salud
SMART	Specific, Measurable, Attainable/Achievable, Realistic and Time Bound
SQUIRE	Standards for Quality Improvement Reporting Excellence
TW	Thematic Workshops
WP	Work Package

List of figures

Figure 1: Steps of JADECARE implementation strategy.....	12
Figure 2: Blocks and core features of the Basque good practice	13
Figure 3: Blocks and core features of the Catalan good practice	14
Figure 4. Blocks and core features of the German good practice	15
Figure 5: Blocks and core features of the Danish good practice	16
Figure 6: The PDSA Cycle.....	22
Figure 7: Outline of the PDSA cycles in JADECARE	22
Figure 8: The post-implementation phase	23

List of tables

Table 1: Summarising the NAs and the associated OGP implementation choices.....	19
Table 2: Questions that helped guiding the SWOT analysis.....	21

Executive summary

An ageing population with a growing burden of chronic diseases and multimorbidity is constantly increasing the demand for more efficient care and smarter, personalised care based on innovative solutions and health outcomes. Healthcare systems are striving to deliver digitally enabled, integrated services that are person-centred and based on the needs of citizens. In this context, JADECARE aimed to contribute to innovative, efficient, and sustainable health systems by providing expertise and sharing good practice solutions for digitally enabled integrated person-centred care.

JADECARE was an opportunity to sow the seeds of innovation in some cases, or to accelerate an innovation process in others, in the field of digitally enabled integrated person-centred care. Based on a previous selection exercise by the European Commission, four original Good Practices were selected for transfer to other European Union countries, covering integration, chronic conditions, multimorbidity, frail people and patients with complex needs, self-care, prevention and population health, disease management and case management. Depending on their needs and level of maturity, Next Adopters adopted either individual core features of a single original good practice (one-to-one approach), a choice made by 17 Next Adopters, or core features of more than one good practice (mix & match approach), a choice made by 4 Next Adopters.

Deliverable 4.2 "Blueprint on Learning from Good Practices" as part of Work Package 4 activities provides guidelines and operational procedures for the transfer of JADECARE good practices, including key elements to ensure scale-up and sustainability after the end of the project.

This document analyses Next Adopters' experience with transferring and adopting original Good Practices and supports good practice transfer beyond JADECARE. It represents a reflection at the end of the implementation process, evaluating the challenges faced, the successes achieved, and the lessons learnt along the way. This insight could help identify areas for improvement, refine future implementation strategies and guide future quality improvement initiatives.

Implementing best practices is an ongoing process. This work is therefore a starting point to sustain the implementations achieved and to foster a culture of continuous improvement. It can provide strategies to maintain best practices and adapt them to evolving healthcare needs.

Structure of the document

This document is an easily accessible implementation guide for both inside and outside the JADECARE project, and it is structured as follows:

A first introductory section including: a) a general introduction to the context in which the JADECARE project was developed; b) a brief summary of the structure of the JADECARE project; c) a description of the content and general purpose of the document, including a list of potential readers who might benefit from this experience.

The first part of the document describes the implementation methodology designed in JADECARE, starting with the “early adopters”, i.e., the four original Good Practices (oGPs) and those who have adopted it, i.e., the Next Adopters (NAs). It also describes the three phases of the implementation strategy designed and used for the transfer and adoption of the good practices (pre-implementation, implementation, post-implementation)¹.

The second part, which is the core of the document, presents the methodology employed for the development of this Blueprint and the main conclusions and lessons learned by the NAs in terms of strengths, weaknesses, and elements that facilitated or inhibited implementation. A special section contains recommendations and guidelines for sustainable implementation. Final conclusions, that is a summary of the main points of discussion in the document itself, are at the end of the document.

¹ For further detail about the implementation strategy see Deliverable 3.1 “Impact Assessment Plan” of JADECARE <https://www.jadecare.eu/resources/#deliverables>

Introduction

Context

Europe's health systems are facing major challenges as a result of demographic changes and an increased morbidity and mortality due to chronic and complex diseases. Increasing life expectancy leads to a higher number of people who are increasingly dependent on care and support in everyday life. For this reason, it is necessary to strengthen the networking between the various health sectors involved in the health challenges, mainly the primary care sector with the hospital care sector (inter-sectoral integration), as well as between the health sector and the other sectors involved (social, education and the labour sectors). With an increasing specialisation in health care, organisational models were rather based on specific medical fields and areas of care that coincide with the domains of medical knowledge. Thus, over the last few decades, specialisations and fragmentations have increased to the advantage of knowledge on a specific disease but to the disadvantage of a global and holistic vision of the patients (their needs, state of health, living environment and socio-cultural context). A more patient centred approach and better coordination of care requires a remodelling of the care process and consequently the need for new models of “integrated care” by improving the inter-professional connection, and cooperation between all the actors of the "health" system. The basic assumption of such collaborative models is that inter-professional coordination and collaboration between all service providers can improve the quality of care and simplify communication channels. Synergies can be exploited, and costs reduced, thanks to local and regional supply networks and integrated solutions from a single entity between outpatient and hospital services. In this integrated context, digital solutions assume high strategic value because they facilitate and speed up the connection between the different sectors, environments, settings, and the related professionals involved. In addition, they themselves become enabling factors for the integration of care, like other factors,² such as:

1. Empowering and engaging people, providing them with opportunities, skills and resources;
2. Strengthening governance and accountability of health system operators and managers, promoting transparency in decision-making and the creation of robust systems that align governance, accountability and incentives;
3. Re-orienting the model of care so that efficient and effective health services are purchased or delivered through care models that prioritise primary and community care services and health coproduction;
4. Coordinating services around people's needs, at all levels of care, as well as promoting activities to integrate different health professionals and create effective networks between health and other sectors;

² World Health Organization. (2015). WHO global strategy on people-centred and integrated health services: interim report. World Health Organization. <https://apps.who.int/iris/handle/10665/155002>

5. Creating an enabling environment that brings together different stakeholders to undertake change, modify the legislative framework, financial aspects and incentives, reorienting the workforce and public policies.

JADECARE Joint Action

JADECARE (Joint Action on implementation of Digitally Enabled integrated person-centred CARE) involved 16 Competent Authorities and 29 Affiliated Entities from 16 countries across Europe. Among them, there were 21 "Next Adopters" (NAs) and 4 "Early Adopters" of Good Practices in integrated person-centred digital care. JADECARE made 4 original Good Practices available to the 21 NAs and accompanied them in the transfer and adoption process building their Local Good Practices (LGPs). In doing so, JADECARE aimed to contribute to the development of innovative, efficient, and sustainable health systems in the beneficiary countries. The four oGPs covered fields as the integration of care, chronic conditions, multimorbidities, fragile people and patients with complex needs, self-care, prevention and health of the population, disease management and case management, and were the following:

1. The Basque Health Strategy on Ageing and Chronicity: Integrated Care (Spain)
2. The Catalan open innovation hub on ICT-supported integrated care services for chronic patients (Spain)
3. The OptiMedis Model-Population-based integrated care (Germany)
4. The Digital roadmap towards an integrated health care sector (Denmark)

The transfer methodology proposed by JADECARE took into account the local context, the maturity of the integrated care models, the legal frameworks, the culture/values of the NAs, allowing the transfer in different contexts. Thanks to the transfer methodology and the support provided by the "Early Adopters", the NAs: (i) strengthened their ability to move to a digital, integrated, and person-centred care; (ii) improved knowledge in the use of implementation methodologies; (iii) systematically assessed the quality of the transfer of practices and (iv) included elements of sustainability in the LGPs.

About the Blueprint

Aim of the document

This document is intended to be a tool for turning ideas and concepts into a roadmap for bringing project deliverables to life and it serves as a point of reference during all the phases of a good practice implementation process, ensuring that the final result is in line with the original vision. It includes:

- Methodology and recommendations to support the implementation or the adoption of an identified good practice;
- Definition of core elements to assure scale up;
- Description of the process to ensure sustainability after the end of the project.

Potential readers

The potential readers of this document are possible future next adopters who will be involved in the implementation of a good practice related to digitally enabled integrated person-centred CARE, and in general the national and European JADECARE target groups, including:

- the relevant scientific community;
- health policy makers and experts;
- healthcare professionals and other stakeholders;
- communities and local health authorities;
- patients;
- carers;
- other social agencies working in the field.

PART 1 – JADECARE METHODS AND MEANS

The JADECARE implementation strategy³ aims to serve as a guideline for the JADECARE implementation sites to facilitate the uptake in routine practice of good practices. It includes a series of methods and techniques, concrete procedures, and recommendations to enhance the adoption and sustainability of JADECARE original good practices with demonstrated success.

In JADECARE, a three-step implementation strategy was defined that was followed by all implementation sites and that had been already used in CHRODIS PLUS JA (Joint Action) (see figure below). It has been designed to be appropriate from the scientific point of view, applicable considering data availability and feasible according to project’s timeline and resources. In the following figure, the different activities and timelines are defined.

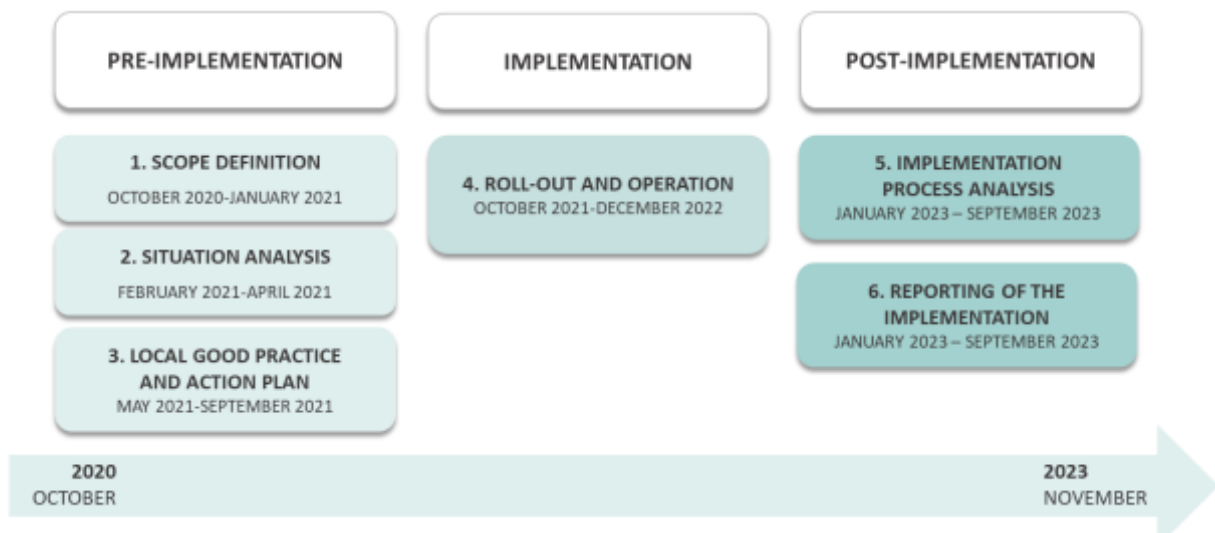


Figure 1: Steps of JADECARE implementation strategy

The three steps of the implementation strategy are:

- Pre-implementation phase: planning and preparation for the implementation (NAs delivered implementation action plans, that included the vision of their future practice);
- Implementation phase: roll-out and operation (NAs provided inputs for regular monitoring and intermediary evaluation (for PDSA cycles) as well as the final evaluation);
- Post-implementation: impact assessment and learning (NAs delivered final implementation report, that included sustainability strategy and action plan). A set of methods and

³ For more detail about the implementation methodology developed by Kronikgune, see Deliverable 3.1 “Impact Assessment Plan” <https://www.jadecare.eu/resources/#deliverables>

techniques were used to enhance the adoption, implementation, and sustainability of the LGPs.

