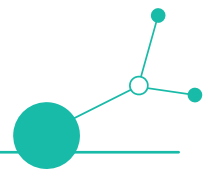


D 1.4.1. ACTION PLAN FOR PROCAREFUL MODEL IMPLEMENTATION



Version 4
08 2024

Authors: Anton Trstenjak Institute of Gerontology and Intergenerational Relations with contribution from all consortium partners.





TABLE OF CONTENTS

1. INTRODUCTION	3
1.1. SHORT DESCRIPTION OF PROCAREFUL HYBRID MODEL	3
1.2. OBJECTIVE OF ACTION PLAN	5
2. PROCAREFUL ACTION PLAN	6
2.1. INTRODUCTION	6
2.1.1. PRE-IMPLEMENTATION ASSESSMENT	6
2.1.2. CO-DESIGN	6
2.2. PREPARATORY PHASE	6
2.2.1. TECHNICAL DIMENSION: INFRASTRUCTURE AND RELIABILITY	6
2.2.2. ETHICAL & LEGAL DIMENSION	7
2.2.3. RECRUITMENT	9
2.2.4. ORGANIZATIONAL DIMENSION	9
2.2.5. NON-TECHNICAL ASPECT OF THE MODEL	10
2.3. IMPLEMENTATION PHASE	10
2.3.1. IMPLEMENTATION FRAMEWORK	10
2.3.2. COMMUNICATION	11
2.3.3. MONITORING OF THE IMPLEMENTATION AND TROUBLESHOOTING	12
2.3.4. TRAINING AND CONTINUOUS EDUCATION	13
2.3.5. EVALUATION FRAMEWORK	14
2.4. POST-IMPLEMENTATION PHASE	15
2.4.1. SUSTAINABILITY - GOAL SETTING	15
2.4.2. SUSTAINABILITY - FUTURE CONSIDERATION	16
2.4.3. CELEBRATION AND NEXT STEPS AT PILOT SITES	16
2.4.4. SUSTAINABILITY - CREATION OF A VALUE	16
3. ANNEXES (PROJECT PILOT ACTION PLANS AND FRAMEWORK)	19



1. INTRODUCTION

1.1. SHORT DESCRIPTION OF PROCAREFUL HYBRID MODEL

The PROCAREFUL hybrid model aims to **PREVENT** cognitive decline, physical decline, and social isolation of persons 55 +. The model includes ways to improve or at least help people sustain their mental, social, and physical level of wellness and autonomy, by encouraging development of **HEALTHY HABITS**, taking advantage of digitalisation and modern knowledge about how to better provide care or support.

The model consists of a technical platform with three types of exercises: cognitive exercises, physical exercises and social exercises, that can be combined and partly adapted to the level that is most appropriate for a person who will be using them. Beside that model also consists of knowledge and exercises that can help you, carers and volunteers, to better understand ageing, illness and frailty, development of good habits and prevention, motivation, digital barriers and communication with older person, helping you to develop good relationship with older person and support him or her in healthy habits development as much as possible.

WHO IS THE MODEL FOR?

PROCAREFUL hybrid model is being developed in a way that can support different pairs of people in different situations which we can find across central Europe in the field of long-term care:

The main purpose of the model is to support adults aged 55+ who need various levels of care, provided by informal carers and/or professionals and can still strongly benefit from preventive solutions. We refer to them as seniors in the technical part of the model. Model solutions focus especially on those showing early signs of cognitive or physical decline, also those living alone or feeling lonely, including during long absences of household members or carers. This diverse group can often improve their health and well-being through regular cognitive exercises, physical activities (suitable to their abilities), and social interactions. As part of the model seniors are supported by informal and/or formal carers, while in long-run it might be also possible to include the support of volunteers who are also part of long-term care in some countries.

Using a model for cognitive support, physical support, and social support of older people offers several benefits also for participating **INFORMAL CARERS, VOLUNTEERS, AND PROFESSIONALS WORKING IN A HOME CARE ENVIRONMENT**:

1. **Holistic care delivery:** By addressing cognitive, physical, and social needs, carers can provide more comprehensive and personalised care, improving the overall well-being and quality of life for older people. This ensures that all aspects of the person's health are being considered and supported.
2. **Improved outcomes:** Integrating cognitive, physical, and social supports can lead to better health outcomes for older people, such as enhanced cognitive function, increased physical mobility, and greater social engagement. This holistic approach contributes to both mental and physical health, helping to maintain independence and reduce the need for more intensive care as long as possible.
3. **Enhanced efficiency and quality of care:** A structured model helps informal carers, volunteers, and professionals systematically address various aspects of care. This can lead to better quality of care that includes also critical psychosocial aspects - that is often overlooked - and by providing digital platform model hopes to be time-efficient in long run understanding the time constraints on both informal carers and people employed in the care sector.
4. **Reduced carer burden:** By using a clear model and a digital tool with set exercises, informal carers, volunteers, and care workers can feel more confident. They get clear guidance on how to help with cognitive, physical, and social activities. This framework and guidelines reduce the guesswork and emotional stress that often come with caregiving.



5. Increased- job, informal care provision and volunteering satisfaction: Seeing positive impacts on the lives of those they care for can boost job, informal care provision and volunteer satisfaction for professionals, informal carers and volunteers. Knowing their efforts lead to meaningful improvements in cognitive, physical, and social domains can be highly rewarding and motivating for both carers and care recipients.
6. Improved relationship between carers and care recipients: Formal and informal carers, along with their care recipients, may sometimes struggle to establish and maintain good relationships. As people age and/or become ill, they can change and more often than not they find it difficult to accept help, which can complicate the caregiving process. Additionally, the demands and time constraints on carers can create further challenges for these relationships. The Procareful hybrid model aims to improve these dynamics by offering space and tools for social interaction, as well as enhancing carers' understanding of old age and illness.

In summary, employing a comprehensive support model enables informal carers, volunteers, and home care professionals to deliver more holistic, efficient, and high-quality care. This approach benefits carers by providing structure, reducing stress, and enhancing satisfaction, while significantly improving the health and well-being of older adults (55+) and older people.

WHY A HYBRID MODEL?

PROCAREFUL hybrid model consists of two parts: technical solution and non-technical solution. In the latter part, we are going to improve the personal segment of care, especially in the field of prevention.

What does the technical part of the model look like?

PROCAREFUL platform is a technical web-based solution that supports older people with concrete preventive measures, such as physical exercises, social exercises called challenges, and cognitive exercises. A prevention plan is going to be set automatically or manually by a formal or informal carer and is going to be able to respond to a person's needs and abilities.

What do we talk about when we talk about a non-technical aspect of the model?

If we want to change the way we provide care and if we want to work more preventively, mind shift is required: from service orientated care to personal, emphatic care and from reactive care to proactive, preventive care. And this mind shift has to happen on all levels: from developers, care providers to people we work with. To achieve that training on topics related to care, understanding of ageing, understanding of illness, frailty, formation of new habits, meaning and motivation for prevention, understanding of digital barriers and communication is going to be conducted as important part of implementation.



1.2. OBJECTIVE OF ACTION PLAN

The action plan serves as a standardized framework for the joint implementation of the PROCAREFUL hybrid model in home care environments, ensuring a cohesive approach across all 5 pilot sites. Developed through a collaborative effort by implementation teams and coordinated by IAT, the plan also benefited from the valuable support and feedback of Britenet, CEI, ISRAA, MI, and WWBW.

This action plan covers essential aspects from pilot preparation to implementation and sustainability, including timing, resource allocation, risk assessment, methodologies, training, and other vital considerations. The PROCAREFUL model provides the theoretical foundation for these pilot actions and subsequent project phases, while the action plan offers practical, standardized instructions to bring these concepts to life and testifies to partners' commitment to carry out those actions.

Recognizing the need for adaptability, this action plan is designed as a dynamic document that can be tailored by each pilot site. Following the execution of action plans, the information on what should be added to the framework or adjusted is going to be continually collected and reflected upon during periods 3 to 5, ensuring flexibility and promoting an ongoing learning process during the pilot actions. This approach allows us to refine and improve our methods, ultimately enhancing the effectiveness and sustainability of the PROCAREFUL hybrid model in home care settings.

When preparing and utilizing the action plan, please keep the following aspects in mind:

- The action plan acts as a comprehensive framework for our efforts; however, local pilot actions may require additional or alternative steps and considerations.
- Make use of the provided framework, worksheets and templates (in the annex) to prepare local action plans. During the implementation, regularly review action plans and give feedback on any tasks that may prove impractical during implementation or actions you recognised as important but were not included into action plans preparation. We consider this feedback crucial for improvement and quality development of our PROCAREFUL hybrid model.



2. PROCAREFUL ACTION PLAN

2.1. INTRODUCTION

Understanding of the situation is basis for any project action plan. In order to achieve that, PROCAREFUL project starts with a pre-implementation assessment and co-design phase.

2.1.1. PRE-IMPLEMENTATION ASSESSMENT

Needs analysis before developing a hybrid care model for home care environments is essential for creating a model that is tailored, effective, and sustainable. By understanding the specific needs and challenges of target groups and community, developers can design a model that truly meets the needs of those it aims to serve. As part of PROCAREFUL project pre-implementation needs analysis is going to be carried out in the first project period and for quality reasons revisited one more time in the third period of the project.

Following groups are being assessed as ground for model development and testing:

- Adults (persons 55+) and older people in need of care, that is provided by informal carers and/or professionals working in the care field. Especially older people with the appearance of the first signs of cognitive or physical decline, with special attention to those living alone at home, being lonely or living alone for longer periods of time (e.g. during extended absences of other household members/carers).
- Professionals working in a home care environment.
- Informal carers of older people who provide care to those who need it within the context of an existing relationship, such as a family member, a friend or a neighbour; informal care is care, usually unpaid, provided outside of professional or formal framework.

2.1.2. CO-DESIGN

Using co-design while developing new solutions ensures they are user-centred, innovative, practical, and widely supported, ultimately leading to more successful and sustainable outcomes.

PROCAREFUL's activity 1.2 Design and contextual adaptation of the hybrid model is dedicated to co-design, resulting in two deliverables, D.1.2.1 Document that presents the co-design methodology and D.1.2.2 Report presenting the co-design findings of the PROCAREFUL. Those activities are going to be carried out in the period two and for quality reasons shortly revisited in period three.

2.2. PREPARATORY PHASE

The preparatory phase begins in the third project period and aims to prepare all partners for implementing the PROCAREFUL hybrid model. To achieve this, the following areas will be addressed, and specific steps will be taken during this phase:

2.2.1. TECHNICAL DIMENSION: INFRASTRUCTURE AND RELIABILITY

INFRASTRUCTURE: Understanding and preparing the infrastructure before implementing a technical solution is crucial for improving user experience, ensuring security, facilitating smooth implementation, mitigating risks, and aligning with strategic goals.

As part of PROCAREFUL project, all partners are going to clarify following questions:



- Is internet access required? Do all end-users have free access to the internet (via phone or otherwise)?
- Do all involved in the pilot have devices they'll need to implement the solution?
- Do devices support the software?
- What happens after: Are possible product adjustments after implementation chargeable or provided as a service? Is there a replacement in case of hardware damage or loss?

Furthermore, following technical requirements and infrastructure for implementing the technology in PROCAREFUL project are agreed by all consortium partners and are going to be verified by piloting partners on the field during preparation period:

- Can older people they plan to include into testing use smartphone? Or how can this problem be breached?
- Is it feasible for formal and informal carers to use computers? Or how can this problem be breached?
- Have all the people we plan to include have access the Internet? And if not, how can this problem be breached?

RELIABILITY TEST: Conducting a reliability test or pre-test before implementing new technologies in a home care environment is a crucial step to ensure the smooth running of the implementation and earn trust of the end-users.

A reliability test is going to be carried out with a selected group of employees (e.g., experts, interested employees etc.) and end-users with the aim to obtain their feedback.

During our PROCAREFUL project we are going to carry out reliability test in two steps:

1. Testing English version of platform (Application for a formal/informal caregiver - approximately July 1; application for seniors - approximately July 31)
2. Testing platform in national languages (approximately August 16)

While carrying out reliability test it is recommended to include colleagues who are not part of the project.

2.2.2. ETHICAL & LEGAL DIMENSION

The legal and ethical dimension refers to elements, principles, behaviours, and considerations that relate to both legal requirements and ethical standards. This category encompasses aspects related to ensuring that actions and decisions align with the law, such as enabling safety, security, privacy, and morally acceptable conduct.

The technological solution will adopt the PROCAREFUL Platform, which will provide for the creation of 4 technical/administrative profiles (Head Admin, Super Institution Admin, Institution Admin with Formal Caregiver Role, and Institution Admin) and 3 user profiles (Formal Caregiver, Informal Caregiver, and Senior).

For the senior user, contact and demographic data will be collected to create a profile. Additionally, information on the senior user will be gathered during the preliminary assessment, which will evaluate their psycho-physical condition and social habits. Further data will be gathered through the platform, particularly regarding the types of exercises performed (including cognitive training, physical training, and social challenges) and scores obtained. Performance will be tracked to provide exercises tailored to each senior user's level.

The platform will implement different levels of access to senior users' data. Each profile (administrative, formal caregiver, and informal caregiver) will have authorisation to access specific data. All individuals accessing the platform will be formally authorised by written designation.

Before platform use begins, users will be fully informed about its purpose, functionalities, and how their collected data will be treated and stored. Informed consent will be required from all users (older people,



formal caregivers, and informal caregivers), highlighting their right to withdraw without giving reasons and without repercussions.

Ethical & legal consideration(s)	Handling
Compliance with European privacy legislation (GDPR)	To ensure full compliance with national and European legislation, [name of partner] is going to implement the following actions: <ul style="list-style-type: none"> • Joint Controllorship Agreement is going to be stipulated with the Consortium • Informative and Consent form are going to be provided to participants • Data Protection Impact Assessment is going to be conducted • Policy privacy and adoption of security measures as mentioned in Enisa Handbook for security of personal data processing is going to be established
Ethics committee involvement	The ethical aspect is going to be analysed through specific meetings between team members and experts supporting [name of partner] on ethical and privacy issues. Due to the aims of PROCAREFUL project it is not mandatory and required to apply to the Ethics Committee.

Predicted data flow and storage of information:

Project participants (both end users and formal caregivers who will eventually be involved) will be asked to sign the Informed Consent and the Project Participation Form. The data collected will be stored in the partner’s protected archives and retained for the entire duration of the project and, in any case, no longer than 10 years from the project’s conclusion to ensure compliance with legal requirements. Data will be exclusively accessible to the partner’s PROCAREFUL Project team involved in pilot-related activities.

Additional information will be gathered during the preliminary assessment of participants’ psycho-physical conditions and social habits. Furthermore, data on the type of exercises performed (related to cognitive training, physical training, and social challenges) and the scores obtained will be collected through platform use. This data, stored in the cloud repository provided by Britenet, will be accessible to responsible formal caregivers (Social Worker, Care Worker) and to administrative profiles (Social Worker Coordinator/Home Care Service Responsible, Service Coordinator/Nursing Home Coordinator, Project Managers).

Administrative profiles will have access to all information related to profiles created on the platform (end users, formal caregivers, informal caregivers). Individuals assigned to these roles will be formally authorised through written designation.

Data	Access
Provided by older people	Formal caregivers (Social worker, Care worker), Administrative profiles (Social worker coordinator/Home care service responsible, Service coordinator / Nursing home coordinator, Project managers), Informal caregivers (if they will be involved)



Provided by informal carers	Administrative profiles (Social worker coordinator/Home care service responsible, Service coordinator / Nursing home coordinator, Project managers), Formal caregivers (Social worker, Care worker)
Provided by the formal carer	Administrative profiles (Social worker coordinator/Home care service responsible, Service coordinator / Nursing home coordinator, Project managers)

2.2.3. RECRUITMENT

For successful pilot implementation, it is important to engage the right people, understand their situation, and give them tools that can enable them to carry out the intervention well.

Recruitment of participants will be carried out in two stages: first in period three to reach as close to pilot target as possible and again in period four to mitigate the possible drop-out and for partners to have possibility to include the interested end users also later in the process.

2.2.4. ORGANIZATIONAL DIMENSION

Involving all important stakeholders at every stage of the process—from needs assessment to co-design, preparation, implementation, and assessment—is essential for creating effective, user-centered, and sustainable solutions in the home care environment. This inclusive approach ensures that the solutions are practical, relevant, and supported by all parties involved, leading to better outcomes and higher satisfaction for all stakeholders.

For the pilot sites, it will be essential to identify key stakeholders specific to each pilot context, as they are crucial for the successful implementation of the model. Developing a list of project members and stakeholders will facilitate coordinated communication and active involvement throughout the pilot.

The following elements must be considered:

- Identify the individuals in the home care facility who need to be involved in introducing the new technology, including all relevant levels, particularly decision-makers.
- Identify the key stakeholders in the home care environment and broader community who will need to be involved in introducing the new technology, with a focus on all levels, especially decision-makers.
- Identify the opinion leaders within the home care facility and the community.
- Determine who will need to be kept informed about the changes.
- Develop a plan to ensure continuous involvement and engagement of these stakeholders throughout the process.

By determining these elements, each pilot site will establish a clear framework for stakeholder engagement, enhancing collaboration and support for model implementation.

Understanding the current situation is vital for implementing a new solution and for integrating the new model as seamlessly as possible into the existing processes.



The partners will begin by assessing the current workflows of both formal and informal carers. For formal carers, this involves understanding their roles, responsibilities, and communication processes within their organizations. For informal carers, partners will evaluate the challenges they face, including access to resources and training. The partners will then work on integrating the PROCAREFUL model into these workflows, aiming to improve coordination and communication for formal carers while providing better support, resources, and guidance for informal carers. The goal is to streamline processes, enhance caregiver satisfaction, and improve overall care quality. Through these changes, partners expect more organized workflows for formal carers, as well as greater confidence and reduced stress for informal carers, leading to improved outcomes for both groups.

2.2.5. NON-TECHNICAL ASPECT OF THE MODEL

PROCAREFUL hybrid model consists of two parts: of technical solution and non-technical solution - part of the model, where we want to improve personal segment of care, especially in the field of prevention. To change the way care is provided and work more preventively, a shift in mindset will be required. This shift will move from service-oriented care to personal, empathetic care and from reactive care to proactive, preventive care. This mindset change will need to happen at all levels, from the developers (all of us) to the people we will work with.

Partners will focus on the non-technical aspects of the PROCAREFUL hybrid model by addressing prevention, habit development, aging, and illness. These elements will be integrated into the local action plans which will form the basis for improving care practices. To ensure successful implementation, formal and informal carers will undergo continued training throughout the pilot phase, aimed at developing their non-technical skills and deepening their understanding of the model. This training will take place in four sessions, each lasting two hours, during the fourth and fifth project periods.

2.3. IMPLEMENTATION PHASE

2.3.1. IMPLEMENTATION FRAMEWORK

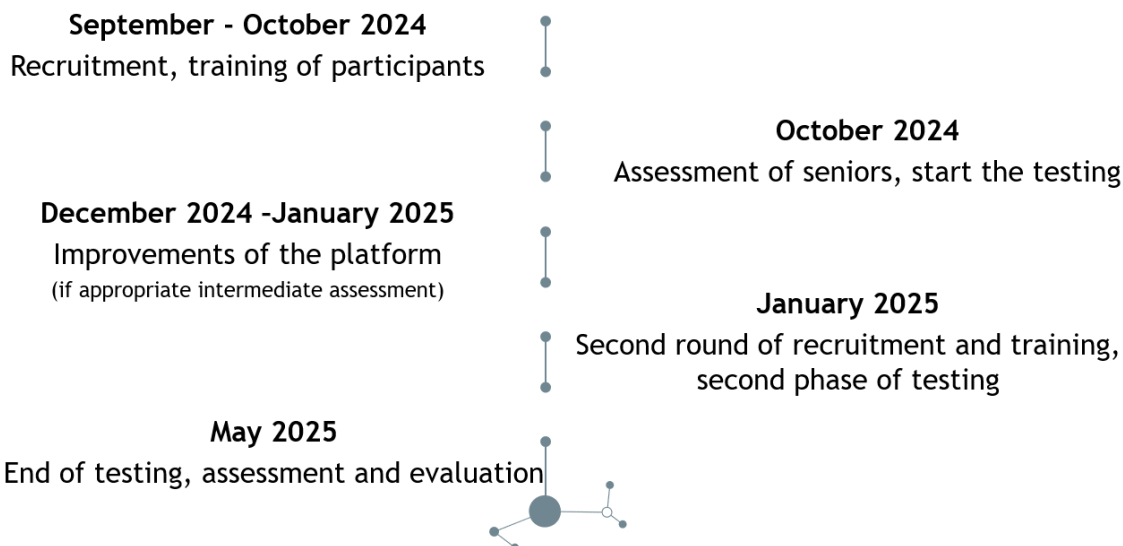
The purpose of the pilots while testing a newly developed digital solution is to evaluate its effectiveness and usability in real-world settings on a smaller scale before full deployment. For the PROCAREFUL hybrid home care model, this will involve testing the model in five countries with a total of 135 individuals to assess its usefulness across different care contexts. The PROCAREFUL model will aim to prevent cognitive decline, physical decline, and social isolation in adults aged 55+. By encouraging the development of healthy habits and leveraging digital tools and modern care practices, the model will seek to improve or maintain the mental, social, and physical wellness and autonomy of older adults. Pilots will help identify potential issues, gather user feedback, and ensure the solution is refined and optimized for broader implementation.

During the initial weeks of implementing the hybrid model, the project manager or designated personnel will allocate adequate resources for on-site support. This approach will ensure that immediate assistance and guidance can be offered while closely observing and addressing any concerns or issues that arise in practice.

At the beginning, special attention will be paid to the technological part of the solution. Partners will establish regular feedback loops to continuously assess and refine the system. Demonstrating proactive efforts to address any negative impacts to staff will help maintain motivation and encourage effective use of the new solution.



TIMEFRAME for pilot implementation



Implementation framework summary:



Duration of the Pilots: The pilot phase will span from September 2024 to June 2025, divided into two cycles: the first cycle from September/October to December 2024, and the second cycle from January to June 2025.

Recruitment: Recruitment will occur in two rounds: the first round from May to September 2024, and the second round in January 2025. This phased approach aims to mitigate drop-out rates and allow for additional participants if needed.

Number of Participants: The PROCAREFUL model will be operational over 12 months across five pilot locations, targeting a total of 135 users. The distribution is as follows: 30 participants in Treviso (IT), 30 in Split (HR), 30 in Baden-Württemberg (DE), 15 in Log-Dräger municipality (SLO), and 30 in Lublin (PL).

2.3.2. COMMUNICATION

Clear communication of key information, roles, and responsibilities for troubleshooting is essential for smooth pilot testing and helps build trust among participants. To facilitate this, each PROCAREFUL pilot will use a Pilot ID card. You can find general example of such card below:

NAME OF THE PILOT Name of organisation in charge of the pilot		[add logo]	interreg CENTRAL EUROPE	Co-funded by the European Union	PROCAREFUL
SHORT DESCRIPTION OF THE PILOT  <p>PROCAREFUL hybrid home care model will be tested in [name of the pilot] with [number] individuals to assess usefulness of the model across different care contexts. This model itself aims to prevent cognitive decline, physical decline, and social isolation in adults aged 55+. By encouraging the development of healthy habits and leveraging digital tools and modern care practices, the model seeks to improve or maintain the mental, social, and physical wellness and autonomy of older adults.</p>		TIMEFRAME for implementation of the actions <ul style="list-style-type: none"> [Sep]-[Oct] Recruitment, training of participants [Oct] Assessment of participants, start the testing [Dec]-[Jan] Improvements of the platform [Jan] Second round of recruitment and training, second phase of testing [May] End of testing and evaluation 			
PILOT IMPLEMENTATION TEAM [Name, Surname, Organisation]; [Name, Surname, Organisation]		 [add photo]		Main contact person for all questions related to testing [Name, Surname, Contact]	
		Technical support - for all technical problems procareful.support@britenei.eu Use this email to contact technical partner directly in English (in case of language barrier please contact the main contact person).			



Importance and more detailed mode of communication will be described by each pilot partner in the following days.

2.3.3. MONITORING OF THE IMPLEMENTATION AND TROUBLESHOOTING

Regular monitoring during the introduction of a new digital solution will involve several key steps. Each step will be designed to ensure the successful testing and adoption of the technology while addressing challenges as they arise. For monitoring and troubleshooting purposes PROCAREFUL consortium is going to:

1. Establish Clear Benchmarks and KPIs:

In the PROCAREFUL model, benchmarks and KPIs will be integral to the assessment tool. The platform will facilitate a thorough evaluation of seniors' cognitive, physical, and social conditions with the goal of crafting personalized care plans tailored to individual needs. The assessment will include evaluations of cognitive, physical, and social domains, along with sleep quality and overall well-being. The platform will guide assessors through the process, providing necessary tests and questionnaires, and will generate a detailed final report that summarizes the scores and includes the seniors' responses.

During the pilot activities, assessments will be conducted at three key stages:

- Initial assessment: Prior to defining the personalized care plan
- Intermediate assessment: After three to four months of training
- Final assessment: At the conclusion of the pilot

Furthermore, the PROCAREFUL platform will support additional assessments if there are indications of decline or the need to adjust the care plan, such as modifying exercise routines. For more information on the assessment, including the battery of questionnaires and KPIs, partners will refer to deliverable D 1.3.1, the document that presents the PROCAREFUL model training manual.

2. Conduct Regular Feedback Sessions

During the pilots, regular meetings will be held at two levels:

- National Group Meetings: Formal carers, informal carers, and seniors will convene 3-4 times to share experiences, provide feedback, and receive additional training on the non-technical aspects of the platform (see section 3.4 for more details).
- International Team Meetings: The international team of pilot implementation leaders will meet weekly from September 19 to November 14, and subsequently every second Thursday of the month until the end of the pilot. Technical partners and developers responsible for the non-technical aspects of the solution will regularly attend these meetings. These sessions will provide the consortium with opportunities for regular feedback, troubleshooting, progress reviews, and ongoing training on the non-technical components of the platform (see section 3.4 for more details).

In addition to these meetings, the pilot implementation team will engage with formal and informal carers and seniors individually to facilitate continuous feedback, address issues, and review progress on the ground.

3. Troubleshoot Issues Immediately

Partners are going to troubleshoot issues immediately as they arise during the pilot phase, ensuring that challenges are addressed promptly to maintain smooth implementation.

4. Regularly Review Progress Against Benchmarks

Partners are going to regularly review progress against the established benchmarks and KPIs to ensure the model is meeting the desired outcomes and making necessary adjustments throughout the pilot phase.



5. Adjust Training and Support Based on Feedback

During the pilots, partners are going to carry out continuous training for the non-technical aspects of the solution and, if needed, for the technical platform, supporting participants in testing and ensuring they have the tools and knowledge required for successful implementation.

6. Communicate Successes and Improvements

During the pilots, partners are going to pay special attention to updating participants and other stakeholders on the positive outcomes of the hybrid model. Highlighting both smaller and bigger successes is going to boost morale, motivation, and reinforce the value of the new technology.

7. Engage Stakeholders in Continuous Improvement

A key goal of testing the PROCAREFUL hybrid model is going to be to improve the solution. Therefore, partners are going to actively involve all stakeholders in this process. In addition to individual engagement, stakeholders are going to participate in 3-4 group meetings during the testing phase to take part in more in-depth discussions. Furthermore, a final evaluation is going to be conducted to assess overall progress and gather comprehensive feedback.

8. Document and Report Findings

During the PROCAREFUL testing phase, partners are going to prepare and deliver regular reports that document the monitoring process, issues encountered, solutions implemented, and the outcomes achieved. These reports will be delivered in deliverables 2.3. Furthermore, the reports are going to be shared with stakeholders to ensure transparency and continuous support.

By following these steps, partners are going to ensure that the digital solution is effectively tested and integrated into the long-term home environment, with issues being resolved quickly and participants continuously motivated by the positive impact of the new hybrid model.

2.3.4. TRAINING AND CONTINUOUS EDUCATION

The training is going to be delivered in two phases:

1. Online Train-the-Trainers Training:

- **Structure:** This training is structured over two days, totalling 20 hours of instruction, divided into 8 hours of theory and 12 hours of individual practical work.
- **Timing:** Theoretical training will take place on August 8-9th, from 9:00 AM to 1:00 PM.
- **Language:** English.
- **Participants:** Trainers who will subsequently train the pilot sites, at least 2-3 representatives from each organisation, including formal and informal carers.
- **Content:** The training will cover familiarisation with the platform and the core concepts and methodologies of the PROCAREFUL model, preparing trainers for localised training.

2. On-site Training at Pilot Sites:

- **Structure:**
 - For formal and informal carers, the training is structured over one or two days, including 4 hours of theory and, if possible, 4 hours of individual practical work.
 - For seniors, the training focuses mostly on pilot and platform understanding and is structured over one day, with 2-3 hours of theory and practice.
 - Both types of training can be conducted in groups or individually, depending on the needs and possibilities of the local trainers.
- **Timing:** September, up to the first part of October for seniors.
- **Language:** National languages of the pilot sites.
- **Participants:** Formal carers, informal carers, and seniors.



- **Content:** The training will focus on the practical application of the PROCAREFUL model, tailored to local contexts.

For more information on trainings and trainings' content look up the deliverable D 1.3.1. Document that presents the PROCAREFUL model training manual.

CONTINUOUS EDUCATION: During the pilots, regular meetings will be held to ensure continuous education for participants. These meetings are crucial for imparting knowledge related to the non-technical aspects of the model, and they also provide opportunities for troubleshooting technical issues and offering additional training as needed. The meetings are structured as follows:

- **National Group Meetings:** Formal carers, informal carers, and seniors will meet 3-4 times to receive further training on the non-technical aspects of the platform. These sessions will use a group social learning methodology to deepen participants' understanding of aging, living with illness and frailty, and to promote healthy habits, effective communication, and better motivation.
- **International Team Meetings:** These meetings will be conducted to train the international team of pilot implementation leaders, enabling them to carry out the additional training sessions effectively.

If needed, individual technical trainings will be organised as well.

2.3.5. EVALUATION FRAMEWORK

The impact evaluation will assess the changes generated in the governance and organizational model of care provision in the 5 pilot sites. To this aim, the PROCAREFUL evaluation model will employ a multidimensional approach combining qualitative and quantitative methodologies. The envisaged approach incorporates stakeholders' perspectives and governance frameworks to ensure a holistic understanding of the effectiveness of ICT-based integrated care. Through the evidence of impact, the evaluation model is intended to serve as a valuable resource for informing and shaping policy strategies, enabling well-informed decision-making, and driving sustainable enhancements in healthcare delivery.

A tentative list of core actions can provide an initial outlook on the evaluation process:

1. Definition of a preliminary set of dimensions covering different aspects of care
2. Selection and involvement of key stakeholders
3. Elaboration of an impact map
4. Construction of a battery of impact indicators
5. Data collection and analysis (including pre-post questionnaire)
6. Elaboration and report

Evaluating the impact of innovative services and care provision models on organizational aspects, particularly change management, is a crucial component in understanding and optimizing the transformation of healthcare delivery and the digitalization of healthcare systems. The PROCAREFUL evaluation focuses on how innovation influences organizational structures, processes, culture, and management practices. A comprehensive set of criteria will be established to effectively measure the impact of ICT in integrated care. For each of these dimensions, a set of indicators will be developed.

The following is a preliminary list to be updated with the support of all relevant stakeholders engaged in the pilot activities:

1. Clinical Outcomes
 - a. Physical & Cognitive Improvements
 - b. Adherence to Treatment & Motivation
 - c. Preventive Care & Behavioral Changes
2. Operational Efficiency
 - a. Efficiency of Care Delivery



- b. Productivity of Care Providers
 - c. Resource Utilization
- 3. End-users Experience
 - a. Satisfaction of Care Beneficiaries
 - b. Usability and Accessibility
 - c. Quality of Care
- 4. Management and Coordination
 - a. Data Utilization
 - b. Care Coordination
 - c. Information Sharing
- 5. Patient Empowerment and Health Literacy
 - a. Empowerment
 - b. Health Literacy
 - c. Self-Management
- 6. Sustainability and Scalability
 - a. Sustainability
 - b. Scalability

To ensure that end users are empowered, the evaluation will need the active involvement of multiple stakeholders from the beginning. This will help gather comprehensive input to address the real needs and barriers to effective care provision. Following this approach, the evaluation team will create and distribute a questionnaire before and after the pilot implementation to collect both quantitative and qualitative data on all aspects of care.

To clarify, a **pre-questionnaire** will be administered before the pilot implementation to establish the baseline— creating a reference point against which change can be measured. It will provide information addressing indicators such as beneficiaries' health status, providers' workload, and systems' usability. **The post-questionnaire** will be administered after the pilots to compare responses and measure changes over time.

The pre-post-analysis will consider multiple perspectives, promoting participation and ownership to improve the acceptance and long-term viability of the PROCAREFUL model. Furthermore, by gathering data before and after the interventions, the questionnaires will help establish causal relationships between the pilots and health outcomes. The overall objective is to gain insight into specific areas where the PROCAREFUL model is most effective and to maximize continuous improvement.

To summarize, the evaluation aims to build a model to quantify the changes generated by the pilots. These changes are expected to provide a thorough understanding of the impact of project activities on system organization and quality of care, offering actionable insights to guide future improvements and policy strategies.

2.4. POST-IMPLEMENTATION PHASE

2.4.1. SUSTAINABILITY - GOAL SETTING

Concrete, realistic, and shared goals are motivators and provide a clear guideline. They should be regularly reviewed and adjusted as needed throughout the process.

Partners are going to clearly define strategic and operative goals for implementing the new technology, ensuring that they are SMART: specific, measurable, achievable, relevant, and time-bound. They are going to elaborate on how these goals are going to be achieved, defining specific measures to monitor progress and success. Partners are going to outline the steps needed to reach these goals, ensuring alignment with



both short-term and long-term objectives. These measures will guide the implementation process, helping the team stay on track and adapt as needed.

Following groups will be considered in goal setting:

- Goals of pilot organization
- Goals for older people
- Goals for informal carers
- Goals for formal carers
- Goals for home care provider

2.4.2. SUSTAINABILITY - FUTURE CONSIDERATION

When implementing new solutions, it is essential to look beyond the current benefits and implications and also think about their long-term relevance. Questions about the usefulness and durability of the solution over 10-15 years, the need for updates or upgrades, the ability to adapt to changing infrastructure and standards, and the ability to identify potential future problems are essential. A complete picture ensures, that the chosen solution will not only be successful in the short term but will also be able to meet changing needs and challenges in the long term.

As part of the post-implementation phase partners are going to be encouraged to think about the future of PROCAREFUL hybrid care model. Tentative suggestions will be made already at the time of action plan preparation, but this section will be further developed during the fourth and fifth project period.

2.4.3. CELEBRATION AND NEXT STEPS AT PILOT SITES

Celebrating and acknowledging participants at the end of the pilot is crucial for recognizing their contributions and fostering a sense of accomplishment. It helps build morale and reinforces the value of their involvement. Additionally, outlining the next steps at the pilot sites ensures a smooth transition from the pilot phase to full implementation, maintaining momentum and clarity on future actions. This approach not only honours the participants' efforts but also sets the stage for continued success and engagement.

Each piloting partner is going to outline the next steps following the conclusion of the pilot and will organize an event to mark the end of the pilot phase.

2.4.4. SUSTAINABILITY - CREATION OF A VALUE

PROCAREFUL hybrid model is designed to prevent or slow down cognitive and physical decline and reduce social isolation. By promoting the development and maintenance of healthy habits, the model aims to enhance people's well-being, sustaining their autonomy and independence.

A key component of the model is the digital platform that supports the creation and maintenance of healthy habits in people's daily routines. This platform is not only a tool for self-management, but also serves as a remote monitoring system for healthcare professionals. By enabling remote monitoring, the platform helps to reduce the burden on caregivers and healthcare providers.

The challenge lies in ensuring this platform is adaptable to the diverse care contexts in Central Europe. This includes accommodating varying organizational structures, regulatory environments, and methods of care delivery. The platform should be flexible enough to integrate into different care systems while providing holistic, preventive care. Ultimately, the success of the hybrid model depends on its ability to address these complexities and deliver a comprehensive, user-centred solution that meets the need of seniors and their caregivers.