Each NA chose the oGP that best fitted their local needs and to transfer and adapt features from. The work was divided in corresponding transfer WPs, one per oGP transferred. The NAs who chose a “Mix and Match” approach participated in more than one transfer WP (Work Packages for each oGP from 5 to 8).

In the following paragraphs, after a brief description of each oGP and the choices made by each NA, the three different phases of implementation are described.

1.1 Original Good Practices

Basque health strategy in ageing and chronicity: integrated care intends to improve health and quality of life of the population, enhance the health system quality, efficiency and sustainability and the collaboration with social services and the Community. The approach focuses on risk stratification, digitally enabled, integrated care and patient/citizen empowerment, by means of new organisational models, professional roles, pathways and processes and digital tools and analytics.

For the purpose of facilitating implementation, the following blocks and core features were identified:

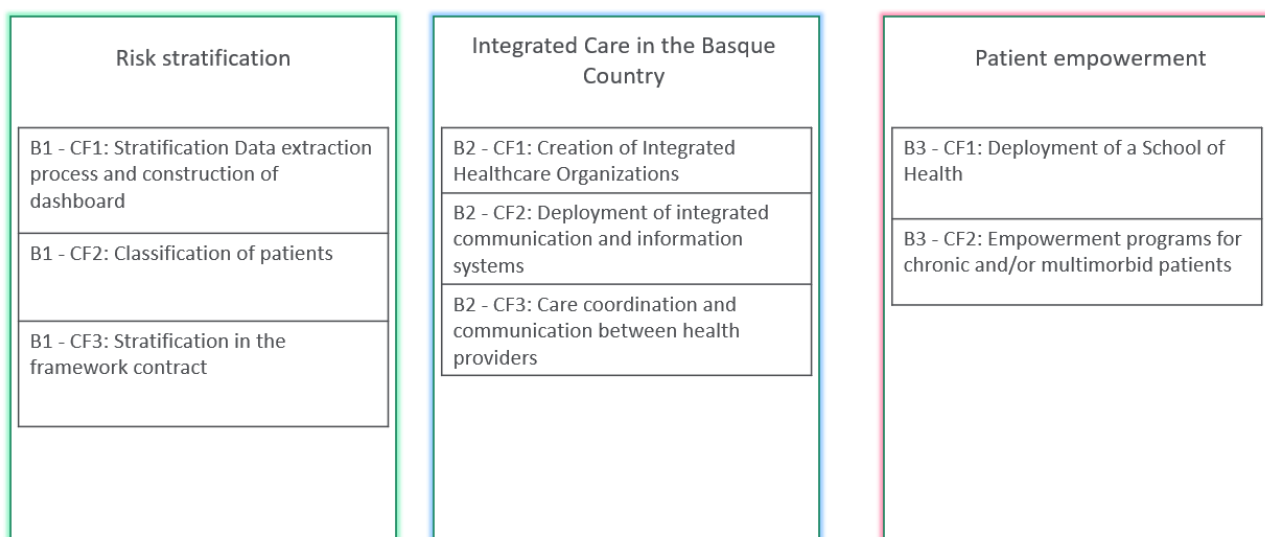


Figure 2: Blocks and core features of the Basque good practice

Catalan Open Innovation Hub on ICT-Supported Integrated Care Services for Chronic Patients. The leader is the Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), whose approach encompasses both vertical (specialized vs. community-based care) and horizontal (healthcare vs. social support) integrations. It combines a population-health orientation with a collaborative

adaptive case management approach of specific integrated care services. The main objectives are promoting synergies among relevant stakeholders of the health and social care system, guaranteeing the healthcare continuum with support of digital tools, and complementing the individual approach with a population-based perspective.

For the purpose of facilitating the implementation, the following blocks and core features were identified:



Figure 3: Blocks and core features of the Catalan good practice

The main objectives of the **OptiMedis original Good Practice** are to achieve better population health, improve patient experience, improve provider satisfaction, and increase effectiveness and efficiency of care by optimising services, reducing ambulatory care sensitive hospitalisation and by organising integrated and preventive care services based on patient health goals. It does this through the creation of territorial networks of health and non-health services providers coordinated

by an independent local integrator, whose main goal is to “produce health” through patient centred services, case and care management, the development of mutually beneficial relationships and by establishing incentive systems to reward interventions beyond the multiplication of services. Digital solutions provide for better target setting, patient stratification to better plan care interventions, business intelligence solutions for care networks and to measure population, patient, and provider outcomes. Continuous evaluation of service performance and outcomes as well as peer reviews ascertain that only the best and most evident practices are sustained and scaled-up.

For the purpose of facilitating the implementation, the following blocks and core features were identified:

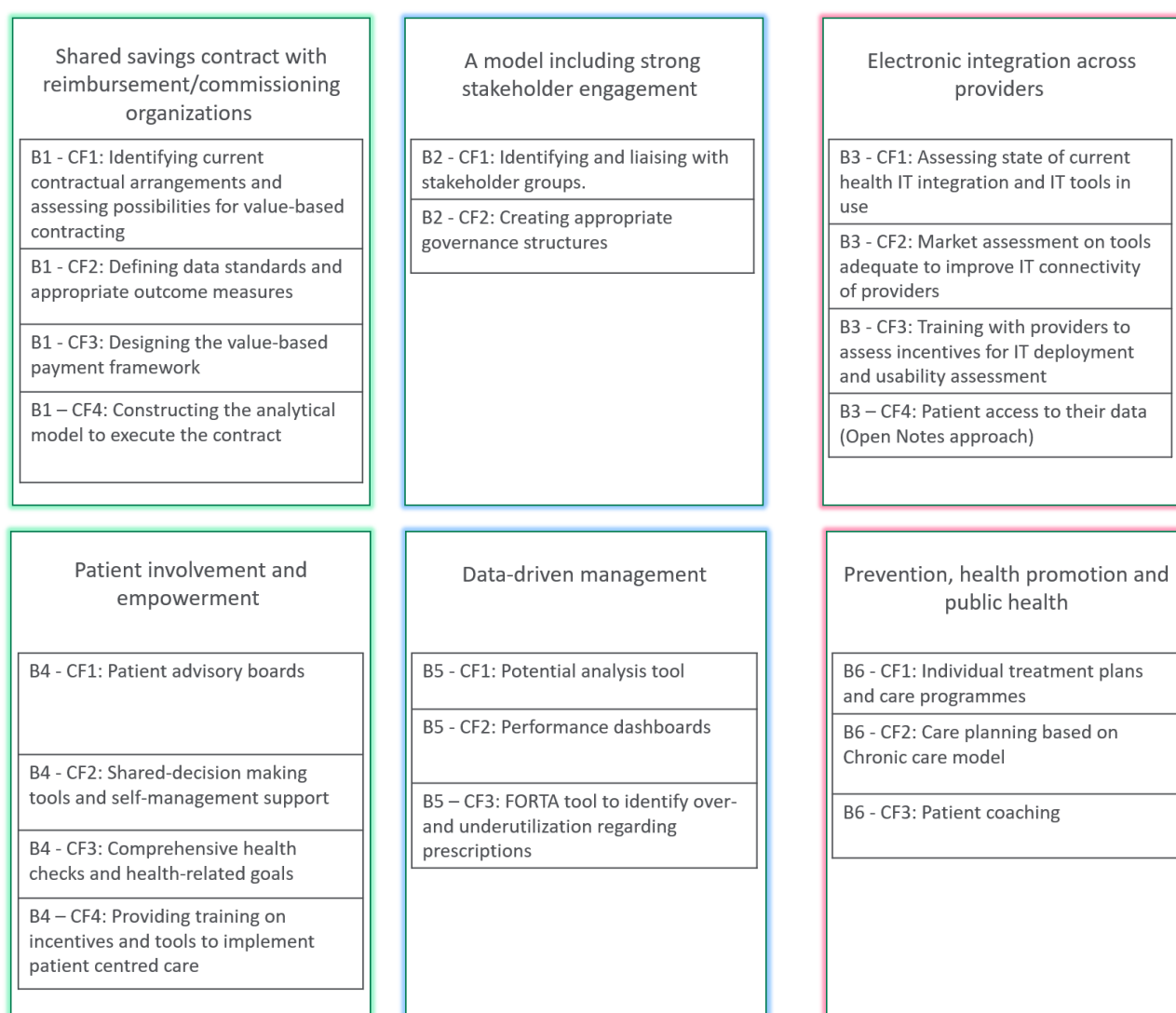


Figure 4. Blocks and core features of the German good practice

Digital roadmap towards an integrated health care sector. The leader is the Region of South Denmark which has the aim to provide patients with a coherent and safe journey through the

different sectors and actors in the Danish Healthcare system. The purpose of the Digital Roadmap is to improve and strengthen the existing cooperation between the healthcare sectors. The Roadmap towards Integrated Care consists of different elements that together make up the foundation for digital and cross-sectorial communication. This is based on a strong collaboration between the different organizations in the regional eco-system of academia, knowledge institutions and private companies. Focus is on user involvement of both professionals and end-users in co-designing solutions and implementation processes and a strong IT infrastructure to make digital communication possible.

For the purpose of facilitating the implementation, the following blocks and core features were identified:

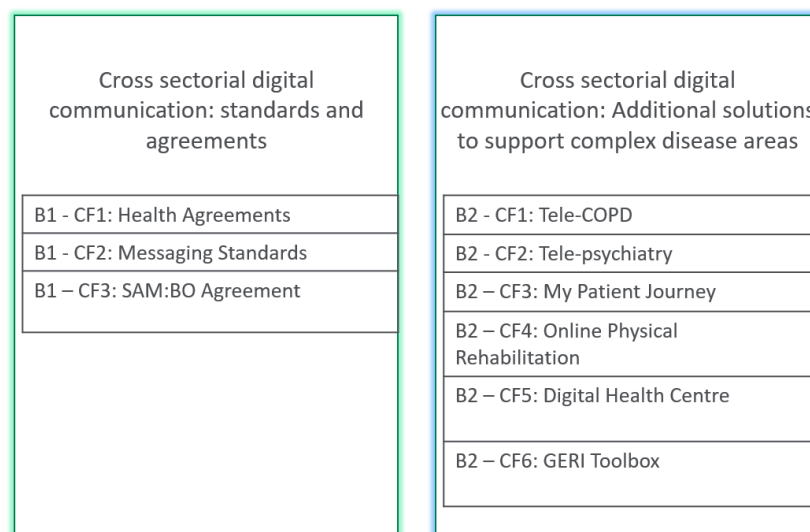


Figure 5: Blocks and core features of the Danish good practice

1.2 Next Adopters

17 NAs chose a single oGP transfer methodology, while four adopted the Mix and Match approach. Table 1 at the end of the paragraph summarizes the choices of each NA.

More in detail, there are five NAs that transferred Core Features from the **Basque Country good practice** (*Basque health strategy in ageing and chronicity: integrated care*):

- **Italy** - Agenzia Regionale di Sanita - ARS della regione Toscana (ARS TOSCANA)
- **Italy** - Azienda Unità Sanitaria Locale Umbria 1 (USL UMBRIA 1)
- **Greece** - School of Medicine, Aristotle University of Thessaloniki (AUTH)
- **Portugal** - Central Administration of the Health System (ACSS)
- **Serbia** - Ministry of Health of Republic of Serbia (MoHRS)

On average three Core Features were transferred by each NA, of which the ones of major interest were:

- “Classification of patients”, within block 1 related to risk stratification.
- “Deployment of integrated communication and information systems” and
- “Care coordination and communication between health providers” as part of block 2 on the integration of care.