Building on users and practitioners needs identified in the research phase, the following roles and responsibilities are going to be allocated as part of the platform (Deliverable 1.4.2.):

Role	Description	Responsibilities	Features
Senior	Individuals aged 55 and over who use the platform to enhance their cognitive and physical well-being through personalized activities and health monitoring.	Engage actively in cognitive exercises, physical activities, and personal growth challenges provided on Procareful.	<ul style="list-style-type: none"> • Cognitive games • Physical activities: <ul style="list-style-type: none"> ○ Physical activities ○ Breathing exercises ○ Walking • Personal growth challenges
Informal Caregiver	Typically family members or friends of seniors who provide unpaid care and support.	<ul style="list-style-type: none"> • Monitor the well-being and activities of the seniors they care for. • Participate in communication channels to coordinate care with formal caregivers. • Assist with daily activities and ensure the senior's comfort and safety. 	<ul style="list-style-type: none"> • Dashboard with senior engagement data • Notification Center • Performance warnings • Senior profile • Documents • Notes • Care Plan • Senior Details
Formal Caregiver	Professionals such as health care professionals, psychologists, volunteers who provide professional care and support to seniors.	<ul style="list-style-type: none"> • Assess the condition and health status of seniors. • Develop personalized care plans based on assessments and individual needs. • Monitor condition and track progress over time. • Communicate effectively with other caregivers and seniors. • Provide medical, therapeutic, or rehabilitative care as needed. • Document care provided and maintain accurate records. 	<ul style="list-style-type: none"> • Dashboard with Senior's engagement data • Notification Center • Performance Warnings • Condition Assessment form • Care Plan: <ul style="list-style-type: none"> ○ Assigning ○ Building ○ Editing • Senior Profile <ul style="list-style-type: none"> ○ Documents ○ Notes ○ Care Plan ○ Senior Details
Institution	Care and service providers within a community. It employs caregivers and coordinates resources to ensure seniors' well-being.	<ul style="list-style-type: none"> • Provide support and services to seniors within the community. • Employ and manage caregivers to ensure adequate support for seniors. 	<ul style="list-style-type: none"> • Dashboard with Institution Data: <ul style="list-style-type: none"> ○ Caregivers workload ○ Roles distribution ○ Statistics • Users management



		<ul style="list-style-type: none"> • Coordinate resources and services to meet the needs of seniors effectively. • Monitor caregiver workload and roles distribution using Procareful. 	
Head Admin	Technical administrator responsible for managing Procareful at a country level.	<ul style="list-style-type: none"> • Create and manage accounts for institutions within Procareful. • Manage institution owners and their access permissions. • Provide technical support to users of Procareful. 	<ul style="list-style-type: none"> • Create Institution • Manage Institutions <ul style="list-style-type: none"> ○ Managing Institutions Administrators ○ Activating/deactivating institutions

Based on the chart above and non-technical competences described in the Training manual (Deliverable 1.3.1.) each piloting partner will define the list of competences that can be upskilled in their pilot and include them into their action plan.

PROCAREFUL VALUE PROPOSITION

PROCAREFUL is transforming the landscape of home care for individuals aged 55 and older by integrating cutting-edge technology with compassionate care. Our innovative platform is designed to bridge gaps in care access and enhance the quality of life for seniors through a hybrid model that combines technology with human touch.

CORE VALUE PROPOSITION

1. **Enhanced Accessibility and Quality of Care:** PROCAREFUL'S platform increases access to home care services, ensuring that seniors receive high-quality, personalized care regardless of their location. Our MVP features include:
 - **For Institutions:** Streamlined user management tools to track engagement and ensure compliance.
 - **For Carers:** Comprehensive tools for condition assessment, activity recommendations, and efficient communication.
 - **For Seniors:** Engaging cognitive games, physical exercises, and personal growth challenges with an intuitive user interface.
2. **Future-Ready Features:** Post-MVP, PROCAREFUL will further enhance its capabilities with:
 - **Advanced Communication Tools:** Real-time in-app chat and push notifications for better coordination.
 - **AI-Driven Insights:** Improved activity recommendations using machine learning.
 - **Community Engagement:** Tools for organizing local events and activities.
 - **Mobile Integration:** Native app for seniors with integration options for other health apps.
 - **Enhanced Gamification:** Reward systems and a broader range of activities to boost engagement.
3. **User-Centric Design:** PROCAREFUL is designed with user needs at the forefront:

- **Seniors:** A user-friendly platform that supports cognitive and physical health with ease of navigation.
 - **Carers:** Tools that simplify tracking, communication, and engagement.
 - **Institutions:** Administrative features for managing roles, compliance, and user engagement.
4. **Collaborative Network:** As part of deliverable D 1.4.3, PROCAREFUL is going to established a Network of Cooperating Organizations. This network connects regional stakeholders to support the architecture and functionality of the PROCAREFUL model in their respective countries. The collaboration fosters the innovative design of the home care model and promotes its adoption, replicability, and sustainability across the Central Europe (CE) area.
 5. **Sustainable Impact:** PROCAREFUL'S hybrid home care model is built for scalability and sustainability. By leveraging digital tools and a network of regional partners, PROCAREFUL ensures that the solution not only addresses current needs but is adaptable and resilient for future demands.

PROCAREFUL is not just a platform; it's a commitment to improving the lives of seniors through innovative technology, non-technical skills and collaborative effort. By bringing together developers, formal and informal cares, older people and other stakeholders PROCAREFUL is paving the way for a future where quality home care is accessible, personalized, and PROACTIVE.

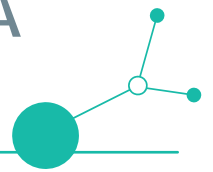
Value proposition will be further supported and enhanced once evaluation results become available.

During the fourth and fifth project period each piloting partner will think about the value of the PROCAREFUL hybrid model in terms of potential business model and include them as the annex to their action plans.

3. ANNEXES

1. PROJECT PILOT'S ACTION PLANS:
 - 1.1. PILOT ACTION PLAN - CROATIA
 - 1.2. PILOT ACTION PLAN - GERMANY
 - 1.3. PILOT ACTION PLAN - ITALY
 - 1.4. PILOT ACTION PLAN - POLAND
 - 1.5. PILOT ACTION PLAN - SLOVENIA
2. FRAMEWORK FOR ACTION PLAN DEVELOPMENT

D 1.4.1. ACTION PLAN FOR PROCAREFUL MODEL IMPLEMENTATION - CROATIA





PROCAREFUL ACTION PLAN

1.1. INTRODUCTION

Understanding of the situation is basis for any project action plan. In order to achieve that, PROCAREFUL project starts with a pre-implementation assessment and co-design phase.

1.1.1. PRE-IMPLEMENTATION ASSESSMENT

Following groups are being assessed as ground for model development and testing:

- **Adults (persons 55+)** and older people in need of care, that is provided by informal carers and/or professionals working in the care field. Especially older people with the appearance of the first signs of cognitive or physical decline, with special attention to those living alone at home, being lonely or living alone for longer periods of time (e.g. during extended absences of other household members/carers).

The target group for the pilot action in Croatia includes approximately 200 people who already receive services from our organization and are confident using technology. As of 2021, around 13,350 people aged 55+ live in Split. Most of these individuals reside in urban areas (Split and its surroundings), typically in solitary households or with a spouse, and are in regular contact with healthcare and occasionally social services. The 55+ age group in Croatia is highly diverse but generally faces growing dependency on others, with over half unable to fully meet their physiological and social needs independently. This points to a gradual decline in physical and mental abilities, increasing the risk of disability and illness. Based on focus group results, participants actively work to maintain physical, cognitive, and social engagement. While many needs are met through services offered by our organization and others, some unmet needs are addressed independently (e.g., self-organized field trips). Through various activities—such as reading, social gatherings, and exercise—they aim to delay cognitive decline, sustain social connections, and prevent physical deterioration.

- **Professionals working in a home care environment.**

In the pilot implementation, at least six local professionals from Association “MI” in Split will cooperate in testing the hybrid model. This team includes nurses (from public health and private sectors), social workers, and gerontomaids, all dedicated to senior socialization programs. These professionals bring valuable experience in supporting cognitive health, preventing physical decline, and promoting social inclusion among the elderly. However, the broader context reveals critical gaps: a national shortage of elderly care professionals, insufficient funding, and the urgent need for standardized practices in social care. Many care workers face heavy workloads, low wages, and increasing demands from their clients, underscoring a pressing need for systemic support to ensure sustainable, high-quality elderly care.

- **Informal carers** of older people who provide care to those who need it within the context of an existing relationship, such as a family member, a friend or a neighbour; informal care is care, usually unpaid, provided outside of the professional or formal framework.

For the pilot, we plan to engage around 5-10 informal carers, contacting them through recruited elderly beneficiaries. Informal carers in Croatia remain largely unrecognized and unsupported: an estimated 460,000 individuals fulfill caregiving roles without formal status, financial aid, or dedicated support services, according to the 2020 Eurocarers report. Currently, there are no specific services or financial assistance for informal carers, though our organization offers advice and a listening ear as needed. Focus group participants in our co-design process highlighted the challenges



they face, particularly loneliness, exhaustion, and the invisibility of their work. They emphasized that a hybrid support solution could help reduce their constant physical presence, while maintaining care standards.

1.1.2. CO-DESIGN

In Croatia, the co-design process successfully gathered valuable input from all target groups, informing the adaptation of the hybrid solution for project implementation. Despite challenges in scheduling focus groups for informal carers due to personal commitments, cooperation with local service providers, including health and social care representatives and local authorities, proved highly effective. Feedback from seniors and informal carers was particularly valuable, addressing specific needs and preferences, and this input was shared with partners responsible for developing the digital solution.

1.2. PREPARATORY PHASE

The preparatory phase begins in the third project period and aims to prepare all partners for implementing the PROCAREFUL hybrid model. To achieve this, the following areas will be addressed, and specific steps will be taken during this phase:

1.2.1. TECHNICAL DIMENSION: INFRASTRUCTURE AND RELIABILITY

INFRASTRUCTURE: Understanding and preparing the infrastructure before implementing a technical solution is crucial for improving user experience, ensuring security, facilitating smooth implementation, mitigating risks, and aligning with strategic goals.

For the pilot implementation in Croatia, internet connectivity and IT equipment will be essential. Formal and informal carers will use computers or tablets, while seniors will use smartphones. The Association MI - Split will supply IT equipment for formal carers from its existing resources, so no additional procurement will be necessary. The recruitment process will focus on seniors and informal carers who are regular users of IT technologies with basic digital skills, ensuring that all participants already have personal IT equipment with internet access.

RELIABILITY TEST: Conducting a reliability test or pre-test before implementing new technologies in a home care environment is a crucial step to ensure the smooth running of the implementation and earn the trust of the end-users.

The English platform version in the Croatian pilot site will undergo two rounds of testing. In the pretest, one employee will review the platform, followed by a second round with four employees using specific testing scenarios. All testers will be proficient in English. The national language platform version will be tested by four employees, each representing different roles—Head (Country) Admin, Institution Admin, Institution Super Admin, Formal Carer, and Informal Carer—and by one senior user for the Senior role. The senior user has already agreed to participate in testing scheduled for August.

1.2.2. ETHICAL & LEGAL DIMENSION

The legal and ethical dimension refers to elements, principles, behaviours, and considerations that relate to both legal requirements and ethical standards. This category encompasses aspects related to ensuring that actions and decisions align with the law, such as enabling safety, security, privacy, and morally acceptable conduct.



<p>Ethics committee involvement</p>	<p>The ethical aspect is going to be analysed through specific meetings between team members and experts supporting MI Association on ethical and privacy issues.</p> <p>Due to the aims of PROCAREFUL project it is not mandatory and required to apply to the Ethics Committee.</p>
-------------------------------------	---

1.2.3. RECRUITMENT

For successful pilot implementation, it is important to engage the right people, understand their situation, and give them tools that can enable them to carry out the intervention well.

Seniors:

Recruitment of participants will be carried out in two stages: first, in period three to reach as close to the pilot target as possible and again in period four to mitigate the possible drop-out and for partners to have the possibility to include the interested end users also later in the process.

Informal carers

In Split pilot site, informal carers will be recruited based on the preferences and needs of the elderly beneficiaries, following the initial recruitment of seniors. This recruitment will leverage the seniors' connections with family members, although informal carers are not formally affiliated with our organization. We do not anticipate significant challenges in this process, as the recruitment of informal carers is not a formal project requirement.

Formal carers

Formal carers were recruited during the third implementation period, with all selected individuals being MI employees. This early recruitment aimed to ensure thorough team preparation for pilot implementation. Selection criteria included experience, expertise, and motivation. No major challenges are anticipated in this process.

1.2.4. ORGANIZATIONAL DIMENSION

Involving all important stakeholders at every stage of the process—from needs assessment to co-design, preparation, implementation, and assessment—is essential for creating effective, user-centered, and sustainable solutions in the home care environment.

KEY STAKEHOLDERS

In Croatia introducing new technology in the home care service, involvement is required across all organizational levels:

Management: The Executive Board (President, Director, EB Member) and the Social Program Manager will oversee strategic decisions and implementation.

Supervisory Level: The Social Services Coordinator will guide and monitor the adaptation process.

Executive Level: Service providers, specifically care workers, will be engaged in daily operations and technology application.

In the broader home care environment and community, collaboration with previously involved stakeholders, such as health system representatives, social care institutions, and policymakers, is essential. During pilot



implementation, the MI team will ensure continuous interaction with these stakeholders to integrate their valuable input.

Opinion Leaders: Within our organization, management holds decision-making authority, actively incorporating feedback from service providers. Nationally and locally, key influencers include the relevant Ministries, the City of Split, and other institutions, which issue essential guidance and policies on elderly care.

Communication on Changes: For significant updates, all project participants—users, family members, team members, and stakeholders—will be informed to ensure transparency and alignment with project goals.

CURRENT WORKFLOW: Understanding the current situation and workflows of both formal and informal carers.

Currently, formal carers at MI provide daily services to elderly beneficiaries, primarily through the "Golden Age Centre" socialization program, engaging in various activities to support cognitive, physical, and social well-being. These carers are involved in multiple projects, but all contribute to this central program. As for informal carers, their daily routines and methods of care are unknown until they are engaged in the pilot. The PROCAREFUL model will be integrated into the workflows of formal carers, providing them with digital tools to more effectively track the health and status of elderly individuals, improve coordination, and enhance care. The impact on informal carers will be assessed once they are included. The overall goal is to improve the quality of life for elderly beneficiaries and offer both formal and informal carers better tracking capabilities, ultimately reducing their workload and enhancing the continuity and quality of care provided.

1.2.5. NON-TECHNICAL ASPECT OF THE MODEL

PROCAREFUL hybrid model consists of two parts: of technical solution and non-technical solution - part of the model, where we want to improve personal segment of care, especially in the field of prevention. To change the way care is provided and work more preventively, a shift in mindset will be required. This shift will move from service-oriented care to personal, empathetic care and from reactive care to proactive, preventive care. This mindset change will need to happen at all levels, from the developers (all of us) to the people we will work with.

In Croatia healthcare prevention refers to proactive measures aimed at maintaining and improving health, particularly for elderly individuals, by reducing the risk of illness and promoting well-being. It involves a continuous effort to encourage a healthy lifestyle, including proper nutrition, regular physical activity, and mental stimulation, along with regular health check-ups and visits to healthcare providers. Prevention also includes educating individuals about potential health issues, fostering an awareness of risks, and empowering people to make informed decisions that support long-term health. By emphasizing prevention and health promotion, the goal is to enhance quality of life and encourage active aging.

1.3. IMPLEMENTATION PHASE

1.3.1. IMPLEMENTATION FRAMEWORK

For the project implementation framework and timeline, see chapter 1.3.1 of Deliverable 1.4.1

Implementation framework summary for Croatia:

The recruitment process for the pilot will begin in early September, primarily targeting seniors involved in the Golden Age Centre socialization program. The PROCAREFUL team and MI personnel working as socialization coordinators will use various channels, including direct contact, social media platforms (e.g., Facebook), and posters to generate interest. Formal recruitment will take place through a presentation at the end of October, which will also serve as the first stage of training, introducing seniors to the project



and pilot. Training for formal carers will take place after the online training for trainers, planned for the end of August and early September. This will involve smaller group sessions (2-4 carers) led by trainers.

For seniors, the training will occur in two stages: the first stage, at the end of September, will include a presentation on the project and pilot, and the second stage, at the beginning of November, will assist seniors with installing the app and familiarize them with its use in smaller groups (3-6 seniors).

Seniors will be assessed in two stages in October: the first by a MoCA-certified expert for cognitive assessments, and the second by formal carers for individual assessments.

Continuous training will be provided through monthly meetings with seniors and, as needed, for formal carers.

A celebration to thank participants will be held in early June 2025, featuring a social event with refreshments and the presentation of Certificates of Appreciation to each user.

1.3.2. COMMUNICATION

The communication is of the crucial importance for the success of the pilot implementation in Split. It will involve several levels of communication: (I) Formal carer - Seniors, (II) Formal carers - Trainers/ Core project team, and (III) Trainers/ Core project team - Seniors.

(I) Formal carers will be in a contact with seniors during the socialization activities and on-demand. They will be responsible to get feedback from seniors and helping the navigate the app during the pilot.

(II) Formal carers will be in a contact Trainers/ Core project team to report on feedback from seniors, while Trainers/ Core project team will be responsible to provide support in solving any problems especially technical ones. Channels of communication will differ - in person, over the phone, via-email, etc.

(III) Trainers/ Core project team will be periodically in contact with seniors (during monthly meetings in person). The goal will be to address all the issues Formal carers couldn't solve.

1.3.3. MONITORING OF THE IMPLEMENTATION AND TROUBLESHOOTING

Regular monitoring during the introduction of a new digital solution will involve several key steps. Each step will be designed to ensure the successful testing and adoption of the technology while addressing challenges as they arise.

For more information on the monitoring and troubleshooting, see chapter 1.3.3 of Deliverable 1.4.1.

1.3.4. TRAINING AND CONTINUOUS EDUCATION

The training is going to be delivered in two phases across all pilot sites. For more information on training and continuous monitoring, see Chapter 1.3.4 of Deliverable 1.4.1.

1.3.5. EVALUATION FRAMEWORK

The impact evaluation will assess the changes generated in the governance and organizational model of care provision. The evaluation framework is consistent across the 5 pilot sites. For more information, see Chapter 1.3.5 of Deliverable 1.4.1.



1.4. POST-IMPLEMENTATION PHASE

1.4.1. SUSTAINABILITY - GOAL SETTING

Concrete, realistic, and shared goals are motivators and provide a clear guideline. They should be regularly reviewed and adjusted as needed throughout the process.

The goals of MI organization, and for all partners in the national team, include recruiting and implementing the pilot with 30 users, maintaining high quality of service provision, supporting all target groups, and disseminating information to advocate for an improved quality of life for the elderly. For older people, the focus is on enhancing their quality of life and providing support in managing daily tasks. Informal carers aim to receive support in their caregiving efforts and advocate for greater recognition and support for their unpaid work. Formal carers seek to reduce their burden in delivering services and advocate for the adoption of digital solutions in social and healthcare services. Lastly, home care providers aim to gain a deeper understanding of the needs of both caregivers and beneficiaries while increasing the use of technology in home care services.

1.4.2. SUSTAINABILITY - FUTURE CONSIDERATION

When implementing new solutions, it is essential to look beyond the current benefits and implications and also think about their long-term relevance.

In Croatia in this preparatory phase, the hybrid solution appears to have potential beyond the project, particularly for elderly people living at home who need support in maintaining a healthy lifestyle and preventing cognitive, physical, or social decline. It could be useful in a broader context for home care organizations or other types of services aimed at elderly care. Potential risks and challenges include over-reliance on technology, which might reduce human contact, as well as limited internet access in some rural areas and elderly homes. There is also a risk that the platform may not improve or adapt as needed over time. To address these challenges, strategies could involve balancing technology use with human interaction, ensuring broader internet access, and planning for regular platform updates. The solution is expected to be generally accepted by different target groups, but regular training will be necessary to ensure smooth integration and continued effective use.