These are Core Features that have allowed the NAs both to adopt an active approach to patients, having previously classified their possible risks and needs, and to integrate and therefore better coordinate the responses to these needs.

The scale of implementation varies greatly: from the hospital setting to the local community, to the entire population of several regions.

There are 3 NAs that have transferred Core Features from the sole **Catalan good practice** (*Catalan Open Innovation Hub on ICT-Supported Integrated Care Services for Chronic Patients*).

- **Italy** - Azienda Sanitaria Locale Napoli 2 Nord (ASL NA2)
- **Hungary** - Jahn Ferenc Dél-pesti Kórház és Rendelőintézet (JFDPK)
- **Italy** - Regione Marche (MARCHE)

Two out of three have transferred six Core Features from the oGP in a small setting which includes one hospital and the surrounding territory. Those Core Features are mainly related to:

- Vertical and horizontal integration experiences adopted in Catalonia (block 3 of the oGP);
- and the digital support of integrated care services (block 5 of the oGP).

On the contrary, the third NA has implemented only three Core Features from the block “Health risk assessment and population-based approach” but to a larger scale (the entire regional population).

Three NAs were interested in the **OptiMedis good practice** (*Population Based Integrated Care Good Practice*) and decided to adopt the model almost in its entirety, rather than just transferring some core features. However, during the JADECARE project they focused mainly on some areas:

- electronic integration across providers;
- stakeholder engagement;
- data driven management;
- patient involvement and empowerment;
- prevention, health promotion and public health.

Two of the three NAs intended to implement the "OptiMedis" model on a large scale (the whole region or province).

- **Slovenia** - Health Insurance Institute of Slovenia (ZZZS)
- **Belgium** - Communauté germanophone pour une vie autodéterminée

whereas one intended to implement it in 3 city quarters:

- **France** - Eurometropole de Strasbourg (EUSTRAS).

The 6 NAs that transferred Core Features from the sole **South Denmark Region good practice** (*Digital roadmap towards an integrated health care sector*), were mainly interested in the block 2 Core Features concerning additional solutions to support complex disease areas including Telemedicine and Digital solutions as Tele-psychiatry, Tele-rehabilitation or Tele-monitoring. Most NAs transferred two to three Core Features. Only one NA was interested in both, block 1 & 2, Core Features, willing to implement both regulatory framework (as agreements and protocols) as well as digital tools.

Almost all the NAs aimed to have an impact at a large scale (population of a province, a region or a country), but directly involving, during the pilot project, a sample or a little part of the entire population.

- **Italy** - Regione Lombardia (LOMBARDIA)
- **Latvia** - Childrens Clinical University Hospital (CCUH)
- **Spain** - Consejería de Salud y Familias Junta de Andalucía (CSFJA) and Fundación Pública Andaluza Progreso y Salud (FPS)
- **Spain** - Servicio Cántabro de Salud (SCS) and Instituto de Investigación Marqués de Valdecilla (IDIVAL)
- **Spain** - Gerencia Regional de Salud de Castilla y León (SACYL)
- **Spain** - Servicio Murciano de Salud (SMS) and Fundación para la Formación e Investigación sanitarias de la región de Murcia (FFIS).

Mix and Match approach

Four NAs chose a Mix and Match approach, i.e., to adopt Core Features from different good practices. In all four cases the implementation took place on a large scale: provincial (or country) regional or national.

- **Denmark** - North Denmark Region (RND) chose the Basque practice and the OptiMedis practice.
- **Croatia** - Croatian Institute of Public Health (CIPH) chose the Basque practice and the South Denmark Region practice.
- **Estonia** - Viljandi Hospital (VH) chose the Catalan practice and the OptiMedis practice.
- **Czech Republic** - University Hospital Olomouc (UHO) chose the Basque practice and the South Denmark Region practice.

Country	Next adopter	Basque strategy	Health	Catalan open innovation hub	The OptiMedis model	Digital Roadmap – R. S. Denmark
Bosnia and Herzegovina	Institute for Public Health of the Federation of BH					
Bosnia and Herzegovina	Ministry of Health and Social Welfare -Republic Srpska					
Croatia	Croatian Health Insurance Fund					
Czech Republic	Univ. Hosp. Olomouc					
Denmark	The North Denmark Region					
Estonia	Viljandi Hospital					
France	Eurometropole de Strasbourg					
Greece	School of Medicine, Aristotle University of Thessaloniki					
Hungary	Jahn Ferenc South-Pest Hospital and Clinic					
Italy	Azienda Sanitaria Locale Napoli 2 Nord					
Italy	Lombardy Region					
Italy	Tuscany Regional Health Agency (ARS)					
Italy	Azienda USL Umbria 1					
Italy	Marche Region					
Latvia	Children's Clinical University Hospital					
Lithuania	Ministry of Health					
Portugal	Central Administration of the Health System					
Slovenia	Health Insurance Institute of Slovenia					
Spain	Consejería de Salud y Familias Junta de Andalucía					
Spain	Servicio Cántabro de Salud					

Table 1: Summarising the NAs and the associated OGP implementation choices

1.3 Implementation strategy

1.3.1 Pre-implementation

The objective of this phase was to identify, specify and analyse determinants that act as barriers and enablers, which could influence implementation outcomes, and then to elaborate the Action Plans to be followed during the implementation.

The Pre-Implementation phase ran between months 1 and 10 of the project, from October 2020 to July 2021.

This first phase consisted of the following actions:

1. Definition of the scope of the intervention and selection of topics to implement⁴;
2. Situation analysis using the Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis⁵;
3. Preparation of the Local Good Practice and Action Plan⁶.

The Scope Definition was carried out from October to December 2020 and actually began after the creation of the NAWG (Next Adopter Working Groups) following these steps:

1. Study original Good Practice(s) information: Blocks and Core Features, maturity requirements;
2. According to the original Good Practices blocks, analyse NA site:
 - Aims, challenges, and local existing interventions,
 - Local needs to be covered;
3. Assess and select the Core Features according to:
 - Relevance: Map local needs with original Good Practice(s) Core Features,
 - Feasibility: Core Features maturity requirements vs Check local capabilities;
4. Reporting of the process.

The **Situation analysis** of JADECARE was carried out from January to April 2021.

For the Situation Analysis, each NA site undertook the SWOT analysis. The SWOT analysis is a structured, strategic planning tool used to explore, describe, and evaluate the Strengths (S), Weaknesses (W), Opportunities (O), and Threats (T) of a project, intervention, program, or policy, addressing both internal (S&W) and external (O&T) conditions that may affect its success. It offers a simple and in a glance way to communicate the position of a project, intervention, or program. SWOT analysis needs to be focused on the core features selected in the scope definition. If these features are of different nature and different stakeholders are required for the situation analysis, the performance of more than one SWOT analysis is possible.

The NAWGs performed a SWOT analysis according to the objectives of the scope they have previously defined (oGPs' Core Features). Due to the COVID 19 situation, the process was conducted through online meetings.

⁴ The scope definition template is available in the D3.2 Interim Evaluation Report. For more detail, please see <https://www.jadecare.eu/resources/#deliverables>

⁵ The situation analysis template is available in the D3.2 Interim Evaluation Report (link above).

⁶ The LGP and LAP templates is available in the D3.2 Interim Evaluation Report (link above).

STRENGTHS	WEAKNESSES
What are your advantages? What do you do well? What relevant resources do you have access to? What do other people see as your strengths?	What could you improve? What do you do badly? What should you avoid?
OPPORTUNITIES	THREATS
Where are the good opportunities in front of you? What are the interesting trends you are aware of?	What obstacles do you face? What is your competition doing? Are the specifications for your services changing?

Table 2: Questions that helped guiding the SWOT analysis

Definition of the local interventions and action plans: this phase was carried out from June to October 2021, in which the NAWG defined its Local Good Practice and its Action Plan starting from the analysis performed in the scope definition, the situation analysis (Strategic Intervention Areas, SIAs) and the local policies, strategies and interventions that were already in place in the NA context.

The Local Good Practice (LGP) described the local intervention, including the aim, target population, setting(s), inputs needed, Local Core Features (LCFs) and their components, and the expected outcomes.

The Local Action Plan (LAP) defined the concrete actions (what) to be taken to reach implementation and sustainability of the LGP during JADECARE, the responsible actors (who), resources needed, timeline (when), settings (where) and the Key Performance Indicators to be measured.

Templates were provided for the definition of LGP and LAP to be completed by each NA. The LGPs and LAPs of the 21 NAs are reported in Deliverable 4.1⁷, which has already described how the NAs have designed the practices to be implemented in their context, namely the LGP and the associated LAPs, which contain the actions, timescales and resources needed to implement the LGP.

1.3.2 Implementation

The Plan-Do-Study-Act cycle⁸ presents a pragmatic scientific method for testing interventions in complex systems using an iterative approach. It enables rapid assessment and provides flexibility to adapt the intervention according to feedback, to ensure that fit-for-purpose solutions are

⁷ “D4.1 - Local Good Practices and Action Plans”, for more detail please see <https://www.jadecare.eu/resources/#deliverables>

⁸ Speroff, T., & O'Connor, G. T. (2004). Study designs for PDSA quality improvement research. *Quality Management in Healthcare*, 13(1), 17-32.

developed. Using PDSA cycles aims to facilitate the adoption and testing of interventions in real and system-level.

The steps of a PDSA cycle are:

- **PLAN:** Plan the actions to test the intervention in the “DO” step of the cycle.
- **DO:** Carry out the action and collect data to document any problem or unexpected observation.
- **STUDY:** Analyse data obtained during the “DO” step. The obtained results are compared to the predictions. Learning is summarized.
- **ACT:** Refine the intervention based on the lessons learned. If applicable, determine modifications and improvements to be implemented in a new PDSA cycle⁹.

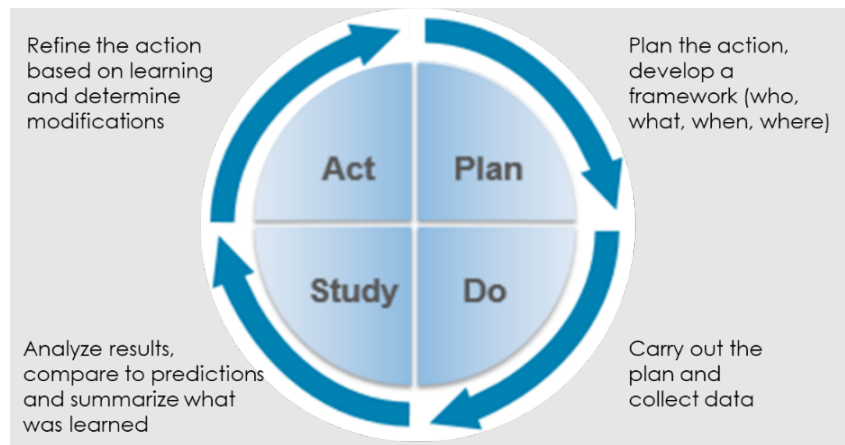


Figure 6: The PDSA Cycle

As with any scientific approach, documentation of each stage of the PDSA cycle is important to support technical robustness, quality, team reflection and learning and to ensure knowledge is captured to support organizational development and transferability to other settings.