1.4.3. CELEBRATION AND NEXT STEPS AT PILOT SITES

Celebrating and acknowledging participants at the end of the pilot is crucial for recognizing their contributions and fostering a sense of accomplishment.

Each piloting partner is going to outline the next steps following the conclusion of the pilot and will organize an event to mark the end of the pilot phase.

In Croatia after the testing period and the conclusion of the PROCAREFUL project, we plan to explore external financing options, such as new projects, grants, and other funding sources, to support the larger deployment of the solution. The final event to celebrate the completion of the pilot is planned for early June 2025.



1.4.4. SUSTAINABILITY - CREATION OF A VALUE

PROCAREFUL hybrid model is designed to prevent or slow down cognitive and physical decline and reduce social isolation. By promoting the development and maintenance of healthy habits, the model aims to enhance people's well-being, sustaining their autonomy and independence.

For more information, see Chapter 1.4.4. of Deliverable 1.4.1.

PLACE, DATE SPLIT, 10.1.2025.

Project partner ASSOCIATION MI

Signature

D 1.4.1. ACTION PLAN FOR PROCAREFUL MODEL IMPLEMENTATION - GERMANY





PROCAREFUL ACTION PLAN

1.1. INTRODUCTION

Understanding of the situation is basis for any project action plan. In order to achieve that, PROCAREFUL project starts with a pre-implementation assessment and co-design phase.

1.1.1. PRE-IMPLEMENTATION ASSESSMENT

Following groups are being assessed as ground for model development and testing:

- ▮ **Adults (persons 55+)** and older people in need of care, that is provided by informal carers and/or professionals working in the care field. Especially older people with the appearance of the first signs of cognitive or physical decline, with special attention to those living alone at home, being lonely or living alone for longer periods of time (e.g. during extended absences of other household members/carers).

In Germany, there are 3.4 million people in need of care. Of these, 2.8 million (52%) are cared for by relatives at home. Around 2000 people are cared for and looked after by the welfare organization. Within WWBW, there are 123 day care places, 605 assisted living places. Many people benefit from the mobile service, even if the precise number cannot be clearly determined.

The majority of older people live in urban areas such as large cities (25%) or urban districts (38%), with only a few (15%) living in sparsely populated rural districts. On average, they had two and a half rooms per person, in addition to a kitchen, bathroom and hallway. WWBW is spread across 19 locations throughout Baden-Württemberg, caring for senior citizens living in both urban and rural areas. This is a special feature compared to other providers. Losses in health can often become barriers to mobility in old age. Restrictions in the previously accustomed independent lifestyle and in social participation are possible consequences with clearly negative effects on the quality of life. Overall, previous analyses and DEAS estimates for Germany show that despite numerous support programmes for "living in old age" and adapted legal frameworks for the creation of age-appropriate housing, there is still a great need for action to meet the needs of older people for an independent and self-determined lifestyle - even if they need assistance and care.

People over 65 do not always have access to technology and the internet and half of the people in Germany who are 70 and older do not use the internet. According to the Allensbach Market and Advertising Media Analysis from 2022, around 52.2% of seniors said they do not use the internet. In a survey conducted in Germany in July 2020, around 54% of senior citizens surveyed stated that they use a stationary desktop PC at least occasionally. Around 42% of respondents use a laptop and 41% of seniors use a smartphone. The points mentioned regarding internet use and the availability of the internet could pose a major challenge in the context of the project.

- ▮ **Professionals working in a home care environment.**

In Germany there are 14100 outpatient care services with 390300 employees. Around 1800 people work at WWBW, most of whom are employed in the direct care context. Diverse professionals are involved in home care and employed by independent or public institutions or by private professionals, such as elderly care workers, (child) care workers, additional care workers, domestic support workers, care assistants, (administrative workers and members of other social professions), physiotherapists (only with doctor's prescription). All the professionals mentioned are also involved in some way in the prevention of social isolation. In addition, there are often neighbourhood aids, self-help groups, church offers and sports groups within the individual residential quarters.



The WWBW employs nursing staff (qualified nurses, some of whom also work as central practical instructors for nursing students and qualified geriatric nurses), care assistants, everyday companions, social workers and medical assistants. The Wohlfahrtswerk's own training center offers further training for employees throughout the year. Here, for example, there are further training courses on the following topics: maintaining everyday skills through exercise, treatment care for nursing assistants (outpatient and inpatient), activation with games.

In Germany, there is a shortage of care professionals and care assistants. In addition, mobile care workers are very time-bound and have little leeway to spend time with or on the patient outside of their concretely paid and time-bound task (for example: washing, giving medication). Especially in urban settings, the time pressure is increased by traffic and the search for parking spaces. Moreover, they have a lot of patients to care for due to the shortage of staff, but also due to a high care ratio. The nursing staff has a high level of responsibility and also has to deal with the relatives.

- **Informal carers** of older people who provide care to those who need it within the context of an existing relationship, such as a family member, a friend or a neighbour; informal care is care, usually unpaid, provided outside of the professional or formal framework.

In Germany, the informal carers group for the pilot site is expected to include 3 to 5 members. Informal caregivers are not directly involved in the care process at WWBW. However, they are often involved in medical history taking, biography work, etc. There are more frequent points of contact, particularly in mobile care. They are an important part of the exchange and source of information for care staff working in the mobile setting (mobile services, day care, assisted living). In WWBW training center, as well as in individual facilities, there is always the opportunity to be trained as an informal caregiver.

A central challenge in the daily practice of care provision is to keep track of all the different tasks and demands around the care situation and to divide them among the members of the care network in such a way that, on the one hand, all tasks are adequately fulfilled and, on the other hand, they are coordinated and distributed in such a way that individual members are not overburdened. The willingness and the possibilities to care for relatives in their own homes is decreasing due to social developments (e.g. increase in women's employment) (Unger et al 2015), but caring relatives still manage the main part of care-related tasks. Informal carers have a high double-triple burden of work, household, family and the person in need of care. In addition, there is often a high financial burden as soon as the person in need of care has few financial means. There are often complicated procedures to get care support, thus a high administrative effort, long waiting times and little support.

1.1.2. CO-DESIGN

In Germany, the co-design process revealed key insights into what the nursing staff considered most important for the web platform, highlighting both strengths and areas of future improvements to better meet their needs. For nursing staff, understanding whether patients found their goals too strenuous or too easy was a priority, as this would directly influence care plans. The majority of professionals found regular updates on each user's performance important, in order to be informed about the users' performance. All participants believe that there should be a predefined training plan based on resources and schedule. This is perceived as saving time. In terms of web platform content, caregivers emphasized the need for information on patient metrics such as weight, height, and BMI, which should ideally influence the training plan. Other important details included underlying illnesses (such as asthma) that could impact training adjustments, a shopping list for patient needs, and information about medications and any known intolerances. While a function for uploading documents was considered unnecessary, due to the risk of



redundant documentation, the participants suggested that this could change if the platform were to integrate with existing care documentation systems. Similarly, entering events was seen as challenging.

The platform itself was expected to be self-explanatory and easy to understand. For successful integration of caregivers and informal caregivers, it was considered essential to have a dedicated contact person from the main administration team, responsible for addressing any issues that arose, especially technical ones, to maintain the participants' motivation.

The timely development of a sustainability concept for the project was an important factor for all target groups.

1.2. PREPARATORY PHASE

The preparatory phase begins in the third project period and aims to prepare all partners for implementing the PROCAREFUL hybrid model. To achieve this, the following areas will be addressed, and specific steps will be taken during this phase:

1.2.1. TECHNICAL DIMENSION: INFRASTRUCTURE AND RELIABILITY

INFRASTRUCTURE: Understanding and preparing the infrastructure before implementing a technical solution is crucial for improving user experience, ensuring security, facilitating smooth implementation, mitigating risks, and aligning with strategic goals.

Considering technical requirements and infrastructure, only seniors who have Internet access at home will be included in the German pilot site. For seniors who do not have their own devices, WWBW can provide loaner smartphones and tablets. For both formal and informal caregivers, it is also a prerequisite that they have Internet access and the technical equipment to participate.

The WWBW uses care documentation software. The aim would be to integrate the PROCAREFUL model here. This is necessary for future use so that care staff can continue to use the platform after the end of the project. Use must not be associated with additional work or with switching to multiple platforms. To check whether the PROCAREFUL model can be integrated into an existing system in the future, WWBW will enter into an exchange with the colleagues responsible for this.

RELIABILITY TEST: Conducting a reliability test or pre-test before implementing new technologies in a home care environment is a crucial step to ensure the smooth running of the implementation and earn the trust of the end-users.

In the German pilot site, a reliability test of the English platform will be carried out by the PROCAREFUL project members of the national group, as well as by project colleagues who have experience in the development of a platform and the maintenance context.

The reliability test of the German platform can be carried out during the summer by the project team or, if necessary, by colleagues from the department who are not involved in the PROCAREFUL project. WWBW will also involve people who have experience in the direct care context.

1.2.2. ETHICAL & LEGAL DIMENSION

The legal and ethical dimension refers to elements, principles, behaviours, and considerations that relate to both legal requirements and ethical standards. This category encompasses aspects related to ensuring that actions and decisions align with the law, such as enabling safety, security, privacy, and morally acceptable conduct.



<p>Ethics committee involvement</p>	<p>The ethical aspect is going to be analysed through specific meetings between team members and experts supporting WWBW on ethical and privacy issues.</p> <p>Due to the aims of PROCAREFUL, project it is not mandatory and required to apply to the Ethics Committee.</p>
-------------------------------------	--

1.2.3. RECRUITMENT

For successful pilot implementation, it is important to engage the right people, understand their situation, and give them tools that can enable them to carry out the intervention well.

Seniors:

Recruitment of participants will be carried out in two stages: first, in period three to reach as close to the pilot target as possible and again in period four to mitigate the possible drop-out and for partners to have the possibility to include the interested end users also later in the process.

Informal carers

In Germany, informal carers will be recruited in August, as soon as the train the trainer courses have been completed. They will be recruited through their relatives who would like to participate as end-users. Existing contacts from participation in previous projects are used. The main challenge is the lack of time for participation, especially in the context of training courses, as it may not always be possible to be trained on the days suggested or to use the platform at regular intervals.

Formal carers

In Germany, formal carers will be recruited in August, as soon as the train the trainer courses have been completed. They will be recruited in the WWBW' facilities and mobile services. Existing contacts from participation in previous projects are used. The project and the participation process are presented on site to the relevant nursing staff. The main challenges are the lack of time to attend the training course, as well as shift work, as it can be difficult to keep employees motivated to use the platform "regularly. In addition, the added value of the model is not recognized.

1.2.4. ORGANIZATIONAL DIMENSION

Involving all important stakeholders at every stage of the process—from needs assessment to co-design, preparation, implementation, and assessment—is essential for creating effective, user-centered, and sustainable solutions in the home care environment.

KEY STAKEHOLDERS

To successfully introduce a new technology into WWBW's home care services in Germany, it is essential to involve people from all levels of the organization. At the executive board level, strategic decision-makers play a critical role in approving the adoption of new technology, ensuring it is in line with WWBW's goals. Regional management and management of mobile services should be involved. Moreover, nursing staff is crucial, as they are the primary users of the technology and will interact with it directly in patient care. The digitization team will be responsible for the technical aspects, ensuring that the technology is effectively integrated with existing systems and remains functional and secure. Finally, it is important to involve senior citizens and relatives, as they are the primary beneficiaries of home care services and the technology.



When it comes to a more extensive introduction and, if necessary, subsidization, then the city and municipal administration in which our facilities are located, possibly the health insurance companies, care insurance companies, should be involved, depending on how extensive the introduction should be and who pays for it.

In WWBW organization, opinions leaders are the board members and the facility and regional management teams. More broadly, they are the ministries (e.g. the Ministry of Social Affairs), the city and municipal administrations in which WWBW facilities are located, possibly the health insurance funds, care insurance funds, etc.

To ensure a smooth transition when introducing the new technology, the executive board should be always informed. Then, it depends on how extensive the changes are and who they affect. In general, all persons who are affected by the changes must be informed.

CURRENT WORKFLOW: Understanding the current situation and workflow of both formal and informal carers

In Germany, the work process for formal and informal carers within the home care setting involves a range of tasks. Time constraints are a significant challenge, as there is little opportunity for anything beyond these essential duties. Their day is structured around these critical tasks, leaving minimal space for additional activities or technology integration. In introducing the PROCAREFUL model, it is crucial that the technology can be easily integrated into the day-to-day workflow of both formal and informal carers without requiring significant extra effort or time investment, but it is questionable how it can be integrated without adding enormous value for users. It probably requires a lot of organisation at the beginning.

PROCAREFUL application can be integrated into existing care documentation software at WWBW. This is essential for ensuring that formal carers and senior citizens can effectively use the application.

1.2.5. NON-TECHNICAL ASPECT OF THE MODEL

PROCAREFUL hybrid model consists of two parts: of technical solution and non-technical solution - part of the model, where we want to improve personal segment of care, especially in the field of prevention. To change the way care is provided and work more preventively, a shift in mindset will be required. This shift will move from service-oriented care to personal, empathetic care and from reactive care to proactive, preventive care. This mindset change will need to happen at all levels, from the developers (all of us) to the people we will work with.

In Germany, healthcare prevention is understood as an umbrella term for preventive measures which are aimed in particular at the health-related behavior of the individual, and for health-promoting measures which also focus on improving the health-related living conditions of society. Building on this principles, the pilot will support prevention by offering a solution that provides tools to promote healthy behaviors and offers guidance in exercises to establish good routines, which is often the most challenging aspect. By focusing on practical support and consistent encouragement, the pilot aims to help individuals incorporate sustainable health habits into their daily lives.

1.3. IMPLEMENTATION PHASE

1.3.1. IMPLEMENTATION FRAMEWORK

For the project implementation framework and timeline, see chapter 1.3.1 of Deliverable 1.4.1

Implementation framework summary for Germany:



The pilot implementation in Stuttgart will run from September 2024 to May 2025. The plan begins with a first round of senior recruitment by September 2024. The first round of caregivers and seniors training will occur between September and the end of December. As soon as seniors agree to participate in the project, the assessment is carried out and the access to the platform is set up. Once the first recruitment phase is completed, continuous training and support will be provided. A second recruitment and training round will take place in January 2025, if additional participants are needed to maintain the target group of 30 people. However, if all participants have been recruited by the end of December, this phase will be cancelled. As soon as a senior citizen agrees to participate in the project, the assessment is carried out and access to the platform is set up. Training for seniors and carers will be carried out in January. The final assessment and evaluation will be carried out either in April 2025 or in July 2025, with a celebration event planned for July 2025.

1.3.2. COMMUNICATION

In Germany, all participants will receive a sheet with all contact information (phone number, email) as soon as they agree to participate. This ensures that someone can always be contacted in case of problems. Regular telephone contact with the senior citizens is also granted. They are also in lively dialogue with the facilities (especially with the management on site). The project will also be presented at events (e.g. 'Digital Pretzel Breakfast'). Here by means of presentation and distribution of the specially created flyers. The current status of the project is presented to the WWBW board once a month (status report) by means of a presentation.

1.3.3. MONITORING OF THE IMPLEMENTATION AND TROUBLESHOOTING

Regular monitoring during the introduction of a new digital solution will involve several key steps. Each step will be designed to ensure the successful testing and adoption of the technology while addressing challenges as they arise.

For more information on the monitoring and troubleshooting, see chapter 1.3.3 of Deliverable 1.4.1.

1.3.4. TRAINING AND CONTINUOUS EDUCATION

The training is going to be delivered in two phases across all pilot sites. For more information on training and continuous monitoring, see Chapter 1.3.4 of Deliverable 1.4.1.

1.3.5. EVALUATION FRAMEWORK

The impact evaluation will assess the changes generated in the governance and organizational model of care provision. The evaluation framework is consistent across the 5 pilot sites. For more information, see Chapter 1.3.5 of Deliverable 1.4.1.

1.4. POST-IMPLEMENTATION PHASE

1.4.1. SUSTAINABILITY - GOAL SETTING

Concrete, realistic, and shared goals are motivators and provide a clear guideline. They should be regularly reviewed and adjusted as needed throughout the process.



In Germany, the goals of the pilot implementation are to successfully involve 30 participants, integrate the web platform into everyday working life, as well as implementing project results in sustainable financing and use. The aim is to introduce older people to the digital world, improving their confidence in dealing with new media while enjoying using the web platform counteracting social isolation. For formal carers the goal is to have a support in everyday care and facilitation of tasks, as no additional effort should be required. For informal carers, the goal is to facilitate their tasks, easily handling the web platform and get support in everyday care. However, these goals will be reviewed and further refined during the implementation phase to ensure they are fully aligned with the needs and feedback from all stakeholders.

1.4.2. SUSTAINABILITY - FUTURE CONSIDERATION

When implementing new solutions, it is essential to look beyond the current benefits and implications and also think about their long-term relevance.

In Germany, the usefulness of the solution beyond the project is seen for seniors living in their home, as it can activate them through exercises while promoting cognitive performance through brain games. Technical issues, but also fear of contact in the context of technology use may pose some challenges in the future. Therefore, the development of a sustainable solution that can also be used after the end of the project is perceived as a critical point. When it comes to implementation in home care services or even in inpatient facilities, training for care staff on how to use the platform is certainly necessary. New employees should also be trained in the use of the web platform. If the senior is in a care service where the system is used, caregiving relatives should be made aware of this and encouraged to use it.

However, this understanding will be reviewed and refined during the implementation phase to better align with real-world needs and insights.

1.4.3. CELEBRATION AND NEXT STEPS AT PILOT SITES

Celebrating and acknowledging participants at the end of the pilot is crucial for recognizing their contributions and fostering a sense of accomplishment.

Each piloting partner is going to outline the next steps following the conclusion of the pilot and will organize an event to mark the end of the pilot phase.

During the implementation phase, discussion will start with the digitalization team to explore potential integration of the system into the existing care documentation framework, and these discussions will continue in the incoming stages. After the testing phase concludes, a closing event will be organized, determining whether a specific closing event for seniors and associated institutions will be arranged. Most likely, smaller, individualized events will take place within each facility, providing a personalized thank-you to participants.



1.4.4. SUSTAINABILITY - CREATION OF A VALUE

PROCAREFUL hybrid model is designed to prevent or slow down cognitive and physical decline and reduce social isolation. By promoting the development and maintenance of healthy habits, the model aims to enhance people's well-being, sustaining their autonomy and independence.

For more information, see Chapter 1.4.4. of Deliverable 1.4.1.