Concretely, in JADECARE, each Next Adopter performed two PDSA cycles as follows:

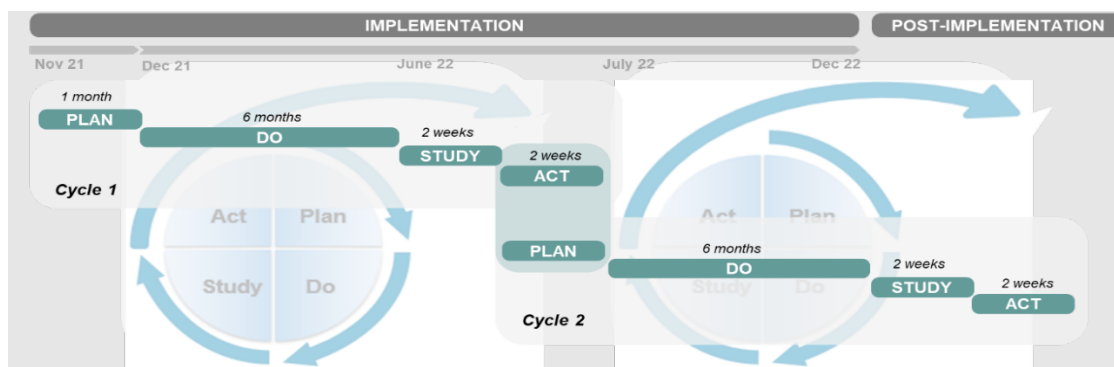


Figure 7: Outline of the PDSA cycles in JADECARE

⁹ The PLAN-DO-STUDY-ACT templates are available in the D3.2 Interim Evaluation Report (<https://www.jadecare.eu/resources/#deliverables>).

1.3.3 Post-implementation

The post-implementation phase includes the analysis and reporting of the results of the local interventions of the NAs, that is, the LGPs, and the study of the implementation experiences.

The post-implementation phase in JADECARE lasted 9 months, from January 2023 to September 2023 and consisted of the following activities:

- Analysis of the implementation results by performing the “STUDY” and “ACT” steps of the second Plan-Do-Study-Act (PDSA) cycle.
- Reporting of the implementation through an adapted version of the revised Standards for Quality Improvement Reporting Excellence (SQUIRE) 2.0 guidelines.
- Analysis of the implementation process through the Consolidated Framework for Implementation Research (CFIR).

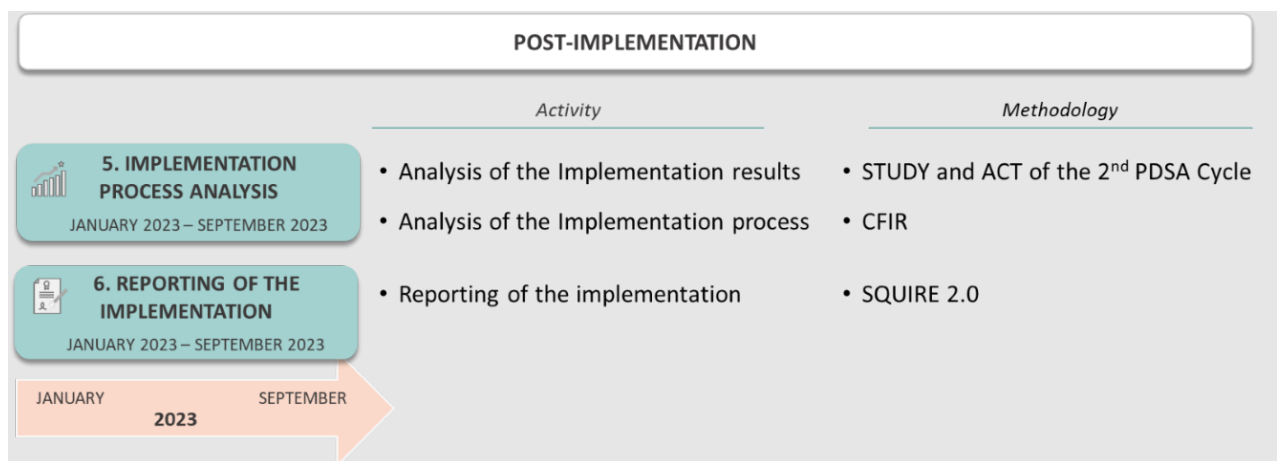


Figure 8: The post-implementation phase

To ensure organised and efficient reporting of results, the NAWGs completed the STUDY, ACT phase and also the SQUIRE and CFIR templates. This activity was carried out until September 2023. An overall analysis and interpretation of the JADECARE implementation results has been performed to obtain ideas for further actions after the end of the Joint Action.

PART 2 – GUIDELINES FOR GOOD PRACTICE TRANSFER

1.4 Methodology

In order to illustrate the potential impact of implementing and supporting the uptake of good practices selected by each NA, the following activities have been undertaken. Both data collection and data analysis were involved in each listed activity.

1) Analysis of the reporting of the implementation process and results

The implementation process of JADECARE was completed by performing the post-implementation phase, where the NAs specified, analysed, and reported aspects of the implementation that could determine implementation success. This task ran from January to September 2023 supported by two methodologies. On the one hand, the “Standards for Quality Improvement Reporting Excellence” (SQUIRE 2.0 guidelines) were used for reporting the whole implementation process. This methodology aims to enhance the evidence base, transferability potential and sharing discoveries. It contains specific elements regarding LGP sustainability beyond JADECARE as well. The Next Adopter Working groups (NAWGs)¹⁰ reported their implementation results by means of the SQUIRE 2.0 answering to 18 items distributed in 2 general sections and 4 key questions¹¹.

On the other hand, the Consolidated Framework for Implementation Research (CFIR) provides researchers with a framework in which they can select the most relevant constructs in the particular field of their study and use them to diagnose the context of the implementation, evaluate the progress of this process, explain the results and improve the quality of the initiatives^{12 13}.

It includes five major domains (the intervention, inner and outer setting, the individuals involved and the process by which implementation is accomplished) and 39 constructs. The domains interact in rich and complex ways to influence implementation effectiveness.

In order to analyse the factors that have influenced the implementation process in JADECARE, two activities were performed:

1. A survey, through which the NAWGs reviewed and reflected on the potential variables that could have had an impact on the implementation process, highlighting the factors that have acted as barriers or facilitators;
2. A focus group organized by each NAWG, ensuring the participation of agents involved in the implementation process of JADECARE with different profiles to ensure a variety of

¹⁰ The Next Adopter Working Group (NAWG) is the team responsible for conducting the implementation of the local practice in each site during JADECARE. NAWGs identify and engage the local stakeholders (individuals or organizations) considered key for the successful Good Practice implementation and sustainability and adopt their specific work and organizational procedures.

¹¹ The template for the SQUIRE questionnaire is available in the D3.2 Interim Evaluation Report (<https://www.jadecare.eu/resources/#deliverables>).

¹² Birken SA, Powell BJ, Presseau J, Kirk MA, Lorencatto F, Gould NJ, et al. Combined use of the Consolidated Framework for Implementation Research (CFIR) and the Theoretical Domains Framework (TDF): a systematic review. *Implement Sci IS* [Internet]. 5 January 2017; Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5217749/>

¹³ Gomes B, Higginson IJ. Factors influencing death at home in terminally ill patients with cancer: systematic review. *BMJ*. 2006 Mar 2;332(7540):515–21.

perspectives of the implementation: organizers, experts, decision makers, front-line stakeholders, and implementers.

The NAWGs analysed the results of the focus group and after that, a global comparative analysis was conducted at the level of the whole project. In order to ensure the quality and robustness of the process, several templates were provided¹⁴.

The reporting of the implementation by means of the SQUIRE and the CFIR have been both analysed to obtain key insights about the implementation for the purposes of building this Blueprint.

2) Facilitator role and co-creation approach of AGENAS

Since the beginning of the implementation process, in the pre-implementation phase, AGENAS was assigned the role of facilitator, which consisted in supporting the NAs in defining their LGP, which described their local intervention, and the Local Action Plan (LAP), which defined the concrete actions (what) to be taken to achieve the implementation and sustainability of the LGP in JADECARE.

Later, during the implementation phase, AGENAS continued to provide specific support to the NAs in defining the elements of common experience, strengths and weaknesses, and factors that hindered or helped implementation. AGENAS was also responsible for leading the co-creation approach used to identify the common implementation principles, involving each NA in the definition of lessons learned. This was made possible by the following tools:

- A survey conducted after the first implementation cycle to investigate more in detail some implementation-related issues that emerged during the thematic workshops. The survey, attached to this document, was made up of 11 questions, either open-ended or closed-ended, relating to the first cycle of implementation¹⁵.
- Interviews with each NA were conducted in specific meetings and during the regular meetings of each WP. The meetings were based on a series of topics related to the overall implementation: added value, main facilitator, main barriers, suggestions for future NAs and sustainability activities.
- Specific support was provided through continuous monitoring of the activities of the NAs that had chosen the Mix and Match approach, through email exchanges during the implementation process and bilateral meetings at specific times, particularly during the first implementation cycle and at the beginning and end of the second implementation cycle.
- Analysis of the lessons learnt at the end of each implementation cycle, during the Thematic Workshops and Key Learning Workshops in particular the key elements to ensure scale-up and sustainability after the end of the project to ensure further implementation at European level, including sustainability at national or local/regional level. This activity was carried out through the

¹⁴ The template for the CFIR survey and the CFIR focus groups are available in the D3.2 Interim Evaluation Report (<https://www.jadecare.eu/resources/#deliverables>).

¹⁵ The results of the survey are attached to this document (Annex 1)

above-mentioned interviews, in which specific questions on sustainability were foreseen, and through the analysis of the documentation provided by WP4, such as the report of the Thematic Workshops and the key points collected during the participation in the Key Learning Workshops.

- *Analysis of the contributions collected during the Policy Board and Policy Dialogue meetings* in order to compare the real impact of the implementation of JADECARE in national and European policies. This activity was carried out firstly through the active participation of AGENAS in the Policy Board and Policy Dialogue meetings, both in terms of facilitating and organising them. In addition to that, the Policy Board reports produced by WP4 were analysed.

1.4.1 Data collection

As described in the Blueprint methodology in the previous section, all content of this document was collected by means of carrying out a series of activities that include both data collection and data analysis.

In particular:

- as regards the SQUIRE analysis, the 21 questionnaires completed by each transfer WP at the time of drafting this document were analysed;
- as regards the analysis of the CFIR, 10 completed templates provided by the transfer WPs at the time of drafting this document were analysed;
- with regards to the survey on thematic workshops, the responses of 25 members of the NAWG were analysed;
- in terms of interviews with NAs, 10 were conducted: 4 from WP5, 2 from WP6 and 4 from WP8 (Mix and Match bilateral meetings are not included as they are referred to later);
- in order to provide specific assistance to NAs that had adopted the Mix and Match approach, 4 bilateral meetings were held during the first implementation cycle and 4 during the second implementation cycle;
- analysis of lessons learned and sustainability was carried out both through the above-mentioned interviews and through the analysis of the documentation provided by WP4, such as the report of the Thematic Workshops and the key points collected during the participation in the Key Learning Workshops;
- the outcomes of the Policy Board and Policy Dialogue have been gathered through active participation in the meetings and the in-depth analysis of the 3 reports produced, containing the minutes of the meetings and the main points touched upon.

1.5 Results

This part of Deliverable 4.2 gathers the main lessons learnt, weaknesses, strengths, facilitators, and inhibitors that characterised the implementation in all its phases. Within each of these sections, content gathered was grouped into thematic areas, in order to make it easier to read and understand, even for an interlocutor outside the project.

1.5.1 Weaknesses

Weaknesses are negative internal attributes (under the organization control). This section includes and identifies everything that keeps the organization from staying on track to achieving its goals, which need to be changed in order to achieve success. In this case, the Good Practice implementation.