PLACE, DATE

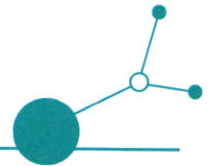
Stuttgart, 13.01.2025

Project partner

WIBW

Signature

D 1.4.1. ACTION PLAN FOR PROCAREFUL MODEL IMPLEMENTATION - ITALY





PROCAREFUL ACTION PLAN

1.1. INTRODUCTION

Understanding of the real needs of a specific category of people in a specific territory is the basis for any project action plan. In order to achieve that, PROCAREFUL project starts with a pre-implementation assessment and co-design phase.

1.1.1. PRE-IMPLEMENTATION ASSESSMENT

As part of PROCAREFUL project pre-implementation needs analysis is going to be carried out in the first project period and for quality reasons revisited one more time in the third period of the project.

Following groups are being assessed as ground for model development and testing:

- **Adults (persons 55+)** and older people in need of care, that is provided by informal carers and/or professionals working in the care field, with special attention to those living alone at home or feeling lonely.

Thirty people will be recruited to participate to the Italian pilot of PROCAREFUL project. Participants will be mainly from Silea's Municipality. In 2023, the Municipality of Silea recorded 4,218 people aged 55 and older. However, ISRAA provides home care services to people from 10 municipalities in Treviso province. We estimate that about 250 potential targets could benefit from hybrid home care intervention. The overall shared feeling among seniors is that they suffer from loneliness due to generational gaps and social distance, as well as a lack of social activities. Their children, on average, live far from their parent's home, but visit them periodically. They mainly have low levels of education and resides in either rural or urban areas.

- **Professionals working in a home care environment.**

In the Italian pilot site, four professionals (one social worker, two psychologists and one anthropologist) will be involved in PROCAREFUL. However, ISRAA has 60 professionals that work in home care services who are mainly social workers and health care assistances. Depending on people's needs, also physiotherapists and psychologists can be involved. Professionals have experience in the field of cognitive and physical decline prevention and social inclusion. Especially for secondary prevention, they aim at favoring ageing in place, encouraging people to participate to different social events. Events are aimed at promoting social inclusion, to counteract loneliness, but also to raise awareness about positive lifestyles, and the importance of physical activity, healthy diet, etc.

- **Informal carers** of older people who provide care to those who need it within the context of an existing relationship, such as a family member, a friend or a neighbor; informal care is care, usually unpaid, provided outside of the professional or formal framework.

We estimate that at least five informal caregivers out of 30 participants aged 55 and above will participate in the project.

ISRAA already works with informal carers. In particular, ISRAA's hub specialized on dementia (C.S.D. - Centro specialistico demenze) supports caregivers of people with cognitive decline, providing them with psychological support, information about the disease and guidelines on how to take care of the person in need. Caregivers are often afraid of developing dementia; therefore, the service also provides suggestions about how to prevent decline.



Café Alzheimer is also organized monthly. It targets informal caregivers, citizens and professionals working in the field to provide information about different topics related to dementia. Municipalities are in charge of organizing the event, in collaboration with ISRAA.

Veneto region provides an economic contribution for caregivers to support them in the care process. Care responsibilities of families, especially children's duties and obligations, are legally recognized. However, despite national funds for caregivers and fragmented policies and initiatives across regions, public support is not adequate.

Informal carers are often the spouse or children of the person in need. However, spouses, due to age or their own health problems, may be unable to provide adequate assistance, particularly with tasks like showering or personal care. Consequently, they seek support to ensure their loved one is safe and well-cared for. While public home care services are often requested, they may not always meet the needs, leading families to hire private assistants to fill the gap.

In Silea's Municipality we will define the exact number of informal caregivers after consulting all the recruited seniors. We plan to only enroll those informal caregivers who directly manifest interest in participation or those who the participants will directly indicate as their informal caregivers. Therefore, we will be open to welcome a number of informal caregivers during the recruiting period.

1.1.2. CO-DESIGN

Using co-design while developing new model is crucial for several reasons and in the Italian pilot site we are planning to connect to a local organization that provides social activities for seniors. On average, participants appreciated being involved in the ideation phase because they felt heard and that their needs are considered.

Silea's Municipality has two main social organizations: "Polaris" and "Al Passo", we will connect with at least one of them to organize a co-design session along with some of their frequenters. During the process, our plan is to keep in mind that many people over 55 might report low levels of digital skills and fear of approaching new tools and care methods. Also, there are not many services offered for prevention. Formal carers reported primarily intervening when there are manifest problems

1.2. PREPARATORY PHASE

The preparatory phase begins in the third project period and aims to prepare all partners for implementing the PROCAREFUL hybrid model. To achieve this, the following areas will be addressed.

1.2.1. TECHNICAL DIMENSION: INFRASTRUCTURE AND RELIABILITY

INFRASTRUCTURE: Understanding and preparing the infrastructure before implementing a technical solution is crucial for improving user experience, ensuring security, facilitating smooth implementation, mitigating risks, and aligning with strategic goals.

In the pilot, we will include only formal carers, informal carers, and older adults who have a minimum of basic digital skills and are already using digital devices in their everyday lives. ISRAA will consider the possibility to lend a mobile or tablet device to a participant in need only if an emergency to it related will occur. On the other hand, we will not involve participants with no digital literacy or those who show any resistance towards technology. Hence, regular and constant internet connection will be required in order to participate to the project. This specific position about the approach towards technology is not light on ISRAA's heart but it is necessary to achieve the Pilot's success.



RELIABILITY TEST: Conducting a reliability test or pre-test before implementing new technologies in a home care environment is a crucial step to ensure the smooth running of the implementation and earn the trust of the end-users.

In the Italian pilot site, the platform in English will be tested by ISRAA employees and a few older people involved in former projects who are unfamiliar with PROCAREFUL. This ensures unbiased feedback. Regarding testing in our national language, we plan to invite seniors who have been involved in previous projects. This approach guarantees that we receive feedback from individuals experienced with similar initiatives.

1.2.2. ETHICAL & LEGAL DIMENSION

The legal and ethical dimension refers to elements, principles, behaviors, and considerations that relate to both legal requirements and ethical standards. This category encompasses aspects related to ensuring that actions and decisions align with the law, such as enabling safety, security, privacy, and morally acceptable conduct.

<p>Ethics committee involvement</p>	<p>The ethical aspect is going to be analyzed through specific meetings between team members and experts supporting ISRAA on ethical and privacy issues.</p> <p>Due to the aims of PROCAREFUL project, it is not mandatory and required to apply to the Ethics Committee</p>
-------------------------------------	--

1.2.3. RECRUITMENT

For successful pilot implementation, it is important to engage the right people, understand their situation, and give them tools that can enable them to carry out the intervention well.

Seniors:

Recruitment of participants aged 55+ will be carried out in two stages: first, in period three to reach as close to the pilot target as possible and again in period four to mitigate the possible drop-out and for partners to have the possibility to include the interested end users also later in the process.

Informal carers

In Italy, informal carers recruitment is closely connected to the recruitment of people aged 55 and above and it will take place in September and October 2024. Main recruiting channels for seniors and consequently for informal carers:

- Social services of the Municipality of Silea (personal contact)
- Beneficiaries of ISRAA home care services (personal contact)
- Interested citizens (advertisements, social medias)

Finally, interested family members will be involved during pilot activities. Although we can hypothesize that caregivers who are busy and of working age might not have time to join the pilot implementation, especially the training, we are confident in relying on participants aged 55+ for the individualization of their potential informal caregivers.

Formal carers

We are planning to recruit at least three formal carers who will be involved in the pilot. Formal carers will be recruited by the end of July 2024 (to join the online training) or by the end of August 2024 (to join the



local training). To reach the target of 6 to 10 care workers for train-the-trainers' activities, we plan to recruit participants by the end of August 2024.

Formal carers are direct employees of ISRAA or Silea's Municipality (our associated partner). We plan to inform the coordinator of home care services about the training and invite formal carers to join. Due to time constraints, the risk is that participants could not join the entire training. Moreover, not all formal carers who will be trained will also be involved in the pilot activities. If the training will be too project-specific, the risk is that they will be specifically trained on a platform that they will not use. This will expose to the risk of drop out.

1.2.4. ORGANIZATIONAL DIMENSION

Involving all important stakeholders at every stage of the process—from needs assessment to co-design, preparation, implementation, and assessment—is essential for creating effective, user-centered, and sustainable solutions in the home care environment.

KEY STAKEHOLDERS

For the Italian pilot site, it will be essential to identify key stakeholders specific to local context, as they are crucial for the successful implementation of the model. We will develop a list of project members and stakeholders that will facilitate coordinated communication and active involvement throughout the pilot.

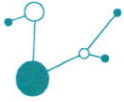
Introducing new technology in a home care facility requires collaboration across various levels to ensure successful implementation and adoption. At each level, we will involve figures like ISRAA's Director, who plays a crucial role in setting strategic goals and providing overall leadership; coordinators of home care services, who are responsible for identifying the care workers who will be involved in the concrete service delivery; formal carers (social workers, psychologists), who will be involved during pilot implementation to be the main contact points for the seniors and informal carers. Last but not least: care workers, who are responsible of care provision and operate at the person's home to deliver care and support according to the developed care plan. All the mentioned figures can support the recruiting, and, during the intervention period, some could offer informal support to the seniors.

When it comes to external stakeholders, we are planning to connect with the Major of the municipality, who is the decision-making figure and aligns community goals with technological advancements in home care; social workers of the municipality, who have direct knowledge of seniors' needs and community dynamics; responsible of voluntary association, who coordinate volunteers and organize social activities and events. These figures will be involved in recruiting participants who could benefit from the service and sharing plans about social activities organized by the association, which participants could join. Another figure whom we are planning to connect with is the Group Medicine Coordinator of Silea's Municipality. His contribution in reporting population's assistance needs will be relevant for the recruiting phase as well as the dissemination of the model.

Social workers Coordinator is a person responsible of the managerial and bureaucratic aspects of home care service and related to the work of the social workers employed in it. This figure oversees tasks of a mainly formal nature pertaining to the service delivery plans stipulated with the benefiting municipalities. It is also in charge of internal administrative procedures connected to service organization. Along with Coordinator of social service of the municipality, who oversees social service programs and provides insights into community needs and priorities, they are going to be ISRAA's main collaborators in the local Silea's context.

CURRENT WORKFLOW: Understanding the current situation and workflow of both formal and informal carers

Social workers of the municipality provide support to people of all ages who require assistance. Concerning older adults, social services oversee various interventions, such as the provision of hot meals at home, tele-assistance, financial aids, transportation services, and home care services. The municipality is responsible for identifying people who may benefit from home care services, facilitating access to these services. A social worker conducts interviews and home visits to assess the person's needs and determine the appropriate interventions to be implemented at home, in collaboration with the person and the family. Temporary activation of home care services is also possible. Once the service is activated, care providers



(e.g., ISRAA) deliver it. Currently the service is designed to help the person in daily activities by relieving the family or helping people living alone (e.g. room hygiene, laundry service, meal preparation, personal hygiene, transport, etc.). Care workers are in charge of these tasks, although additional professionals, such as physiotherapists, psychologists, or speech therapists may be involved based on the individualised intervention plan.

Informal carers take care of their family members, supporting them in different kind of activities that range from the management of financial issues to personal care, depending on the needs of the person. Formal carers are often responsible for finding information regarding care services for the family member who needs assistance. From the co-design activities, it emerged that it is not always easy for them to find out about existing care services. The social worker of the municipality is in charge of providing information about existing services. If there is the possibility of benefiting of a service, there are several bureaucratic steps that the caregiver often manages.

With PROCAREFUL project we aim to extend the type of intervention provided, transitioning from reactive to proactive care, with a focus on preventing potential declines, adopting a holistic approach. This expansion aims to encompass not only those **currently receiving home care services, but also other citizens in need of assistance**. Some individuals may not meet the criteria for traditional home care services, which typically require very low income and resources, but still require support. Formal carers will be also supported by the online platform to monitor people performance and get in touch with users. This tool could provide a better overview of a person' conditions and facilitate communication exchanges, but it is a digital device that should be integrated into the workflow, slightly modifying their working habits. PROCAREFUL project could lead informal carers to feel that their family members are not left alone, and care is provided with a preventive and holistic approach. Being actively involved in monitoring and supporting the individual's progress could foster a sense of reassurance and confidence in the care being provided.

We expect to introduce a new type of service that will sustainably shift care paradigms towards a proactive and preventive approach. We expect to holistically address individual well-being, encompassing not only personal care, but also the dimensions of physical, cognitive, and social health. The overall goal is to promote individual empowerment in managing one's own health. Finally, our objective is also to demonstrate the feasibility of effectively overseeing a greater number of people with the same number of human resources, with the support of technology.

1.2.5. NON-TECHNICAL ASPECT OF THE MODEL

PROCAREFUL hybrid model consists of two parts: of technical solution and non-technical solution - part of the model, where we want to improve personal segment of care, especially in the field of prevention. To change the way care is provided and work more preventively, a shift in mindset will be required. This shift will move from service-oriented care to personal, empathetic care and from reactive care to proactive, preventive care. This mindset change will need to happen at all levels, from the developers (all of us) to the people we will work with.

ISRAA will focus on the non-technical aspects of the PROCAREFUL hybrid model by addressing prevention, habit development, aging, and illness. To change the way care is provided and work more preventively, a shift in mindset will be required. This shift will move from service-oriented care to personal, empathetic care and from reactive care to proactive, preventive care. This mindset change will need to happen at all levels, from the developers (all of us) to the people we will work with.

According to us, healthcare prevention is the attitude toward health and well-being that involves adopting actions and habits that have a positive impact on psycho-physical health and emotional well-being, as well as mitigating the effects of existing pathologies to prevent their exacerbation and to coexist with them in the best way possible. In a local context of healthcare prevention we will foresee a holistic approach and wellbeing that should be understood as the maintenance of a positive balance between the physical, psychological and social dimensions, rather than the absence of disease. This is why we are planning to deliver a basic level of health literacy and awareness. In addition, crucial to it is the existence of public policies that enable and sustain the adoption of such behaviours at the individual and community levels,



both through the design of appropriate services and through actions of information, sensibilization and awareness-raising on the part of citizens. Through monthly group meetings, we will focus on subjects as individual loneliness, holistic approach to wellbeing and communication techniques.

1.3. IMPLEMENTATION PHASE

1.3.1. IMPLEMENTATION FRAMEWORK

For the project implementation framework and timeline, see chapter 1.3.1 of Deliverable 1.4.1

Implementation framework summary for Italy:

The pilot implementation in Silea will run from November to May and will be conducted in collaboration with local care providers: municipality's social workers, group medicine coordinator and representatives of social associations. By October 2024, we plan to accomplish the first round of recruitment where we aim to onboard over 15 seniors and their caregivers. The first round of caregiver and senior training will follow in October, equipping them to use the platform effectively. After an initial assessment, at least half of the seniors will begin using the platform by the end of October on their personal devices for performing assigned exercises and tasks. From November to January, continuous recruiting (to reach a number of 30 participants), training and support will be provided as well as monthly group meeting will be organized. A second recruitment and training round will take place in January if additional participants needed to maintain the target group of 30 seniors. Continuous training will continue as needed, and culminating in the final assessment and evaluation in May, with a celebration outdoors event planned for June to recognize the efforts of all participants.

1.3.2. COMMUNICATION

In Italy, we will be using a direct in-person communication as a key to convey all essential information about the pilot site implementation. Pilot information will be distributed during training sessions and serve as a quick-reference guide throughout the pilot. Training will first be conducted with caregivers to ensure they are equipped to support seniors effectively, followed by senior training sessions where we will introduce the project, explain the upcoming steps, and share contact details. After training, seniors will undergo an assessment and be registered in the application. We assume that a person to talk to in case of any doubts is the best way to build trust and connect on a deeper level with participants' needs or fears. For this reason, the involved professionals are going to be asked to give a wide availability for an active listening. Moreover, we are planning to create a WhatsApp group with all the participants in order to facilitate common communication and share local project-relevant events.

1.3.3. MONITORING OF THE IMPLEMENTATION AND TROUBLESHOOTING

Regular monitoring during the introduction of a new digital solution will involve several key steps. Each step will be designed to ensure the successful testing and adoption of the technology while addressing challenges as they arise.

For more information on the monitoring and troubleshooting, see chapter 1.3.3 of Deliverable 1.4.1.



1.3.4. TRAINING AND CONTINUOUS EDUCATION

The training is going to be delivered in two phases across all pilot sites while specifically in Italy we are keen to keep a very open approach to adapting to local needs. For more information on training and continuous monitoring, see Chapter 1.3.4 of Deliverable 1.4.1.

1.3.5. EVALUATION FRAMEWORK

The impact evaluation will assess the changes generated in the governance and organizational model of care provision. The evaluation framework is consistent across the 5 pilot sites. For more information, see Chapter 1.3.5 of Deliverable 1.4.1.

1.4. POST-IMPLEMENTATION PHASE

1.4.1. SUSTAINABILITY - GOAL SETTING

Concrete, realistic, and shared goals are motivators and provide a clear guideline. They should be regularly reviewed and adjusted as needed throughout the process.

In Italy, the pilot implementation currently aims to engage 30 participants, deepen insights into the hybrid care model, and gain a clearer understanding of the needs of older adults, informal carers, and professional caregivers. The objectives for older adults include encouraging self-management of their health, fostering positive lifestyle changes, and enabling them to continue aging at home with adequate care. For informal carers, the focus is on increasing their openness to new care strategies, helping them adopt beneficial practices, and raising awareness around preventive measures. Formal caregivers will work to integrate the platform and its tools into their daily routines, while home care providers aim to promote awareness of hybrid models and facilitate ongoing discussions about supporting home care through technology. These goals will be revisited and adjusted throughout the implementation phase to ensure they meet the needs and feedback of all stakeholders involved.

1.4.2. SUSTAINABILITY - FUTURE CONSIDERATION

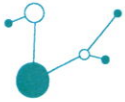
When implementing new solutions, it is essential to look beyond the current benefits and implications and also think about their long-term relevance.

In Italy, we believe that beyond this project, the solution could offer substantial benefits in multiple areas. It could improve companionship by linking older adults with volunteers, fostering social engagement and emotional support. Within personal assistance services, the platform might be integrated into caregivers' daily activities, enhancing communication, health monitoring, and enabling focused preventive care. Additionally, with minimum technical implementation, the platform could collaborate with existing digital tools like emergency response systems (e.g., help buttons or security features for seniors), where the preventive care approach could complement these systems to strengthen elderly care and security. Nonetheless, this understanding will be reassessed and refined during the implementation phase to ensure alignment with practical needs and real-world insights.

1.4.3. CELEBRATION AND NEXT STEPS AT PILOT SITES

Celebrating and acknowledging participants at the end of the pilot is essential for recognizing their contributions and fostering a sense of accomplishment. Each piloting partner is going to outline the next steps following the conclusion of the pilot and will organize an event to mark the end of the pilot phase.

In Italy, after the testing period, we plan to celebrate with an outdoor event before moving to the next project's phase. We aim to use the event as an advantage to present the pilot's results and share the



outcomes with the local community, ensuring that the success and lessons learned are widely recognized. On a technical perspective, we plan to make improvements to the platform based on the feedback and lessons learned during the pilot. After the project ends, we hope stakeholders will see the platform's practical benefits, encouraging its continued use and expansion, particularly given the need for a stronger focus on preventive care. The positive experiences of seniors and the new habits they've formed through the platform are expected to foster lasting interest and support its wider adoption.

1.4.4. SUSTAINABILITY - CREATION OF A VALUE

PROCAREFUL hybrid model is designed to prevent or slow down cognitive and physical decline and reduce social isolation. By promoting the development and maintenance of healthy habits, the model aims to enhance people's well-being, sustaining their autonomy and independence.

For more information, see Chapter 1.4.4. of Deliverable 1.4.1.

PLACE, DATE

Treviso, 16/01/25

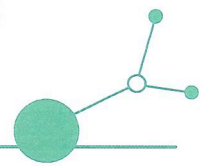
Project partner

ISRAA

Signature



D 1.4.1. ACTION PLAN FOR PROCAREFUL MODEL IMPLEMENTATION - POLAND





PROCAREFUL ACTION PLAN

1.1. INTRODUCTION

Understanding of the situation is basis for any project action plan. In order to achieve that, PROCAREFUL project starts with a pre-implementation assessment and co-design phase.

1.1.1. PRE-IMPLEMENTATION ASSESSMENT

Following groups are being assessed as ground for model development and testing:

- **Adults (persons 55+)** and older people in need of care, that is provided by informal carers and/or professionals working in the care field. Especially older people with the appearance of the first signs of cognitive or physical decline, with special attention to those living alone at home, being lonely or living alone for longer periods of time (e.g. during extended absences of other household members/carers).

In Poland, approximately 12 million people are over 55, representing about 32% of the national population of 37.8 million. Locally, the pilot will take place in Lublin City with support from the Complex of Support Centers (ZOW), part of Lublin Municipality. The senior population in Lublin has steadily increased over recent years, from 77,008 in 2016 to 87,569 in 2023, while the city's total population has declined slightly. ZOW provides support for over 2,000 seniors across 20 senior clubs, six day care centers, four home care points, and specialized centers for those with disabilities. Poland's aging population is marked by feminization, singularization, and increased numbers of individuals over 80. The proportion of those 65+ grew to 7.3 million in 2022, reflecting an aging trend that presents future challenges for healthcare and social services. With a low birth rate and an increasing old-age index, Poland's demographic landscape is shifting, with forecasts suggesting it may become one of the oldest populations in the EU by 2050. Self-assessed health quality declines significantly with age, with only 15.7% of those 80+ rating their health as good or very good. More than half of people over 60 report no activity limitations, yet the prevalence of limitations rises with income and educational inequalities. Many older Poles face a considerable burden from chronic diseases and functional limitations, especially cardiovascular disease, cancer, and neurodegenerative conditions like Alzheimer's, estimated to affect up to 500,000 people. Limitations in daily living impact around 2.5 million older adults, with family members often providing the needed support. Poland's healthcare system faces growing challenges in addressing these needs, especially as the number of elderly with functional impairments and dementia increases.

- **Professionals working in a home care environment.**

In Poland, private home care for individuals requiring daily support lacks regulatory oversight, leaving limited data on service providers, care recipients, or unmet needs. Within the Polish pilot, the Complex of Support Centers (ZOW) in Lublin, a municipal public unit, will participate, with 105 qualified employees, including social workers, therapists, nurses, and physiotherapists. Demand for home care across the EU is vast, but in Poland, high costs and the absence of private insurance or public subsidies make access difficult. Poland also has the OECD's lowest public spending on long-term care relative to GDP, resulting in most Polish carers seeking work abroad. ZOW in Lublin operates 20 senior clubs, 6 daycare centres, and additional support services, collectively aiding over 2,000 seniors in the area. Long-term care for seniors typically includes physical and therapeutic activities, meals, and social engagement. However, the onboarding process for social services is often complex, involving numerous applications and information exchanges with the Municipal Family Assistance Center. Once enrolled, seniors receive ongoing support from specialists, but initial



access is challenging. In contrast, joining a senior club or similar program requires only a single application, often processed within days. Contact limitations further hinder the Centers' ability to communicate with beneficiaries, relying on time-consuming phone calls in the absence of centralized communication tools. Seniors who meet specific criteria can receive a telecare wristband, connecting them with a Telecare Center for support.

- **Informal carers** of older people who provide care to those who need it within the context of an existing relationship, such as a family member, a friend or a neighbour; informal care is care, usually unpaid, provided outside of the professional or formal framework.

Poland lacks formal records of informal caregivers, but estimates suggest that between 80% and 93% of elderly people receive informal care, mainly from family members. Based on data from the EUROFAMCARE survey (2003-2004), Poland likely has around 2 million informal caregivers, the highest proportion in the EU for people not using formal care services. Informal care, typically provided by family, is becoming harder to sustain due to societal shifts that limit family capacity for elderly care. About 2% of those over 65 cannot perform basic daily tasks independently, while over 10% need substantial help, often from relatives who face challenges balancing work and caregiving. The PolSenior2 survey confirmed family as the main source of support (91%), followed by neighbors, friends, and finally, Social Security caregivers (9.9% and 5.7%, respectively). The demand for informal care is likely to outstrip supply in coming years, pointing to an increased need for professional caregiving services. Informal caregivers face difficulties balancing caregiving with other responsibilities, and Poland's traditional view of family as primary caregivers strains those providing long-term support. Many caregivers endure more than two years of caregiving, with one-third caregiving for over five years, which can lead to "carer burnout" and poor physical and mental health. Additionally, a lack of formal legal recognition for informal caregivers limits their access to support. As caregiving duration increases, informal caregivers report worsening health, heightened stress, and mental health challenges, all of which may reduce their ability to provide adequate support and further highlight the need for accessible, professional care options.

1.1.2. CO-DESIGN

In Poland the PROCAREFUL model co-design sessions yielded key recommendations across formal carers, informal carers, and seniors, emphasizing contextual adaptation to enhance caregiving support and accessibility. Formal carers suggested an "Audit" module for identifying user needs, along with integrating diverse entry points like healthcare providers and media into the business model. They emphasized the need for platform integration within work hours and systems, adaptable training plans, and a human component to retain empathy in caregiving. For informal carers, essential modules include resources for self-care, respite programs, and a comprehensive support database to unify currently dispersed information. Challenges include improving information access, establishing an Admin role to manage event data, and enabling direct communication with formal caregivers through the platform. Informal carers also advocated for a virtual space for sharing advice and experiences, recommending verified identities to ensure reliability, as well as mobile accessibility to enhance usability. Seniors prioritized holistic care solutions covering physical, mental, and social needs, and requested a local initiatives module for age-appropriate programs, emphasizing socialization as the primary motivation for engagement. Implementation should focus on seamless formal carer integration, an information hub for informal carers, and social features for seniors to encourage active participation, addressing each group's distinct needs in a unified platform.



1.2. PREPARATORY PHASE

The preparatory phase begins in the third project period and aims to prepare all partners for implementing the PROCAREFUL hybrid model. To achieve this, the following areas will be addressed, and specific steps will be taken during this phase.

1.2.1. TECHNICAL DIMENSION: INFRASTRUCTURE AND RELIABILITY

INFRASTRUCTURE: Understanding and preparing the infrastructure before implementing a technical solution is crucial for improving user experience, ensuring security, facilitating smooth implementation, mitigating risks, and aligning with strategic goals.

The recruitment of the participants of the pilot of PROCAREFUL hybrid model in Poland is focused on the formal and informal carers as well as seniors who are equipped with computers (formal and informal carers) and smartphones (older people) with access to the internet.

If seniors recruited for the pilot are not equipped with smartphones, they will be provided by OIC Poland Foundation along with the internet access.

RELIABILITY TEST: Conducting a reliability test or pre-test before implementing new technologies in a home care environment is a crucial step to ensure the smooth running of the implementation and earn the trust of the end-users.

The EN platform (admin, formal, and informal carer accounts) will be tested internally by seven employees of the OIC Poland Foundation. The testers will include the OIC Poland management, project manager, GDPR officer, and other specialists and trainers, each assigned either a formal or informal carer account. As we will still be in the recruitment phase, we will not yet have the opportunity to test the application with the targeted end-users over the summer.

1.2.2. ETHICAL & LEGAL DIMENSION

The legal and ethical dimension refers to elements, principles, behaviours, and considerations that relate to both legal requirements and ethical standards. This category encompasses aspects related to ensuring that actions and decisions align with the law, such as enabling safety, security, privacy, and morally acceptable conduct.

Ethics committee involvement	The ethical aspect is going to be analysed through specific meetings between team members and experts supporting OIC Poland Foundation on ethical and privacy issues. Due to the aims of PROCAREFUL project it is not mandatory and required to apply to the Ethics Committee.
------------------------------	---

1.2.3. RECRUITMENT

For successful pilot implementation, it is important to engage the right people, understand their situation, and give them tools that can enable them to carry out the intervention well.

Seniors:



Recruitment of participants will be carried out in two stages: first, in period three to reach as close to the pilot target as possible and again in period four to mitigate the possible drop-out and for partners to have the possibility to include the interested end users also later in the process.

The recruitment process in Poland will begin in July and continue through August 2024, involving both informal and formal carers.

Informal carers

Informal carers will be recruited indirectly through formal carers, and potential challenges are anticipated to be discussed during a planned meeting with the formal carers.

Formal carers

Formal carers, on the other hand, will be recruited through a collaboration with ZOW. The initial recruitment message and documentation have been sent out by ZOW's management to their employees, and the process will remain open until the end of August, with a follow-up meeting scheduled for August 27th. Anticipated challenges for the formal carers include concerns over the length of the pilot testing, which will span a few months, as well as the expected workload associated with their participation. Currently, these factors pose the primary barrier to formal carer registration in the pilot, underscoring the importance of the upcoming meeting, where interested carers can ask questions and receive clarification.

1.2.4. ORGANIZATIONAL DIMENSION

Involving all important stakeholders at every stage of the process—from needs assessment to co-design, preparation, implementation, and assessment—is essential for creating effective, user-centered, and sustainable solutions in the home care environment. This inclusive approach ensures that the solutions are practical, relevant, and supported by all parties involved, leading to better outcomes and higher satisfaction for all stakeholders.

KEY STAKEHOLDERS

In Polish pilot site to successfully introduce new technology within the home care facility, involvement from various individuals and groups is essential. Within the Complex of Support Centers (Zespół Ośrodków Wsparcia, ZOW), the management board is crucial as the primary decision-makers, responsible for securing approvals, allocating resources, and setting strategic priorities for implementation. Psychologists, social workers, therapists, and physiotherapists are also essential as they interact directly with seniors and provide feedback to ensure the technology aligns with care needs and practical requirements. Within the home care environment and broader community, the municipality of Lublin City and the Seniors Council of Lublin City are key partners, helping to align the initiative with local social programs and advocate for senior-friendly solutions. Opinion leaders include the ZOW management board, which influences staff and community acceptance, and the Social Affairs Department in Lublin City, which supports social services and can impact funding and acceptance of technological advancements in home care. Additionally, senior clubs, families of seniors, and other ZOW employees should be informed about the change to support its use, ensure continuity of care, and foster a collaborative environment for successful technology adoption.

CURRENT WORKFLOW: Understanding the current situation and workflow of both formal and informal carers

The workflow for formal carers in Poland begins with the notification of the need for support, where a senior or their family submits an application form to the social welfare office. A social worker then conducts a home visit to assess the senior's condition, diagnose their needs, and determine eligibility for services. Based on this assessment, the formal carer creates a personalized support plan that includes specific care activities, medical services, and social engagement options tailored to the senior's needs. The social worker coordinates the implementation of this plan, organizing home care services, medical visits, and referrals to other professionals or volunteer groups. Regular visits are made to monitor the senior's condition, ensure



that services are being provided effectively, and make adjustments to the support plan as necessary. Formal carers also provide direct care, assisting with daily activities such as cooking, shopping, hygiene, and medication management. If needed, they coordinate medical and rehabilitation services, ensuring the senior receives appropriate nursing care or physical therapy. Additionally, the formal carer arranges psychological support to address emotional well-being and reduce isolation. The informal carer typically maintains phone contact with the formal carer to discuss the senior's condition, progress, and any emerging needs.

1.2.5. NON-TECHNICAL ASPECT OF THE MODEL

PROCAREFUL hybrid model consists of two parts: of technical solution and non-technical solution - part of the model, where we want to improve personal segment of care, especially in the field of prevention. To change the way care is provided and work more preventively, a shift in mindset will be required. This shift will move from service-oriented care to personal, empathetic care and from reactive care to proactive, preventive care. This mindset change will need to happen at all levels, from the developers (all of us) to the people we will work with.

In Poland healthcare prevention refers to proactive measures and strategies aimed at preventing the onset, progression, or recurrence of diseases, injuries, and other health conditions. The goal of healthcare prevention is to maintain and improve health by reducing risk factors, promoting healthy behaviors, and implementing early interventions to avoid or minimize potential health issues.

1.3. IMPLEMENTATION PHASE

1.3.1. IMPLEMENTATION FRAMEWORK

For the project implementation framework and timeline, see chapter 1.3.1 of Deliverable 1.4.1

Implementation framework summary for Poland:

Preparation for the local pilot site implementation will begin by establishing relevant collaborations with local home care providers, such as partnering with the Complex of Support Centers, a public unit of the municipality, and other key stakeholders. Our goal is to involve around 30 seniors, along with both formal and informal caregivers, from the city of Lublin and Lublin Poviát in the testing process. OIC POLAND has maintained ongoing communication with the Complex of Support Centers since organizing co-design sessions with formal and informal caregivers and seniors.

The first phase of recruitment will be conducted in collaboration with the Complex of Support Centers. The recruitment document and message will be distributed to employees by the management of ZOW. Recruitment will remain open until the end of August, with a scheduled meeting on August 27th for formal caregivers and management staff. If there is insufficient interest from formal caregivers in committing to long-term participation in the pilot, OIC POLAND will reach out to other local entities involved in senior home care to recruit additional formal caregivers. The pilot invitations will also be shared through other channels. An open recruitment announcement will be made on the OIC POLAND website and social media, allowing other senior care professionals to apply if they are interested in participating in the program.

The primary focus of recruitment is to engage formal caregivers first, who can then help to involve informal caregivers and seniors. OIC POLAND will also act as both the administrative and institutional admin for the pilot testing, streamlining processes and reducing bureaucratic obstacles related to adding external institutions to the program. OIC POLAND will work directly with recruited caregivers to create their accounts and support their participation. Recruitment efforts will continue through September.

Once the formal caregivers are recruited, it will be essential to sign agreements with them and provide in-depth training on the project and the platform. Several training sessions will be held in October, covering



topics such as assessing seniors' conditions, account management, personalizing activities and care plans, monitoring, feedback reporting, and completing project documentation. Once the formal caregivers are comfortable with the platform and the app, an assessment of seniors is planned for late October to early November. Seniors are expected to be registered on the app by November.

OIC POLAND will tailor the format of the training—whether online, in-person, and the specific days and times—to accommodate the needs and availability of the recruited formal caregivers and seniors, ensuring optimal conditions for successful pilot implementation.

1.3.2. COMMUNICATION

Effective communication with relevant stakeholders is essential, as collaboration with external home care providers is critical for us to successfully implement the pilot testing activities, hybrid care model, and other key activities in the project. While the pilot ID card serves as a useful tool, it alone is insufficient for establishing meaningful communication. OIC POLAND will prioritize engaging directly with the management teams of key local stakeholders, presenting the project and its activities, and identifying shared interests and motivations to build a solid foundation for collaboration.

1.3.3. MONITORING OF THE IMPLEMENTATION AND TROUBLESHOOTING

Regular monitoring during the introduction of a new digital solution will involve several key steps. Each step will be designed to ensure the successful testing and adoption of the technology while addressing challenges as they arise.

For more information on the monitoring and troubleshooting, see chapter 1.3.3 of Deliverable 1.4.1.

1.3.4. TRAINING AND CONTINUOUS EDUCATION

The training is going to be delivered in two phases across all pilot sites. For more information on training and continuous monitoring, see Chapter 1.3.4 of Deliverable 1.4.1.

1.3.5. EVALUATION FRAMEWORK

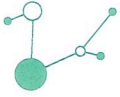
The impact evaluation will assess the changes generated in the governance and organizational model of care provision. The evaluation framework is consistent across the 5 pilot sites. For more information, see Chapter 1.3.5 of Deliverable 1.4.1.

1.4. POST-IMPLEMENTATION PHASE

1.4.1. SUSTAINABILITY - GOAL SETTING

Concrete, realistic, and shared goals are motivators and provide a clear guideline. They should be regularly reviewed and adjusted as needed throughout the process.

The goal, as we currently see for OIC organization, is to master platform management so we can effectively train others on how to use it and market the hybrid care model to senior home service providers. For older people, the goal is to understand and use the platform effectively, find its functionalities useful in daily life, and be motivated to engage in proactive activities for better physical and mental fitness. Informal carers need to understand the platform, learn how to use it, and support the proactive care of their family seniors. Formal carers aim to learn how to incorporate the platform into their professional work, promote



proactive health, encourage healthy habits among seniors, and embrace technology in senior care. For home care providers, the goals are to embrace the use of technology in senior care, shift toward preventive measures, and integrate the platform into their daily operations.

1.4.2. SUSTAINABILITY - FUTURE CONSIDERATION

When implementing new solutions, it is essential to look beyond the current benefits and implications and also think about their long-term relevance.

At this preparatory phase in the Polish pilot site, we predict that the solution could be useful beyond the project scope in several ways, such as supporting remote daily care provided by private caregivers (private entities) and assisting daily care delivered by family doctors or family members. Potential risks and challenges that could arise include financing the solution, particularly the costs associated with its modification and adaptation to changing circumstances, and issues surrounding personal data processing. To address these, strategies such as securing long-term funding, ensuring robust data protection measures, and planning for continuous updates and adaptation to regulatory changes will be essential. The solution is expected to be accepted by different target groups; however, regular training sessions will be required to ensure smooth integration. Additionally, awareness-raising campaigns and ongoing cooperation will be necessary to ensure broad engagement and successful adoption across all user groups.

1.4.3. CELEBRATION AND NEXT STEPS AT PILOT SITES

Celebrating and acknowledging participants at the end of the pilot is crucial for recognizing their contributions and fostering a sense of accomplishment.

Each piloting partner is going to outline the next steps following the conclusion of the pilot and will organize an event to mark the end of the pilot phase.