THE INFRASTRUCTURE

Given the focuses of the good practices, **lack of e-health (or, more in general, ICT) infrastructures and of available data** was mentioned as a weakness that can affect the success of the adoption process. Furthermore, despite availability of data, data validity may still be missing, or insufficient, and poor-quality data cannot be used effectively, if at all.

Ethical issues related to data utilisation are likely to become relevant throughout the implementation process. Some technical skills, and knowledge about database structure and existing variables, are also required: the possible lack of them is undoubtedly a weakness. The lack of good user knowledge of ICT tools can affect the success of the project, also in terms of their actual incorporation into routine practices and in terms of sustainability.

Another identified weakness is the **usage of different IT systems** throughout the implementation area, as it makes it more difficult to identify some sort of standard, ensure interconnection and possibly increase the scale of the project.

THE PEOPLE

As for **professionals, their current or future insufficient number** in the implementation area is a weakness. It should also be considered that it is unlikely for professionals to devote a large part of their time to the project, in addition to their usual duties. Besides that, limited willingness of professionals to adopt new working styles, approaches and tools also appears to be a weakness. Another aspect to consider is the scepticism of professionals regarding the viability of the innovations to be implemented, especially in terms of sustainability beyond the project period.

Furthermore, there could be other processes that are already ongoing within the implementing organisation at the time of project start and that could have a negative impact on the implementation, resulting for example in a loss of time and/or data. This could, for example, be the

case with changes in the organisational structure. As far as the organisation is concerned, it is also to be considered that when there are many actors making decisions, it could take time to reach agreements.

Limited engagement and commitment to the project by the team members and stakeholders can affect the quality and reliability of the project's results and impede the progress of research or interventions. Project participants might: be less likely to adhere to protocols, to attend follow-up appointments, or to provide accurate and timely data. In some cases, the lack of an obligation to participate may raise ethical concerns. If the project aims to address critical health issues or evaluate life-saving interventions, not having a mechanism to ensure a representative sample or sufficient participation may hinder progress in improving health outcomes or addressing public health concerns. It should also be noted that there could be different developmental rhythms among parties involved in project implementation, for example in terms of bidding deadlines, initial training of professionals, cascade information transfer, etc.

RULES AND FUNDS

Internal regulations and procedures (e.g. public tenders), as well as possible delays in subcontracted activities (e.g. development of ICT tools), may have an impact and should be taken into consideration, as they may affect timing and ultimately success.

Finally, **insufficient availability of funds** to carry out the project as intended and ensure its sustainability over time is also a weakness.

1.5.2 Strengths

Strengths are positive internal attributes that are within the organization's control. This section includes and identifies everything the organization did right when trying to achieve a specific goal, initiative or project.

THE INFRASTRUCTURE

Having an **adequate network of health services in place, and possibly already some degree of coordination between them and with social services**, is surely a strength in the project implementation. The **availability of a large number of data** is also a strength, as it can allow for different implementation opportunities, and it reduces the effort needed to develop/collect them. At the same time, it is important to have a methodical approach towards studying and filling data. More in general, a culture of data and innovation is a plus. An efficient and effective **ICT infrastructure** plays a key role in designing and implementing the LGP: likewise, being already in place some contracts/agreements with IT companies providing healthcare platforms can prove to be a useful starting point.

While the **COVID-19 pandemic** was surely seen as an inhibitor, it is noteworthy that, on the other hand, it was also observed that it **created a good momentum for the uptake of digital healthcare technologies**, although persistent interest in these technologies beyond the emergency cannot be taken as a given.

THE PEOPLE

A **strong team of motivated and well-trained people and inspired leaders** implementing the good practice, as well as the support and commitment of the organisation to which it belongs, is a strength in implementing a project. Reference people are needed both in the central administration and in peripheral management and in the local team(s).

That said, involving **healthcare professionals** from the beginning can be a truly important facilitator of the adoption process, as well as successfully negotiating time that they can devote to the implementation of the good practice. On the other hand, **patient involvement is also a facilitator**. Both sides of the care process can provide perspectives on what is most useful and how change should take place, and both sides can actually “be” the change, testing it and promoting it among their peers. Usually, what needs to be done is known from the beginning, while the most difficult aspect is to determine how it can be done. More generally speaking, **the involvement of committed stakeholders and policy makers**, and other people and organisations that could be interested and could contribute to the implementation process should ideally be sought. Codesigning processes can prove to be very beneficial, as it increases a sense of ownership and can ensure that activities are identified that are considered to be truly valuable and that are well-aligned with the existing workflows as well as current initiatives and policies. Although different actors should be involved, it can be helpful to give the leadership and overall responsibility for the local pilot project to well-credentialed professionals. This whole process involves **performant communication activities** (meetings, workshops, webinars, articles...), both among implementers-stakeholders and towards external audience (other professionals and stakeholders, patients, decision-makers...), which is also a facilitating factor. Relevant actors should be informed from the beginning and throughout the project all the time. This helps understanding the implementation process in a given area and prevents fake news and unjustified fears possibly arising from unverified sources.

THE CULTURE

Having the training and workplace culture change objectives defined is critical to the success of the project. They provide people with the necessary knowledge, skills and attitudes to excel in their roles, improve efficiency, align with best practice, encourage collaboration and create a culture of continuous improvement. Together, these factors contribute to the overall success and positive impact of the project, particularly in terms of sustainability. When knowledge and skills are embedded in the culture of the organization, the benefits extend beyond the duration of the specific

project. The team can carry forward the acquired expertise, maintain high standards, and contribute to ongoing improvements in healthcare delivery even after the project has ended. Furthermore, it was observed by NAs that having **defined a clear, shared objective and a realistic, well-tailored action plan** can help overcome obstacles, hence everything that makes this possible can be considered as a strength. The mindset is also important: focusing more on the work done than on the barriers can be regarded as a strength.

THE FUNDS

The availability of **adequate funds** or the ease in having funds allocated to the project is a strength that can greatly benefit the implementation process, along with the availability of suppliers and the stipulation of adequate contracts.

1.5.3 Facilitators

Facilitators, as opportunities, are external positive conditions. They are outside the organization, but they can be of advantage to reach the projects goals and move the project forward. They may facilitate the implementation. They are often beyond the influence of a region or a local organisation, but it is important to know their possible influence. They include economics, technology, regulation and legislation, sociocultural changes.

POLITICAL SUPPORT

Sustained strategic and political support throughout project implementation and after JADECARE ends is undoubtedly a facilitator. Political support from the top can strengthen the mandate to sustain the implementation because it ensures that sufficient resources, including funding, infrastructure and human capital, are allocated to support the implementation of best practices. When political leaders prioritise healthcare and commit to providing the necessary resources, it improves the ability to sustain the implementation of best practices over the long term. Also, political support enables the development and implementation of policies that promote and enforce the adoption of best practices. It can allow the creation of regulatory frameworks, guidelines and standards that govern healthcare delivery and encourage adherence to evidence-based practices. Political leaders can advocate for policy changes that align with best practices and ensure their effective implementation across the healthcare system. Not less important is the fact that political support brings visibility to the importance of best practices in healthcare. Political leaders can leverage their influence and platforms to advocate for the adoption and sustained implementation of evidence-based practices. Their endorsement and public statements raise awareness among healthcare providers, the public, and other decision-makers, emphasizing the significance of best practices and creating a supportive environment for their implementation.

THE PEOPLE

Implementing the good practice in a **geographical area that is generally proactive and open to change** and working with professionals who are committed, open-minded and who easily adapt to new situations is a plus. **Commitment from external stakeholders** from all levels, such as healthcare professionals, subject matter experts, non-governmental organizations (NGOs), and industry representatives, who often possess valuable expertise and resources, can bring specialized knowledge, skills, and financial or in-kind support, which can greatly enhance the project's success.

THE METHODOLOGY

Standardized methodology, procedures, and guidelines at project level, which means **strong project design** is the key for success of JADECARE project, also after its end. It was noticed that standardization established a consistent approach to project management, ensuring that all team members, in particular the NAs followed a set of predefined methodologies, procedures, and guidelines, promoting efficiency by reducing redundancies, eliminating confusion, and streamlining processes. It allows for smooth coordination and communication among team members, enabling them to work together seamlessly towards project goals. This kind of project design promoted consistency, efficiency, quality assurance, scalability, replicability, risk management, collaboration, communication, training, evaluation, and continuous improvement. By adopting standardized approaches, project teams could navigate challenges effectively, optimize resources, and increase the likelihood of achieving project objectives in a systematic and reliable manner.

The **leadership and the professionalism of the holders of the original good practice** was also mentioned as a facilitator.

1.5.4 Inhibitors

Inhibitors are external conditions that may stand in the way or hinder the organization goals or project progress or implementation.

UNFORESEEN EVENTS

Unforeseen, external events, such as the recent COVID-19 pandemic and changes in the political situation, can negatively affect the implementation process, slowing the activities down.

Another obstacle that was encountered was a **change in stakeholders**: some relevant actors had been involved in the implementation process but then changed position, resulting in a repeated need for the NA to involve other people, thereby slowing down the overall process. Also changes in the **health care organisation** may have a negative impact on the implementation, as they may slow it down and force to change the implementation compared to what was initially planned.

THE CULTURE

In addition to privacy issues, **resistance to change by individuals or professional bodies** is seen as one of the main barriers (both internal and external to the organisation) to full implementation of the plan. In fact, most of the time people may resist change because they are unsure about the outcomes or consequences of implementing a new practice. They may be comfortable with the current way of doing things and fear that the new practice will disrupt established routines or lead to negative outcomes. Furthermore, they may lack sufficient awareness of the existing need for change or of the opportunities that innovation can bring.

Cultural barriers to the use of technology are among the most frequently identified external barriers to implementation, particularly for some of the oGPs. Very often, people are comfortable with familiar practices and may perceive technology as a threat to established routines or traditional methods of care. Some people may have a fear or lack of trust in technology, especially if they are unfamiliar with it or have had negative experiences in the past. This fear may prevent them from embracing new technological solutions, even if these solutions bring proven benefits. Cultural barriers can include a lack of digital literacy, particularly in certain demographic groups or regions. This can hinder the adoption of technology as individuals may lack the skills and knowledge necessary to effectively use and benefit from digital solutions.

THE INFRASTRUCTURE

Structures of healthcare systems are often fragmented and complex. They consist of multiple organisations, departments, and levels of government. Furthermore, this may also refer to the financing system. Complexity can lead to fragmentation and lack of coordination, making it difficult to implement and sustain best practices consistently across the system. Decision-making processes can be slow, and accountability can be diluted, hindering the effective implementation of new practices. Health systems can also be resistant to change because of entrenched traditions, professional interests, and established power dynamics. Implementing new practices often requires challenging the status quo and overcoming resistance from various stakeholders. Resistance can take the form of reluctance to adopt new technologies, scepticism about evidence-based practices, or fear of disrupting established workflows. In addition, healthcare systems are often constrained by limited resources, such as financial, human, and technological resources, and are subject to regulatory and legal frameworks that can create barriers to the implementation of best practices.

Financial incentives can be a hindering factor especially in healthcare systems that operate under a fee-for-service reimbursement model, where providers are reimbursed based on the volume and intensity of services provided, rather than on the outcomes or quality of care delivered. This can create a financial disincentive for providers to adopt new practices that may reduce the need for certain services or procedures. As a result, providers may be less motivated to adopt practices that prioritise prevention, early intervention, or cost-effective approaches. Healthcare systems with fragmented payment systems, where different components of care are billed and reimbursed

separately, can also hinder the implementation of good practices. This fragmentation often results in misaligned financial incentives between different healthcare providers, making it difficult to coordinate and integrate care effectively. As a result, the adoption of new practices that require collaboration and coordination may be resisted due to financial concerns and conflicting incentives.