In Poland to ensure the long-term sustainability of the platform and hybrid care model, it is essential to customize the solution to meet the specific needs of local end-users. This will allow them to recognize the platform's practical value in their daily work with seniors and their families. Feedback provided during pilot testing should be carefully addressed by partners to fine-tune any critical aspects for successful adoption. Additionally, ongoing awareness-raising efforts about the project, its results, and the hybrid care model should extend to a broader range of stakeholders beyond those directly involved in the pilots, as they represent only a small portion of the entire home care sector.

A final event to celebrate the pilot, share experiences, and discuss lessons learned could be organized following the conclusion of the testing phase.

1.4.4. SUSTAINABILITY - CREATION OF A VALUE

PROCAREFUL hybrid model is designed to prevent or slow down cognitive and physical decline and reduce social isolation. By promoting the development and maintenance of healthy habits, the model aims to enhance people's well-being, sustaining their autonomy and independence.

For more information, see Chapter 1.4.4. of Deliverable 1.4.1.

PLACE, DATE *Lublin, 20.01.2025r*

Project partner

Signature

OIC POLAND
Fundacja Akademii WSEI
20-213 Lublin, ul. Gospodarcza 26
NIP 9462744604

Prezes Zarządu
OIC POLAND
Fundacja Akademii WSEI

dr Ewelina Iwonek

D 1.4.1. ACTION PLAN FOR PROCAREFUL MODEL IMPLEMENTATION - SLOVENIA





PROCAREFUL ACTION PLAN

1.1. INTRODUCTION

Understanding of the situation is basis for any project action plan. In order to achieve that, PROCAREFUL project starts with a pre-implementation assessment and co-design phase.

1.1.1. PRE-IMPLEMENTATION ASSESSMENT

Following groups are being assessed as ground for model development and testing:

- **Adults (persons 55+)** and older people in need of care, that is provided by informal carers and/or professionals working in the care field. Especially older people with the appearance of the first signs of cognitive or physical decline, with special attention to those living alone at home, being lonely or living alone for longer periods of time (e.g. during extended absences of other household members/carers).

The Municipality of Log-Dragomer has 1,355 people aged 55 and older, with at least 150 receiving informal or professional care, and 15-20 people receiving home care services. This group is highly heterogeneous, including both the baby boom generation and older generations with different needs. While 4% require long-term care, 20% are healthy seniors seeking programs for active aging. Many in this population are well-educated and live in suburban areas, either independently or with family. Key needs include material support (e.g., pensions), maintaining physical and mental activity, preventing loneliness, finding meaning in old age, and ensuring care during illness or disability. While Slovenia has a strong third sector providing sports, cultural, and social activities for older people, some still face isolation, especially those in need of care. Informal caregiving remains prevalent, though the risk of caregiver burnout is rising. There's also a challenge in passing on life experiences, as younger generations often possess more knowledge. Additionally, the lack of a long-term care system and reliance on institutional care is a growing concern, exacerbated by urbanization and changing family structures.

- **Professionals working in a home care environment.**

In the Slovenian pilot site, we will collaborate with Zavod Pristan, the largest home care provider in Slovenia, which employs 116 management and coordination staff and 1,119 social carers. We will also work with the smaller provider Junaki na Domu, which employs 2-3 professionals in our municipality. Home care services in Slovenia are organized at the municipal level, with services granted by the municipality to various providers. Long-term care occupations will be divided into nursing care (in care homes) and home care, which will include formal carers and specialized healthcare professionals such as nurses. Most home care will be provided by formal carers, with nurses involved when specific medical tasks are required. Services will include assistance with daily living tasks, domestic help, and maintaining social contacts. However, there is a long-standing shortage of well-trained staff in long-term care, leading to increased workloads, staff burnout, and a declining workforce. Addressing this challenge will require improved working conditions, competitive salaries, technological support, professional development opportunities, and measures to enhance the attractiveness of care professions.

- **Informal carers** of older people who provide care to those who need it within the context of an existing relationship, such as a family member, a friend or a neighbour; informal care is care, usually unpaid, provided outside of the professional or formal framework.



In Slovenia, the informal carers group for the pilot site is expected to include 2 to 4 members, recruited primarily from the municipality's existing support programs for this population. Informal carers often face significant mental and physical strain, with limited professional support, which can lead to burnout, neglect, and abuse. Women make up over two-thirds of carers, and an estimated 48,000 people in Slovenia provide regular personal care outside their households. The municipality has implemented various support activities, including training programs, self-help groups, an "Office for Older People" providing information and professional support, and a newsletter to keep carers informed. Despite these resources, informal carers still face challenges such as a lack of respite care, insufficient knowledge, and limited social support. A more flexible legal and employment framework, along with better training and financial support, is needed to address these issues.

1.1.2. CO-DESIGN

In Slovenia, the co-design process for the pilot site highlighted the importance of collaboration and understanding the needs of all stakeholders. One of the key challenges was recruiting formal caregivers, which required multiple meetings and adjustments, and dealing with personal data forms that led to one participant leaving. Despite these obstacles, it was encouraging that participants were willing to share their personal and often difficult care experiences. The focus group with individuals aged 55 and above, while not currently receiving home care, acknowledged the need for such services but struggled to envision their future needs. They expressed concerns about isolation, despite being active and social, and showed reluctance toward using an app, preferring community-based connections. Informal carers highlighted the need for simple, easy-to-use solutions due to their time constraints. Formal carers also expressed interest in the app, but emphasized that it should be simple, useful, and offer more features than those already available through other applications. This process underscored the necessity of creating solutions that address the diverse and specific needs of all participants while fostering trust and engagement.

1.2. PREPARATORY PHASE

The preparatory phase begins in the third project period and aims to prepare all partners for implementing the PROCAREFUL hybrid model. To achieve this, the following areas will be addressed, and specific steps will be taken during this phase.

1.2.1. TECHNICAL DIMENSION: INFRASTRUCTURE AND RELIABILITY

INFRASTRUCTURE: Understanding and preparing the infrastructure before implementing a technical solution is crucial for improving user experience, ensuring security, facilitating smooth implementation, mitigating risks, and aligning with strategic goals.

In the pilot, we will include only formal carers, informal carers, and older carers who have basic digital skills and have used digital devices before. If a person from any of these three target groups has a smartphone but no internet or sufficient internet plan, the municipality will pay for the internet plan or the change from the previous plan with more internet data. In case that older person doesn't have a smart phone, we will first talk with informal carers if there is a possibility to arrange the technical requirements. We also consider asking the community among civil societies if second-hand phones are available (in Slovenia, it is common to donate or sell old but still working phones). In this case, the municipality will cover the cost of the SIM card and internet plan.

RELIABILITY TEST: Conducting a reliability test or pre-test before implementing new technologies in a home care environment is a crucial step to ensure the smooth running of the implementation and earn the trust of the end-users.



In the Slovenian pilot site, the platform in English will be tested by municipal and IAT employees and a few older people. We are also considering including a formal caregiver who expressed interest in the testing.

1.2.2. ETHICAL & LEGAL DIMENSION

The legal and ethical dimension refers to elements, principles, behaviours, and considerations that relate to both legal requirements and ethical standards. This category encompasses aspects related to ensuring that actions and decisions align with the law, such as enabling safety, security, privacy, and morally acceptable conduct.

Ethical & legal consideration(s)	Handling
Ethics committee involvement	<p>The ethical aspect is going to be analysed through specific meetings between team members and experts supporting [name of partner] on ethical and privacy issues.</p> <p>Due to the aims of PROCAREFUL project it is not mandatory and required to apply to the Ethics Committee. However, in Slovenia, we will submit the documents to the Ethics Committee for review, as it has been recommended that we do so by the Ethics Committee.</p>

1.2.3. RECRUITMENT

For successful pilot implementation, it is important to engage the right people, understand their situation, and give them tools that can enable them to carry out the intervention well.

Seniors

Recruitment of participants will be carried out in two stages: first, in period three to reach as close to the pilot target as possible and again in period four to mitigate the possible drop-out and for partners to have the possibility to include the interested end users also later in the process.

Informal carers

In Slovenia, informal carers will be recruited at the end of August or the beginning of September. We will personally invite them (phone calls, individual meetings), and with some, we will make contact through formal carers and home nursing care. The biggest challenge will probably be trust. We anticipate it will take more time to explain and present the benefits to them if they choose to participate.

Formal carers

We are constantly in touch with formal carers organisations (Junaki na domu, Zavod Pristan). Junaki na domu are very motivated and perhaps would even attend the training in August. The other formal carer organisation (Pristan) will start recruiting with an informational email at the beginning of summer and then more intensively at the end of summer when they start returning from vacations.



1.2.4. ORGANIZATIONAL DIMENSION

Involving all important stakeholders at every stage of the process—from needs assessment to co-design, preparation, implementation, and assessment—is essential for creating effective, user-centered, and sustainable solutions in the home care environment. This inclusive approach ensures that the solutions are practical, relevant, and supported by all parties involved, leading to better outcomes and higher satisfaction for all stakeholders.

KEY STAKEHOLDERS

To successfully introduce new technology in a home care facility in Slovenia, involvement is essential from all levels, including the facility's Director, who approves and oversees strategic initiatives; the Program Manager, responsible for planning and coordinating the technology's implementation; the Formal Caregiver's Coordinator, who supervises daily caregiving and communicates needs and updates between caregivers and management; and the Formal Caregivers, who will directly use the technology with the older adult users. Additionally, input from Informal Caregivers (such as family members) and the Older People who will use the technology is crucial, as their feedback ensures the tool's relevance, usability, and effectiveness in meeting their specific needs.

To effectively introduce new technology in a home care environment and local community, collaboration is necessary across all levels. Key participants include the Director of the municipality, who provides strategic oversight and approval; pension and civil organizations supporting older adults, which help engage and advocate for user needs; and local community resources like information centers and volunteers, who promote awareness and provide on-the-ground support.

Within the home care provider organization, opinion leaders such as the Program Manager and Director play pivotal roles in decision-making and implementation, while users, family members, and informal carers give practical insights from daily interactions. In the broader community, influential leaders include the Mayor, Deputy Mayor, and municipal council members, whose endorsement can significantly enhance community buy-in and support for the technology rollout.

To ensure a smooth transition when introducing the new technology, it's essential to inform everyone previously involved in the project, including participants from focus groups, interviews, and pilot programs, as they are directly invested and can offer valuable feedback. Additionally, communication should extend to the broader community, involving local organizations, volunteers, family members, and the community at large, to foster awareness, understanding, and support for the change.

CURRENT WORKFLOW: Understanding the current situation and workflow of both formal and informal carers

In Slovenia currently, formal caregivers operate within a structured workflow, utilizing dedicated platforms for managing patient care, though these platforms vary between organizations. To coordinate effectively, they rely on multiple communication tools—digital calendars for scheduling, physical notebooks for quick, portable notes, phone calls for immediate updates, and in-person discussions for more nuanced, complex information sharing with colleagues and informal caregivers. Integrating the Procareful platform into these systems will require careful alignment with their current digital tools to ensure seamless access and avoid disruption.

For informal caregivers, workflows are far less standardized, with each caregiver creating routines based on individual habits and the unique demands of their daily lives. Their communication with formal caregivers is typically ad hoc, adapting to evolving needs and preferences. To integrate the Procareful platform effectively, it will be important to assess each informal caregiver's routine and determine optimal, minimally invasive touchpoints where the platform could fit naturally. This approach will make it easier for informal caregivers to adopt the technology without disrupting their established caregiving practices.



1.2.5. NON-TECHNICAL ASPECT OF THE MODEL

PROCAREFUL hybrid model consists of two parts: of technical solution and non-technical solution - part of the model, where we want to improve personal segment of care, especially in the field of prevention. To change the way care is provided and work more preventively, a shift in mindset will be required. This shift will move from service-oriented care to personal, empathetic care and from reactive care to proactive, preventive care. This mindset change will need to happen at all levels, from the developers (all of us) to the people we will work with.

In Slovenia, healthcare prevention is understood as a proactive strategy for promoting health, emphasizing wellness maintenance and disease prevention through education, lifestyle adjustments, regular medical care, and community health initiatives. This foundational approach provides a solid basis for the pilot implementation, as it aligns with the existing focus on preventive care and public health education. Building on these principles, the pilot will aim to enhance current preventive efforts, integrating new tools and strategies that encourage healthier behaviors and improve access to preventive resources within the community.

1.3. IMPLEMENTATION PHASE

1.3.1. IMPLEMENTATION FRAMEWORK

For the project implementation framework and timeline, see chapter 1.3.1 of Deliverable 1.4.1

Implementation framework summary for Slovenia:

The pilot implementation in Log - Dragomer will run from November to May and will be conducted in collaboration with local care providers: Zavod Pristan, Junaki na domu, Deos, Zavod As, and Zavod za pomoč in oskrbo na domu Niste sami. The plan begins with a first round of senior recruitment by September 2024, where we aim to onboard over 15 seniors to allow for potential dropouts. The first round of caregiver and senior training will follow in October, equipping them to use the platform effectively. After an initial assessment, seniors will begin using the platform by the end of October on tablets provided for performing assigned exercises and tasks. From November to January, continuous training and support will be provided, followed by an intermediate assessment in January. A second recruitment and training round will take place in January if additional participants are needed to maintain the target group of 15 seniors. Continuous training will continue as needed, culminating in the final assessment and evaluation in May, with a celebration event planned for June to recognize the efforts of all participants.

1.3.2. COMMUNICATION

In Slovenia, we'll be using a Pilot ID Card as a key communication tool to convey all essential information about the pilot site implementation. This card, translated into Slovenian, will be distributed during training sessions and serve as a quick-reference guide throughout the pilot. Training will first be conducted with caregivers to ensure they're equipped to support seniors effectively, followed by senior training sessions where we'll introduce the project, explain the upcoming steps, and share contact details (featured on the ID card). After training, seniors will undergo an assessment and be registered in the application. This structured communication approach is designed to build trust, promote transparency, and sustain motivation by clearly outlining the project's benefits for all participants.



1.3.3. MONITORING OF THE IMPLEMENTATION AND TROUBLESHOOTING

Regular monitoring during the introduction of a new digital solution will involve several key steps. Each step will be designed to ensure the successful testing and adoption of the technology while addressing challenges as they arise.

For more information on the monitoring and troubleshooting, see chapter 1.3.3 of Deliverable 1.4.

1.3.4. TRAINING AND CONTINUOUS EDUCATION

The training is going to be delivered in two phases across all pilot sites. For more information on training and continuous monitoring, see Chapter 1.3.4 of Deliverable 1.4.1.

1.3.5. EVALUATION FRAMEWORK

The impact evaluation will assess the changes generated in the governance and organizational model of care provision. The evaluation framework is consistent across the 5 pilot sites. For more information, see Chapter 1.3.5 of Deliverable 1.4.1.

1.4. POST-IMPLEMENTATION PHASE

1.4.1. SUSTAINABILITY - GOAL SETTING

Concrete, realistic, and shared goals are motivators and provide a clear guideline. They should be regularly reviewed and adjusted as needed throughout the process.

In Slovenia, the current goals of the pilot implementation are to successfully involve 15 participants, deepen the understanding of the hybrid care model, and better understand the needs of older adults, informal carers, and formal caregivers. The project aims to empower older adults to take responsibility for their health, implement positive changes in their lives, and extend their ability to age at home with care. For informal carers, the goal is to increase openness to new care approaches and help them adopt beneficial practices while raising awareness about prevention. Formal carers will integrate the platform and its elements into their routines, while home care providers will enhance awareness of hybrid models and foster ongoing discussions about supporting home care with technology. However, these goals will be reviewed and further refined during the implementation phase to ensure they are fully aligned with the needs and feedback from all stakeholders.

1.4.2. SUSTAINABILITY - FUTURE CONSIDERATION

When implementing new solutions, it is essential to look beyond the current benefits and implications and also think about their long-term relevance.

In Slovenia, the current understanding is that beyond the project, the solution can be highly beneficial in several areas. It can enhance companionship by connecting older adults with volunteers, promoting social interaction and emotional support. In personal assistance services, the platform could be integrated into caregivers' daily work, improving communication, tracking health, and enabling targeted preventive care. It may also be valuable in pension organizations, providing a way to monitor and promote retirees' well-being through preventive health measures and education. Additionally, there is potential for collaboration with existing digital solutions, such as emergency response systems (e.g., help buttons or security features for older adults), where the preventive care model could complement these systems and improve elderly care and security. However, this understanding will be reviewed and refined during the implementation phase to better align with real-world needs and insights.



1.4.3. CELEBRATION AND NEXT STEPS AT PILOT SITES

Celebrating and acknowledging participants at the end of the pilot is crucial for recognizing their contributions and fostering a sense of accomplishment.

Each piloting partner is going to outline the next steps following the conclusion of the pilot and will organize an event to mark the end of the pilot phase.

In Slovenia, after the testing period, we plan to make improvements to the platform based on the feedback and lessons learned during the pilot. Once the project concludes, we hope stakeholders will recognize the platform's practical value, leading to its continued use and growth, especially since there is still a need to place greater emphasis on prevention in caregiving. The positive experiences of seniors and the new habits they've developed through the platform are expected to generate lasting interest and contribute to its broader adoption. As for the final event to celebrate the pilot, the exact format is yet to be decided, but we are exploring several options. Regardless of the format, we aim to use the event to present the pilot's results and share the outcomes with the local community, ensuring that the success and lessons learned are widely recognized.

1.4.4. SUSTAINABILITY - CREATION OF A VALUE

PROCAREFUL hybrid model is designed to prevent or slow down cognitive and physical decline and reduce social isolation. By promoting the development and maintenance of healthy habits, the model aims to enhance people's well-being, sustaining their autonomy and independence.

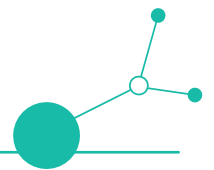
For more information, see Chapter 1.4.4. of Deliverable 1.4.1.

PLACE, DATE *LOG, 16.1.2025*
Project partner *Municipality of Log -*
Dragomer
Signature



D 1.4.1. ACTION PLAN FOR PROCAREFUL MODEL IMPLEMENTATION

FRAMEWORK FOR ACTION PLAN PREPARATION



08 2024

Authors: Anton Trstenjak Institute of Gerontology and Intergenerational Relations with contribution from all consortium partners.