Applicable legislation may affect the possibility of implementing the good practice as planned; in this respect, General Data Protection Regulation (GDPR) was mentioned by various NAs. Lack of relevant legislation (e.g., e-health legislation, county health policy, etc) can also prove an obstacle.

POLITICAL SUPPORT

It was observed that the **launch of the implementation process** outside of the Ministry of Health can prove an obstacle, as well as the availability of only one ministerial department working on the relevant matters can prove a bottleneck. **Changing political scenery** can also lead to uncertainty in the sustainability of the project. When there is a change in political leadership or government policies, funding priorities for healthcare projects can shift. A new administration may have different priorities and allocate resources differently, potentially redirecting funds away from existing projects or changing the focus of healthcare initiatives. Also, political changes can alter the level of support and engagement from key stakeholders, such as government officials, agencies, and advocacy groups.

1.5.5 Lessons learned

Capturing lessons learned is essential for project sustainability, as it facilitates continuous improvement and prevents mistakes from being repeated in future projects. It also helps to retain valuable knowledge and optimise resources to manage future risks and promote organisational learning.

THE PLANNING

The initial phases of the project, and namely the **initial planning**, appear to be crucial in order to successfully implement the LGP. This needs to be designed in an informed and careful manner. It could be said, in this respect, that the process towards adopting a good practice should be regarded and designed as a project, with goals, dedicated human and material resources, timelines and milestones.

While projects implementing good practices are by definition innovative, their **ambition should be set at a realistic level**, which presupposes adequate knowledge and, consequently, planning. It was noted that a good strategy could be to identify a specific area where the project can be implemented first, and then expand it to a larger scale. Preliminary analysis should include an estimation of the impact on health outcomes, costs, and intellectual/industrial property rights issues. One of the

aspects to be considered is surely **the context**: one NA observed, for example, that it would have been beneficial for him to even better explore, at the beginning, the level of digital and health literacy in the implementation area, in order to have a clearer view of the starting point and to make more informed assumptions regarding patient engagement. This could also translate into designing training/awareness raising sessions to ease/promote the implementation of the new practice. Understanding what help the holders of the original good practice can provide is also important as well as getting to know as much as possible about the original good practice. When data are needed to carry out the implementation process, it is important to have a clear picture, from the beginning, of what data is available or can become available and how, and whether the available data is valid or not. New solutions should ideally be compatible with existing IT systems that could be built on or improved: they therefore need to be analysed beforehand. With reference to the context, it was also observed that possible political barriers should be considered, but they should not necessarily prevent undertaking the project. **Legal issues also require time and a proper evaluation** starting with the design phase. This is crucial to shape the LGP and the action plan in an informed and realistic way. Initial analysis should consider that a 3-year timeframe is likely insufficient to be able to reap the full benefits of the implementation or even conclude the process. However, it appears that it can be sufficient to launch a well-defined process that has all the potential to continue and progress in the following years.

IMPLEMENTATION AND SUSTAINABILITY

One of the key learning points reported by NAs from the implementation process is the increased knowledge of **how to use data and how to build a population approach**. This was also possible thanks to the opportunity to test the process of supporting the introduction of innovation in the healthcare system in a real scenario, with a clear methodology and concrete support.

The **in-depth knowledge of good practices** achieved throughout the implementation process, also thanks to the availability of the oGP leaders, and in particular the way in which the practices had already been successfully implemented in different contexts, helped to prioritise the needs of healthcare institutions in relation to digital health, and contributed to a multidisciplinary vision/approach on how to address the same topic/problem in the right sequence.

Finally, in the future it is also important to present the relevance of the results obtained in such a way that the European Commission can act with the instruments at its disposal to support the sustainability of the project.

THE PEOPLE

A **well-organised working group** should ideally be put in place. It would be beneficial to set up a small, action-oriented team that can devote time to the project, solve issues and be actively involved in the implementation. That team would be additionally surrounded and supported by other people

that are experts in different areas, such as healthcare professionals. A network of leaders should be established to support project implementation and, if wished, help to extend it to a broader area. Managers should push with enthusiasm and persuasiveness, while healthcare professionals should be leaders in their own environments, with their staff. Coordination could be achieved by means of organising agile multidisciplinary meetings and by searching consensus and cooperation between the parties by means of focusing on common objectives and assessing the different necessary and complementary paths to achieve them. A well-thought distribution of the workload within the working group would also be important.

The importance of involving relevant actors as early as possible was also underlined. In this respect, exchanging views with the holders of the original good practices can be helpful in order to identify such actors. The early involvement of local implementation sites, along with their IT services, is to be advised. This permits an agreement on the objectives, to be better prepared and solve any potential issues before the start of the implementation phase. Generally speaking, the involvement of several different organisational areas could be considered, namely regulations, material and technological equipment, information systems, care organisation and human resources. The COVID-19 pandemic did not always fully allow for involvement of actors, as healthcare professionals were busy dealing with the emergency. In general, it can be expected that **health professionals** cannot fully devote their working time to the implementation of good practices, hence what the situation actually allows for should be taken into account. Focus should be placed on passionate and enthusiastic professionals, who are open to change and can influence their peers' approach. On the other hand, attention should also be paid to professionals who might be willing to quit the project, in order to evaluate whether something could be done to prevent it. It was debated among NAs, whether **economic incentives linked to the achievement of objectives** can be useful and sustainable over time. No consensus was achieved on the matter, which might suggest that incentives can be considered as an option, but their effectiveness cannot be taken for granted and might differ depending on the contexts. **Patients should also be involved**, as any change in the healthcare system should ultimately be beneficial to their health. Their perspective should be included, e.g. through PREMS (Patient-Reported Experience Measures). It is also worthy to investigate whether **other stakeholders** could be involved from other backgrounds and whether their interest and understanding can be gained. In that respect, policymakers' involvement and political support appear to be crucial, both in terms of implementation and sustainability of the good practice, including possible upscaling. Generally speaking, users/recipients of any innovation should be involved in their development as co-creators.

THE STRATEGY

Strategic thinking should be employed, taking into consideration the larger scope and potential impact of the project and alignment with existing policies/initiatives/strategies. Furthermore, a NA **should ideally try to get all is needed from his own resources**, in order to have control over the

progress of the good practice development and implementation to the highest possible extent. Nevertheless, if some external support is needed, it is important to have a very detailed commitment and agreement to avoid delays, lack of quality, intellectual property issues, etc. The actual implementation of good practices has shown the importance of carrying out an accurate SWOT analysis at the beginning, in order to acquire good knowledge of existing and possible external and internal favourable and unfavourable factors. In that context, the above-mentioned aspects should be assessed.

Overall, a **bottom-up approach** should be favoured over a top-down approach: relevant actors' needs should be listened to in order to set the goals and understand what could be needed to achieve them. It was observed that not having properly investigated whether a new tool would be useful correlated to a limited usage of such tool once implemented. Besides involving all relevant actors from the beginning, it is also important to ensure that regular communication with them is ensured throughout the project.

Conclusions on the transfer experience in JADECARE

The project was useful not only for gaining awareness of what to expect when some innovations are brought to a healthcare system, but also because it increased the understanding of the tools needed to achieve a given goal.

Appreciation was expressed as to how NAs could always ask questions to the original good practice holders and get help. It was also observed that JADECARE showed that the sustainability of the project implementation after its end is something achievable, and the project contributed to make this longer-term approach a reality. A NA reported having learned a lot about the possibilities of enhancement and modernisation within his organisation.

The M&M format received praise for the opportunity it offers to take elements from different good practices according to NAs' needs and interests, mix them and build a new good practice. It was observed that, if more financial resources were available, it would have been possible to include a wider range of elements from different good practices. This reflects the consideration that there cannot be a "one size fits all" approach, but the approach should rather be tailored according to the NAs situation, needs and goals.

The common thread running through all the analyses carried out was the importance of the overall management of the Joint Action in order to complete the whole implementation process.

In this sense, success was possible thanks to a **strong control component**, understood as a set of activities aimed at constantly monitoring the progress of the project, checking that the intermediate results correspond to those expected and, finally, adopting corrective measures in the event of deviations from the initial plan.

This has enabled each partner, starting with the implementers, and ending with the coordinators, to constantly assess whether the project is progressing as expected. By analysing the data collected at each pre-established step, it was possible to determine whether the deadlines had been met and whether the intermediate results were in line with the pre-established objectives. This made it possible to identify any delays or problems and to intervene promptly to prevent them from getting worse.

Constant monitoring, also through the collection of data and information on the progress of the project, has also made it easier to carry out comparative analyses between the initial plan and the actual progress of the project, thus improving the accuracy of future forecasts and the sustainability of the project results, as it has provided constant information on the duration of the activities, the resources required and any critical issues.

In addition, the control reports provided clear and updated information on progress, resulting in effective communication that helped to keep all team members informed and involved, fostering cooperation and mutual understanding, as well as with external stakeholders.

The increased involvement of each partner was a fundamental factor for the achievement of the project common objectives.

This project design enables it to be scalable and replicable. It can be applied to projects of varying sizes, complexities, and contexts. Standardization allows for the efficient scaling up or down of project activities, ensuring that resources are utilised optimally, and project objectives are met consistently. Moreover, standardised approaches can be replicated across similar projects, promoting efficiency, knowledge sharing and continuous improvement.

The standardised methodology of JADECARE includes risk management frameworks and processes, which helped identify, assess, and mitigate project risks in a systematic manner. Also, a common language and framework for collaboration and communication within the project team and with external stakeholders was established. When everyone understands and follows the same procedures, clarity is enhanced, misunderstandings are reduced, and the effectiveness of communication is improved. This communication procedure promoted effective collaboration, facilitating the exchange of information, ideas and feedback among team members, stakeholders, and partners.

In essence, the JADECARE project itself can be considered a 'good practice' in project management and its implementation methodology can certainly be a good example both for the NAs of the future and for the management of other project actions.

Successful implementation of best practice is an ongoing journey that requires the active engagement of healthcare leaders, practitioners and supporting staff. By following these guidelines in the context in which JADECARE was born, we hope that Next Adopters can work towards a future

in which healthcare outcomes are continually optimised, patient satisfaction is maximised and the healthcare sector as a whole reaches new heights of excellence.

With this in mind, we thought it appropriate to include at the end of the document the recommendations that have emerged from the implementation practice experienced during the three years of the project, which are presented in the following section.

1.6 Recommendations

This deliverable takes into account the corrective, remedial or preventative actions in relation to the identified barriers to the implementation, also taking into account the identified strengths and facilitators, as a guideline learned from this implementation activity. The guide follows the implementation methodology that was the basis of the JADECARE project, therefore the following recommendations are given according to the phases of the reference methodology: pre-implementation - implementation - post-implementation. This has been done to make reading easier and to allow interlocutors to choose to read the recommendations according to the stage of implementation they find themselves in.

Pre-implementation guidelines:

The pre-implementation phase aims to ensure effective planning, preparation, and readiness before implementing a new practice or intervention. While specific practices may vary depending on the health care setting and the nature of the intervention, here are some common elements identified through the JADECARE implementation process:

- 1) As the first element of implementation, it is important to **assess the real needs** by conducting a comprehensive assessment of the healthcare facility or system to identify the specific needs, gaps, and challenges that the new practice aims to address. This involves analysing existing processes, resources, and patient populations to determine the requirements for successful implementation.
- 2) **Good context analysis and planning** are crucial, especially at the beginning of the implementation. This entails taking some time to carry out broad consultations (e.g., meetings, written consultations) with stakeholders, patients, healthcare professionals to gain an understanding of the starting point and of what the needs are; agree on the objectives and the timelines; identify strengths, weaknesses, inhibitors and facilitators; assess the availability of resources; identify enthusiastic people that could actively contribute to and promote the implementation.
- 3) Especially at the beginning of a health-related project as JADECARE, it is fundamental to think about **integration into other health management systems** because it allows for a seamless flow of information and processes. When a project is designed with integration in mind, it can align its workflows, data exchange mechanisms and interfaces with the existing systems.

This integration eliminates duplication of efforts, minimizes manual data entry, and ensures efficient collaboration between the project and other healthcare stakeholders.

- 4) Another important element is the **involvement of stakeholders**, especially institutional stakeholders such as the Ministry of Health. The project should be ideally aligned, to the largest possible extent, with existing strategies and, if none is already in place, it could be advisable to create one. Interdisciplinary collaboration with different stakeholders is needed to promote effective teamwork and collaboration between health professionals from different disciplines and sectors. This could promote open communication, mutual respect and shared decision making to optimise patient-centred outcomes. The involvement of specific institutional stakeholders is closely linked to the Policy Board (PB). It is often difficult to find and contact the right people who have the time to devote to the project. In this sense, it is important to consider the elements mentioned below in the implementation guidelines (see next paragraph), on the structure of the PB, which includes a diversity of skills of the representatives (therefore flexibility) to be involved in the Board, and an effective and constant communication with them during project implementation.
- 5) **Study visits** with the holders of original good practices should be organised and take place onsite, face-to-face, to have more interactive discussion on the implementation and better understand how the original good practice actually works.

Implementation guidelines:

The implementation phase involves the actual execution and operationalisation of the planned intervention. It is the stage at which the new practice is put into the local context and integrated into the health system. The following are key elements of the implementation phase identified through the JADECARE implementation process:

- 1) The fundamental element of the whole implementation process is to **maintain ongoing and effective communication** channels to ensure that all team members and stakeholders are well informed about the implementation process. This includes providing regular updates, clarifying roles and responsibilities, and addressing any concerns or questions that arise during the implementation.
- 2) The Policy Board and the national competent authorities are an opportunity in future projects to reinforce the messages on the urgent need to address this type of issue, such as the amendment of the **Data Protection Act**. To avoid the problem of sensitive data, it is useful in the future to manage privacy sensitive data with specific techniques such as anonymisation, substitution and aggregation.
- 3) To improve the chances of success of future projects, the **Policy Board** should be structured in a way that ensures the continued involvement of its representatives throughout the project: the PB should consist of individuals with different backgrounds, expertise, and perspectives relevant to the project's goals and sustainability objectives. A mix of skills and experience can provide a comprehensive approach to project challenges and opportunities.

Each Board member should have clearly defined roles and responsibilities that align with their expertise and contribute to the project's sustainability goals. This clarity ensures that all Board members understand their individual contributions and enables effective collaboration. Regular meetings should be scheduled to discuss project progress, challenges, and strategic decisions. Adequate information sharing and timely updates will also help ensure that all Board members are well informed and can actively contribute to the project's sustainability goals.

- 4) **People education and engagement:** As for people's resistance to change, overcoming it requires more dialogue and scientific evidence. Communication and education could help to convince people that new solutions can be a political issue and that change can be good.
- 5) **Education and training:** Providing continuing education and training opportunities for health professionals to improve their knowledge, skills, and competencies to support their professional development is important to keep up with the latest advances in the health sector. Particularly where there is a fear of new technologies, overcoming this requires education, training and the creation of an enabling environment that encourages the use of technology. Efforts to bridge the digital divide and improve digital literacy are key to successful implementation.
- 6) **Adaptability.** While such an exceptional event as the COVID-19 pandemic cannot be predicted and not even expected, the experience of carrying out a project during the pandemic can be seen as a general reminder that some degree of caution should be used when defining the timelines. This makes sure to include some buffers in order to have some leeway when unforeseen events occur. Especially when those events are somewhat predictable and at a smaller scale.
- 7) As far as ICT aspects are concerned, it was observed that, for the future, the option of **having an EU-wide tender** could be taken into consideration, so that the software needed to adopt a good practice could be bought.

Post-implementation guidelines:

At the end of the implementation of a good practice, it is essential to evaluate the results according to the indicators initially defined. As in JADECARE, it is fundamental to have a mechanism for project evaluation and continuous improvement. By establishing predefined indicators, metrics and evaluation frameworks, standardised approaches enable the project team to monitor progress, measure performance and identify areas for improvement. This is the moment to use the data collected during the project, with the constant monitoring activity, and to add some cognitive elements to transform the data into information. This information must then be analysed to find benchmarks to work towards. This activity is essential for reprogramming the practice and making it sustainable for the future. In general, it is possible to identify some basic elements that characterise the post-implementation phase, identified through the JADECARE implementation process:

- 1) **Conduct a comprehensive evaluation** of the implemented practice to assess its effectiveness, impact, and sustainability. This may involve measuring key performance indicators, gathering feedback from stakeholders and analysing data to determine the practice's outcomes and benefits. Regular monitoring allows for timely identification of issues and opportunities for improvement.
- 2) **Document** the implementation process, lessons learned, and outcomes of the good practice. This documentation serves as a valuable resource for future reference, knowledge sharing, and replication. It helps in disseminating the experience, capturing best practices, and supporting evidence-based decision-making in healthcare.
- 3) **Maintain ongoing engagement with relevant stakeholders**, including healthcare providers, administrators, policymakers, patients, and the community. Keep them informed about the post-implementation results, benefits and any updates or modifications to the practice. Effective communication ensures continued support, encourages collaboration, and fosters a sense of ownership and accountability among stakeholders.
- 4) **Provide training and capacity building initiatives** to ensure that healthcare professionals and staff are equipped with the necessary skills and knowledge to sustain and further enhance the implemented practice. This may involve conducting workshops, seminars, or refresher training sessions to reinforce the practice and promote its integration into routine healthcare processes.
- 5) Foster a culture of **continuous improvement** by encouraging feedback and suggestions from stakeholders. Actively seek input on areas that can be refined or enhanced to optimize the Local Good Practice's impact.
- 6) Develop a **sustainability plan** to ensure the long-term viability of the implemented practice. This plan should address factors such as funding, resource allocation, policy support and integration into existing healthcare systems. Identify strategies for securing ongoing support, whether through government funding, partnerships, or other mechanisms, to ensure the practice's continued success beyond the initial implementation phase.
- 7) Conduct a comprehensive **impact assessment** to measure the long-term effects and benefits of the implemented practice. This assessment can contribute to the evidence base and support the dissemination of the practice's results through publications, presentations, and conferences. Sharing the impact and success of the practice helps create awareness, inspires others, and promotes its adoption in other healthcare settings.
- 8) To overcome financial barriers, healthcare systems can explore **alternative payment models** that reward value-based care, where reimbursement is tied to patient outcomes and the quality of care delivered. Aligning financial incentives with the desired outcomes can promote the adoption of good practices that prioritize patient-centred care, cost-effectiveness, and improved health outcomes. Additionally, policy changes, regulatory reforms and strategic investments in healthcare infrastructure can help create an environment that supports the implementation of good practices by addressing financial disincentives and promoting the alignment of incentives with quality and value in healthcare.

Limitations

Several constraints were encountered in developing this Blueprint:

Complex and evolving conditions: Healthcare delivery through the implementation of best practices often involves the management of complex and evolving conditions. This Blueprint may not adequately address the nuances of certain situations. This can lead to a time lag between guideline recommendations and the latest medical evidence.

Lack of generalisability: Lessons learned from the implementation of best practices have been developed based on available evidence from studies conducted on a certain population in specific areas. However, these populations may not represent the diversity of patients encountered in primary care in Europe. Guidelines developed in one geographical location or for specific patient demographics may not be directly applicable or relevant to other regions or populations.

Limits to co-creation approach: not all NAs have accepted the same level of involvement in co-creation activities, which in some cases has led to difficulties in gathering information and a more fragmented overview of responses.

Heterogeneity of contexts: differences among local contexts where the LGPs have been implemented, in terms of degree of maturity of implementation of integrated care, available resources, existing strategies and plans, support of political leadership, etc.

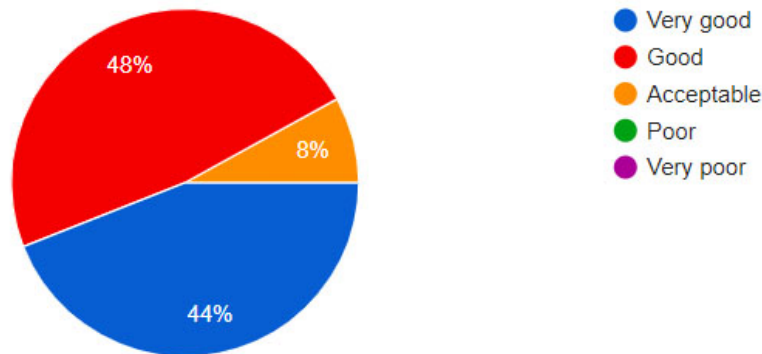
APPENDIX

1.7 Annex 1: Results of the survey titled: Thematic workshops follow up: NAWG members survey

This is a check list of questions on topics that were not explored during the TWs. The NAWG representatives' answers to this survey will be compared and used for the Deliverable 4.2. The survey will be administered twice: now and at the end of next year's implementation Key Learnings- workshops (spring 2023), in order to evaluate similarities and differences, as well as main achievements.

1) How has your experience of working in the NAWG been so far?

25 answers



2) What was the main achievement you experienced related to your participation in the NAWG?

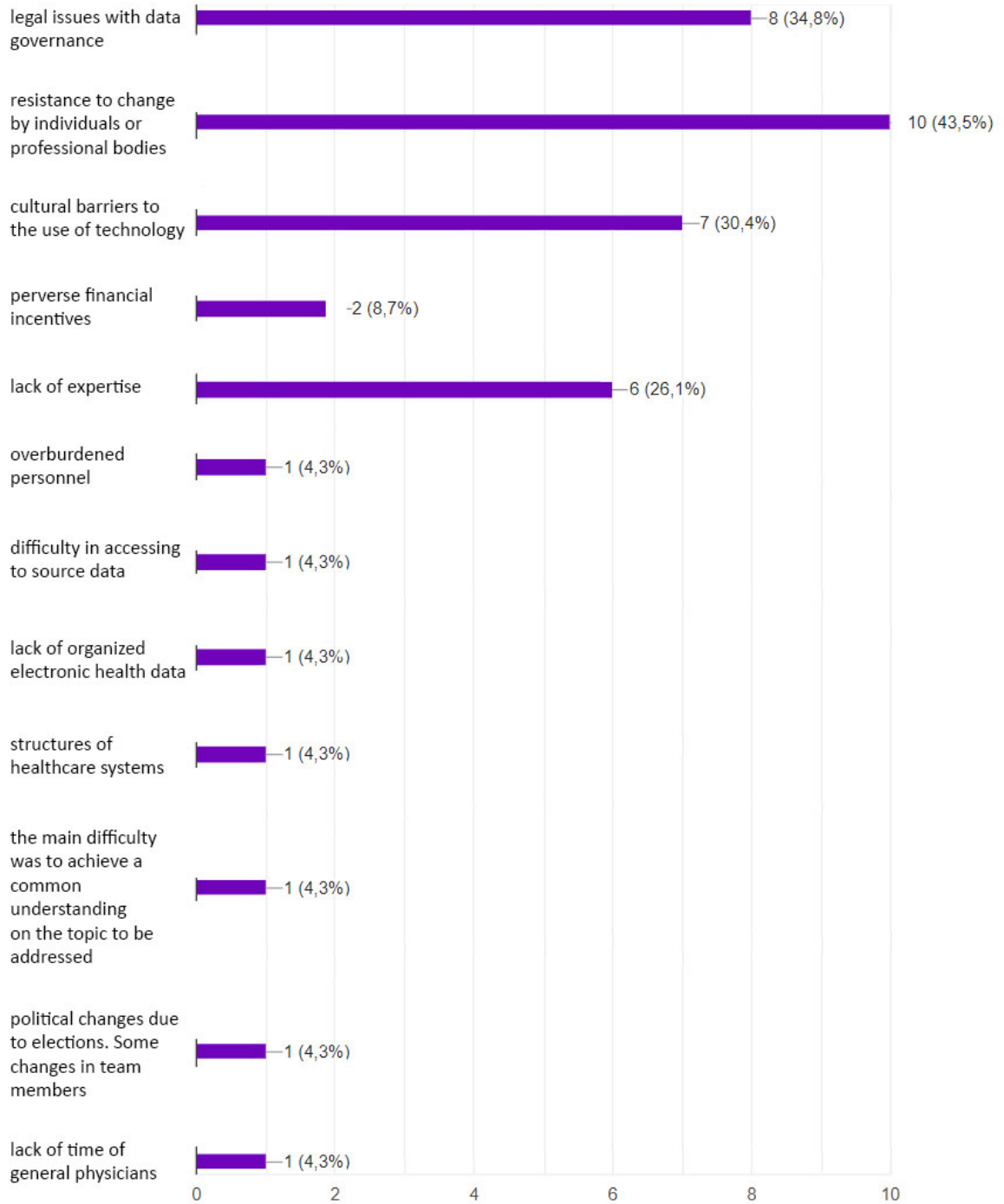
23 answers

- Greater knowledge about data and the population approach
- Knowledge about data
- The possibility to test in a real scenario, with a clear methodology and concrete support, the process supporting innovation introduction in the healthcare system
- To take part of a very interesting project
- In the project design
- The pilot study shows positive preliminary results although the good practice transfer is still a challenging process
- Being involved in project development. Expanding my skills and expertise using real world data
- Participation in stimulating activities
- Know new practices that can be implemented in our region.
- Setting the priorities of needs in health care institutions related to digital health
- To know other good practices that have been already implemented successfully
- Knowledge exchange
- N/A
- Transfer of knowledge and insight in different data approaches

- Skills share, knowledge transmission
- Moving some things on to the next solution.
- Obtain a multidisciplinary vision/approach on how to address the same topic/issue.
- Improved knowledge of current initiatives in place in my organisation, and better coordination among different units.
- Focused guidance
- An opportunity for knowledge-exchange and sharing best practices
- Exchange of experiences and best practices and also the main challenges between the different professional bodies.
- Working not directly in a NAWG but from what I read in reports, most NAWGs are very dedicated to work together
- Knowledge about data

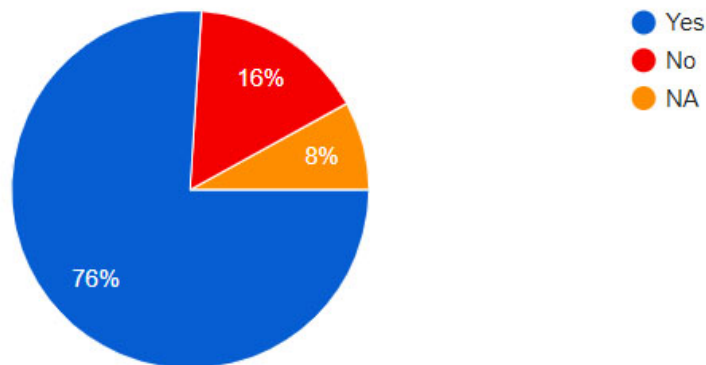
3) During the first implementation cycle, did you encounter any difficulties caused by the presence of 'inhibitors'? If yes, please select one or more of the following "inhibitors"

23 answers



4) Is the removal of those inhibitors necessary to avoid the difficulties encountered?

25 answers



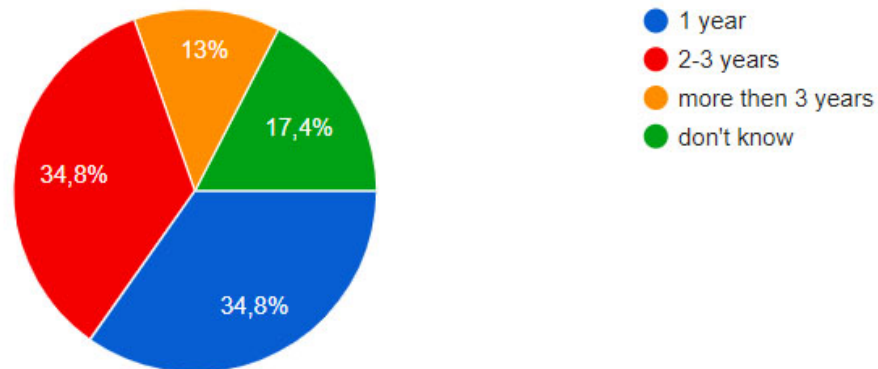
5) If yes, do you have any proposal how to remove them?

17 answers

- Privacy restrictions in the secondary use of data is the main barrier to a full implementation of the plan. Discussions at National level are currently going on; JADECARE, through the Policy board and the National Competent authorities, could reinforce the message of the urgent need to address this issue. Overburdened personnel is currently addressed using the personnel recruited for JADECARE
- To improve legal changes in our regional scope
- Training, education.
- Availability of restricted access
- Manage privacy sensitive data with dedicated techniques such as anonymization, substitution and aggregation
- Removal of GDPR DATA Protection will be necessary for future developments
- Training sessions on motivation for change and the use of technologies.
- Changes in Italian privacy law
- Approach of all partners related to raising the awareness of producing better health outcomes.
- We had to learn by doing (with the support of the oGP)
- involving more relevant actors in the NAWG
- To talk more about things, to try to promote them scientifically. Educate. Convince them that new solutions can be a political issue.
- Better coordination and closer collaboration are needed.
- More engagement of the Health Ministry
- What helped in Estonia was OGP helping to increase involvement and commitment of the state level stakeholders during the workshop in Viljandi
- Regarding resistance by individuals and professional bodies, it will be useful increase the eHealth Skills by professional training sessions or workshops
- Thorough and frequent communication on the benefits of the actions for all involved

6) How long do you think it will take to successfully complete the proposed change?

23 answers



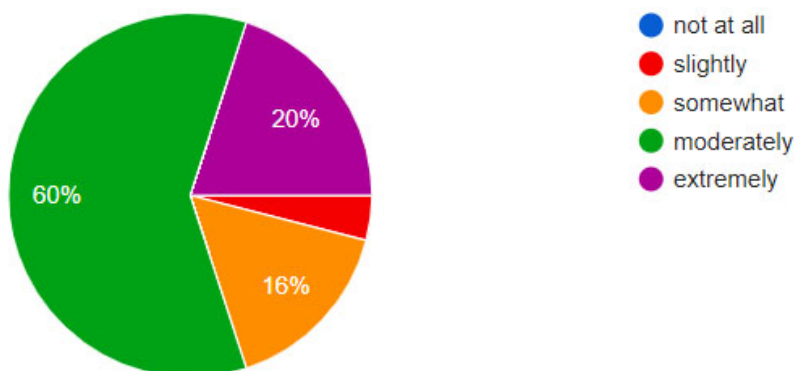
7) What could be, in your opinion, the key success factors of the inhibitor removal?

17 answers

- Convince the people responsible of the importance of the change
- Involve and transfer to the society the necessary information to accept the telemedicine
- Data may be shared and accessed more easily, remotely or with automated algorithms
- On the one hand, convincing managers and, on the other, making professionals see the great potential of the new practices.
- Changing Italian privacy law; specific training about research methods and data analysis tools
- Enhance commitment from all parties working together.
- MENTORING
- Building of an infrastructure for ehealth data
- Better team interaction
- Political decision, the adoption of functional digital health legislation, reduce resistance to change by individuals or professional bodies. Perhaps help at the level of the European Parliament or the European Commission, at least by making recommendations to the Member States.
- Close collaboration.
- The implementation of the measured
- Reinforcing the support to the implementation at local level
- Time and raising awareness
- Having good impact assessment to show the potential gain/benefits to the local decision-makers
- If one could get influencing stakeholders to promote/ endorse the communication endeavours
- Easy access to health data

8) Did your skills and/or knowledge improve during the first implementation cycle?

25 answers



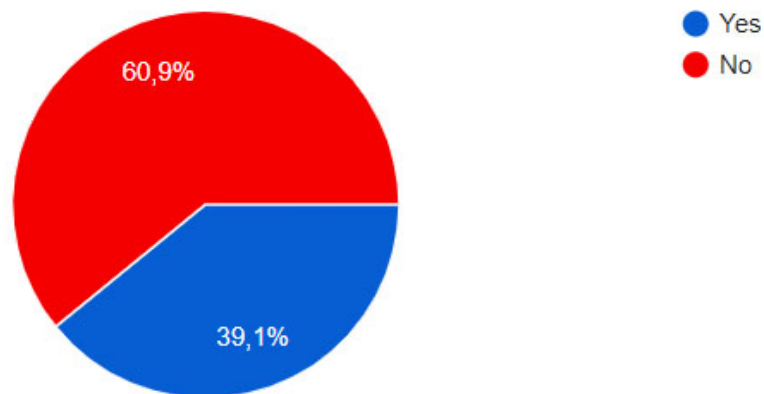
9) If yes, which one/s?

23 answers

- Knowledge about data
- Skills on management and communication/dissemination. Knowledge on health data and healthcare systems transformation.
- About the technology used and to recognize clinical leaders
- In the project management
- Increased awareness of multiple benefits at different levels offered by risk stratification
- Data management with large real world data; interactions with IT experts; statistical package R skills
- Stratification algorithm applied at data
- Possibility that technology allows to resolve medical assistance without the patient being present.
- Data analysis ability; improvement in English language.
- Better perception of situation and coordinating among the stakeholders.
- Knowledge of data and data use
- Team building, team management, organizational, ehealth management
- Insight in data-use
- Technicalities
- International cooperation, models of effective practices. Demonstration of working practice, longer experience, possibility of shortening implementation.
- Teamwork
- Risk stratification
- Specific knowledge about current initiatives at local level
- Organisational skills, digital knowledge
- Knowledge/skills on data modelling
- Knowledge about clinical pathways in different primary use units
- Same communication contents need to be repeated, penetrated in different ways in order to reach people's attention
- Data and Risk stratification

10) Are there any areas of expertise for which you would need training support?

23 answers



11) If yes, which one/s?

9 answers

- Secondary use of healthcare data
- How to motivate for change
- I consider that more translational projects are needed.
- Support with very complex R or Python syntax for programming algorithms
- Assertive communication techniques
- Improvement in methodology in literature review (could be useful to better understand relevant topics ad chronic diseases, population stratification methods); I'd like to learn more about R studio (I just know and use basic function)
- Efficient communication / advocacy strategy and tactic for desired changes, finding political support.
- Risk stratification
- Accountable care organisations' financial/business modelling (involving also state level stakeholders)