TABLE OF CONTENTS

FRAMEWORK FOR ACTION PLAN PREPARATION	3
1. INTRODUCTION	3
1.1. PRE-IMPLEMENTATION ASSESSMENT.....	3
1.2. CO-DESIGN	5
2. PREPARATORY PHASE.....	6
2.1. TECHNICAL DIMENSION	6
2.2. ETHICAL & LEGAL DIMENSION	9
2.3. RECRUITMENT	12
2.4. ORGANIZATIONAL DIMENSION	12
2.5. NON-TECHNICAL ASPECT OF THE MODEL.....	14
2.6. GOAL SETTING AND FUTURE CONSIDERATIONS	14
3. IMPLEMENTATION PHASE.....	16
3.1. IMPLEMENTATION FRAMEWORK	16
3.2. COMMUNICATION.....	18
3.3. MONITORING OF THE IMPLEMENTATION AND TROUBLESHOOTING	19
3.4. TRAINING AND CONTINUOUS EDUCATION	21
3.5. EVALUATION FRAMEWORK	23
4. POST-IMPLEMENTATION PHASE	25
4.1. CELEBRATION AND NEXT STEPS AT PILOT SITES	25
4.2. DEFINITION OF THE CARE AND DIGITAL COMPETENCES TO BE UPSKILLED FROM CARERS PERSPECTIVE	25
4.3. CREATION OF A VALUE PROPOSITION IN TERMS OF BUSINESS MODEL FOR ITS FURTHER SUSTAINABILITY	27



FRAMEWORK FOR ACTION PLAN PREPARATION

The action plan framework was developed to support pilot partners in preparing effectively for solution implementation, staying on track throughout, and ensuring sustainable, integrated outcomes. The framework is divided into three sections: 1) Preparatory Phase, 2) Implementation Phase, and 3) Post-Implementation Phase, each organized in subchapters with a step-by-step approach.

Beyond enhancing the quality of implementation and promoting synchronization among PROCAREFUL consortium partners, this annex can also assist other stakeholders, such as local authorities, healthcare providers, community organizations, and policymakers, as a guide for preparing their own action plans. Stakeholders can adapt the framework to their specific contexts, promoting cohesive, impactful results.

1. INTRODUCTION

Understanding of the situation is basis for any project action plan. In order to achieve that, PROCAREFUL project starts with a pre-implementation assessment and co-design phase.

1.1. PRE-IMPLEMENTATION ASSESSMENT

Topic	NEEDS ANALYSIS
Information	<p>Conducting a needs analysis before developing and testing a hybrid care model for home care environments is essential for several reasons:</p> <ol style="list-style-type: none"> 1. Understanding Specific Needs: Every home care environment is unique, with varying demographics and healthcare needs. A needs analysis helps to comprehensively understand these specific requirements, ensuring that the hybrid care model addresses the most pressing needs of the community it serves. This includes gaining insights into the preferences and challenges faced by older people in need of care, as well as understanding the perspectives and needs of both informal and formal caregivers. 2. Tailoring Solutions: Armed with insights from the needs analysis, the development of the hybrid care model can be tailored to meet the precise needs and preferences of the target population. This customisation increases the relevance and effectiveness of the model, leading to better outcomes for all. 3. Anticipating Challenges: A thorough needs analysis helps to anticipate potential challenges and barriers to implementation. This proactive approach allows us to devise strategies for overcoming these obstacles, reducing the likelihood of setbacks during the development and implementation phases. 4. Engaging Stakeholders: Involving stakeholders, including older people in need of care as well as their formal and informal carers, in the needs analysis process fosters buy-in and ownership of the hybrid care model. By actively involving those who will be affected by the model, we can better ensure that it is well-received and supported within the community. 5. Promoting Sustainability: Understanding the needs and preferences of the target population is crucial for the long-term sustainability of the hybrid care model. A needs analysis helps to design a model that is not only effective in the short term but also adaptable and resilient in the face of future changes and challenges.



	<p>In summary, a needs analysis before developing a hybrid care model for home care environments is essential for creating a model that is tailored, effective, and sustainable. By understanding the specific needs and challenges of the community, developers can design a model that truly meets the needs of those it aims to serve.</p>
<p>Introduction to the action plan: 1.1. Needs-based action plan</p>	<p>Needs analysis aimed at better understanding of target groups was done during the first stage of the project, but it is important to keep it in mind throughout the project - including during the pilot preparation and implementation phase.</p> <p>Look at the answers you provided last year and copy parts of the information that are still relevant so you can keep it in mind during the preparatory and implementation phases. Are there any parts you think should be improved or understand better now? Please improve those parts and include them into your introduction to the pilot action plan.</p>

Adults (persons 55+)

Description of the group: Adults (persons 55+) and older people in need of care, that is provided by informal carers and/or professionals working in the care field. Especially older people with the appearance of the first signs of cognitive or physical decline, with special attention to those living alone at home, being lonely or living alone for longer periods of time (e.g. during extended absences of other household members/carers).

- **Size of the group:** Write down how many people are possible targets of your pilot action. While thinking about that, write down how many potential “targets” are there on your local or, if relevant, on a regional level AND, if it is relevant, how many potential “targets” are part of your organisation or organisation you closely collaborate with (for example there are altogether around 50000 people 55+ that receive care from informal or professional carers in our local community/region; there are 1000 users 55+ receiving care from our home care service).
- **Characteristics of the group:** Add description and information specific to understanding the characteristics of your subgroup, taking into consideration its diversity. For example: how do they live (in rural/urban area, alone/not alone, ...)?; social status; which organisations are most in contact with them?; what are local specificities (something that is different, compared with other local communities/national characteristics)? Do you hypothesise any important differences between possible “targets” in your local area regarding your possible “target” from your organisation as defined in the previous question (for example: our users have mostly lower/higher incomes than the target on the local level; there are more people living alone among our users compared to the target group on the local level)?
- **Need/ problem analysis:** Description of the problems and needs specific to your subgroup and the extent to which they are currently met (with the existing services, solutions). Focus on the prevention in the fields of cognitive, physical decline and social isolation.

Professionals working in a home care environment

- **Size of the group:** Write down how many people are possible targets of your pilot action. While thinking about that, write down how many are there on a local or, if relevant, on a regional level AND how many potential “targets” are part of your organisation or organisation you closely collaborate with.
- **Characteristics of the group:** Write down which type of professionals work in the home care setting in your local/regional area (for example, carers, physiotherapists, etc). Do they already have experience working in cognitive prevention, physical decline prevention and social inclusion? Shortly describe. Please write explicitly, which professionals work within your organisation (or



organisation you collaborate closely with), which are the others (and what organisation do they belong to) and add a bit more detailed organisational structure of your (and other relevant) organisation. Add description and information specific to understanding the characteristics of the group.

- **Need/problem analysis:** Description of the problems and needs specific to your subgroup and the extent to which they are currently met (with the existing services and solutions). Focus on prevention action in care provision for people with cognitive and physical decline and social isolation.

Informal carers

Group description: Informal carers of older people are those people who provide care to those who need it within the context of an existing relationship, such as a family member, a friend or a neighbour; informal care is care, usually unpaid, provided outside of professional or formal framework.

- **Size of the group:** Do you plan to include informal carers in your pilot? If yes, how big do you estimate this group to be? While thinking about that, write down how many people you can easily reach AND how many potential “targets” are there on local or if relevant on regional level.
- **Characteristics of the group:** Add description and information specific to understanding the characteristics of your subgroup and services dedicated to them on your local/regional, if they exist (ex. self-help groups, specific consultation for informal carers, informal carers centers, state/regional financial support). Which organisation(s) work with them? Does your organization already work with informal carers and if yes, how?
- **Need/problem analysis:** Description of the problems and needs specific to your subgroup and the extent to which they are currently met (with the existing services and solutions). Focus on prevention action in care provision for people with cognitive and physical decline and social isolation.

1.2. CO-DESIGN

Topic	DESIGN AND CONTEXTUAL ADAPTATION OF THE HYBRID MODEL
Information	<p>Nowadays we understand co-design as one of the essential steps in successful model and solution development. Using co-design while developing new model is crucial for several reasons:</p> <ol style="list-style-type: none"> 1. Incorporates Diverse Perspectives: Co-design involves stakeholders from various backgrounds, including older people in need of care (so our primary end-users), informal and formal caregivers, and managers. This diversity ensures that the solution addresses a wide range of needs and perspectives, making it more comprehensive and effective. 2. Enhances User Experience: By actively involving end-users in the design process, the solution is more likely to be user-friendly and aligned with their preferences and real-world usage patterns. This leads to higher satisfaction and better adoption rates. 3. Improves Innovation: Collaboration between different stakeholders fosters creativity and innovation. Diverse ideas and insights can lead to unique solutions that might not emerge from a single perspective. 4. Increases Ownership: When stakeholders contribute to the design process, they feel a sense of ownership and are more committed to the solution’s success.



	<p>5. Identifies Potential Issues Early: Co-design allows for the early identification of potential problems and challenges. Stakeholders can provide immediate feedback, enabling designers to make adjustments before the solution is fully developed, saving time and resources.</p> <p>6. Ensures Relevance and Practicality: Solutions developed through co-design are more likely to be relevant and practical, as they are grounded in the actual needs and experiences of users. This relevance enhances the solution's effectiveness and sustainability.</p> <p>7. Facilitates Continuous Improvement: Co-design encourages a culture of continuous feedback and improvement. As users interact with the solution, ongoing input can lead to iterative enhancements, ensuring the solution remains effective over time.</p> <p>In summary, using co-design while developing new solutions ensures they are user-centred, innovative, practical, and widely supported, ultimately leading to more successful and sustainable outcomes.</p>
<p>Introduction to the action plan: 1.2. Co-design basis for action plan</p>	<p>Co-design process: PROCAREFUL's Activity 1.2 Design and contextual adaptation of the hybrid model was dedicated to co-design, resulting in two deliverables, D.1.2.1 Document that presents the co-design methodology and D.1.2.2 Report presenting the co-design findings of the PROCAREFUL. Use this opportunity to look one more time back to your co-design process and include relevant parts to the introduction part of your action plan.</p>

During the implementation it is important to remember the co-design process for two reasons:

1. If you keep in mind things that were most important to your target groups during development you can emphasise things that were integrated and thus increase the motivation of the participants and if some things were not integrated you can observe if people still find them important and should thus maybe be integrated in the future;
2. If you work in the same environment, people you will carry out the pilot with, will remember the co-design process, so it is important that you also keep having in mind what happened, what was being done and said.

Use this opportunity to look one more time back to your co-design process. How did it go? Shortly describe the process in your country. What went well? What were weak points of the process? What are the main results that you should keep in mind also during implementation?

2. PREPARATORY PHASE

The preparatory phase begins in the third project period and aims to prepare all partners for implementing the PROCAREFUL hybrid model. To achieve this, the following areas will be addressed, and specific steps will be taken during this phase. Steps described in chapters 2.1.1.-2.1.8. serve as preparation for the first part of your local pilot action plans.

2.1. TECHNICAL DIMENSION

<p>Topic</p>	<p>INFRASTRUCTURE PREPARATION</p>
<p>Information</p>	<p>Understanding and preparing the infrastructure needed before implementing a technical solution is critical for several reasons:</p>



- **Improves User Experience:** Ensuring that the necessary devices and network capabilities are in place enhances the overall user experience. Users are less likely to encounter technical issues, leading to higher satisfaction and better adoption rates.
- **Facilitates Smooth Implementation:** A well-prepared infrastructure allows for a smoother and more efficient implementation process. This minimizes downtime and reduces the risk of delays, ensuring the solution can be deployed on schedule.
- **Ensures Security:** Understanding the infrastructure requirements allows for the identification and mitigation of potential security risks. Ensuring that the network and devices meet security standards protects sensitive data and maintains system integrity.
- **Mitigates Risks:** Thorough preparation helps to identify and address potential risks and challenges before they become significant problems. This proactive approach reduces the likelihood of implementation failures or setbacks.
- **Facilitates Training and Support:** Having the right infrastructure in place makes it easier to train end-users and provide ongoing support. Users can learn and operate the new solution more effectively when the technical environment is properly prepared.
- **Aligns with Strategic Goals:** Understanding infrastructure needs ensures that the technical solution aligns with the organization's strategic goals and technological roadmap. This alignment supports long-term objectives and sustainability.

In summary, understanding and preparing the infrastructure before implementing a technical solution is crucial for improving user experience, ensuring security, facilitating smooth implementation, mitigating risks, and aligning with strategic goals.

As part of our PROCAREFUL pilots following questions may need to be clarified:

- *Is internet access required? Do all end-users have free access to the internet (via phone or otherwise)?*
- *Do all involved in the pilot have devices they'll need to implement the solution?*
- *Do devices support the software?*
- *What happens after: Are possible product adjustments after implementation chargeable or provided as a service? Is there a replacement in case of hardware damage or loss?*

Consider that the acquisition of works, suppliers or services from economic operators utilizing a public contract is subject to **rules on public procurement**. This secures transparent and fair conditions for competing on the common market and shall be followed when procuring services, works or supplies.

Rules differ depending on the kind of goods or services to be procured, the value of the purchase and the legal status of the awarding institution. Rules are set at the following levels:

- EU rules as set by the applicable directives on the matter;
- National rules;
- Interreg programme rules

It is strongly recommended to become familiar with the applicable procurement rules and, if necessary, to seek advice of procurement experts or national controllers early enough before launching a public procurement procedure.



	<ul style="list-style-type: none"> • More information on EU rules on public procurement, including on applicable EU thresholds, can be found at https://ec.europa.eu/growth/single-market/public-procurement_en, while information on national rules on public procurement can be found on the websites of competent institutions on the matter. • The Interreg CE Programme requires beneficiaries to give evidence of adequate market research for contracting amounts between EUR 10.000,00 (excl. VAT) and the threshold set by the applicable EU and national rules. More information: <u>Interreg CENTRAL EUROPE programme manual</u>.
2.Preparatory phase of action plan: 2.1. Infrastructure preparation	<p>Technical requirements and infrastructure for implementing the technology in PROCAREFUL project:</p> <ul style="list-style-type: none"> • Smartphone - for older people; • Computer - for formal and informal carers; • All groups must have access to the Internet. <p>Include the answers to the following questions in the second chapter 2. Preparatory phase of action plan, subchapter 2.1. Infrastructure preparation.</p>

- *In your country, how are you going to satisfy technical requirements for PROCAREFUL hybrid model implementation during the pilots. Think about all three target groups (older people, informal carers, formal carers) - do they have needed devices? If not what is your plan. Do they all have internet connection? If not what is your plan?*
- *Evaluate the compatibility of the chosen technology with existing systems and infrastructure of your home care service provider.*

Fill in in case you plan to buy something: Vendor/supplier selection and contracting. And include this information into your action plan.	
Do you have internal procurement guidelines?	<input type="checkbox"/> Yes / <input type="checkbox"/> No
Where can you find the vendor/supplier?	
Are these guidelines up-to-date?	<input type="checkbox"/> Yes / <input type="checkbox"/> No
Does the tender follow the eligibility rules of Interreg CENTRAL EUROPE?	<input type="checkbox"/> Yes / <input type="checkbox"/> No

Topic	RELIABILITY TEST
Information	<p>Conducting a reliability test or pre-test before implementing new technologies in a home care environment is a crucial step to ensure the smooth running of the implementation and earn trust of the end-users: Begin by developing realistic scenarios that accurately reflect the challenges faced by older people, informal carers, and formal carers who will be using the solution. These scenarios should encompass a variety of situations to thoroughly test different aspects of the platform. Next, observe how these end-users interact with the technology in these scenarios. Pay close attention to any issues that arise and how users address them. This will provide valuable insights into the practical usability of the solution. Gather comprehensive feedback regarding user-friendliness, efficiency, reliability, and overall user satisfaction. Utilize surveys, interviews, or focus groups to collect this</p>



	<p>feedback from participants. Encourage detailed responses, asking users to describe any difficulties they encountered and offer suggestions for improvement. Use the feedback to make necessary adjustments to the technology and its implementation. Address any identified issues to enhance the solution's effectiveness and user experience. Thoroughly document the results of the reliability test, including both positive outcomes and areas needing improvement. By following these steps, you can ensure that the technology is effectively tailored to the needs of the home care environment and is ready for broader implementation, benefiting older people, informal carers, and formal carers alike.</p>
<p>2. Preparatory phase of action plan: 2.2. Reliability test</p>	<p>Reliability test is going to be carried out with a selected group of employees (e.g., experts, interested employees etc.) and end-users with the aim to obtain their feedback.</p> <p>During our PROCAREFUL project we are going to carry out reliability test in two steps:</p> <ol style="list-style-type: none"> 1. Testing English version of platform (Application for a formal/informal caregiver - approximately July 1; application for seniors - approximately July 31) 2. Testing platform in national languages (approximately August 16) <p>While carrying out reliability test it is recommended to include colleagues who are not part of the project! Include the information about reliability test into your action plan.</p>

- *Who in your group or from outside can do the testing of the platform in English? Do you have someone (formal carer, informal carer, older person) in mind who can test the solution in your language during the summer?*

2.2. ETHICAL & LEGAL DIMENSION

Topic	ETHICAL & LEGAL DIMENSION (reference: DigiCare4CE, Interreg CE project)
Information	<p>The legal and ethical dimension refers to elements, principles, behaviours, and considerations that relate to both legal requirements and ethical standards. This category encompasses aspects related to ensuring that actions and decisions align with the law, such as enabling safety, security, privacy, and morally acceptable conduct.</p> <p>Ethical:</p> <p>Technologies in well-being and healthcare prevention usually do not need ethics. However, if necessary, establish ethical guidelines for using technology with your employees and seek care-related ethical expertise in case of uncertainties. Pay attention to transparency, information, and adherence to agreed-upon ethical values, especially when new employees are being integrated, and regularly assess whether new ethical questions have arisen (Würdig et al., 2022). Ethical rules might be country specific. Therefore, we recommend checking the ethical guidelines and standards of your country. You may also want to involve the following councils, such as the Residents' Council or the Bioethics Commission of your country, depending on local specific requirements.</p> <p>These practical questions might support adhering ethical standards:</p> <ul style="list-style-type: none"> • <i>What ethical issues may arise from the use of technology in your pilot?</i> • <i>What approaches could you develop to address these issues?</i> • <i>Does the use of technology hinder or support social participation, the right to self-determination, and the privacy of your end-users?</i> • <i>Is the dignity and health of your users preserved through the use of technology?</i>



	<ul style="list-style-type: none"> • <i>Does the use of technology potentially harm the reputation of the institutions involved?</i> • <i>Does the deployment of technology contradict the guiding principles of your establishment and other establishments involved?</i> • <i>Which stakeholders need to be informed about and involved in the implementation of technology? Think beyond your users, for example, consider relatives, other carers, employee representatives, health insurance companies, medical practices, political committees, etc.</i> <p>Legal:</p> <p>Adherence to data protection rules is also important throughout the whole pilot action, encompassing the implementation and testing phases of the new technology within the organisations. Ensure strict compliance with both internal organizational and national data protection rules and, on a broader scale, adhere to EU data protection requirements. More information on data protection in the EU: Data protection EU.</p> <ul style="list-style-type: none"> • <i>Does the pilot action follow data protection rules? How to adhere to data privacy rules?</i> • <i>Which consents are needed?</i> • <i>Is there need for a contract between technical solution provider and organization implementing the solution?</i> • <i>How to optimize surveillance?</i> • <i>How is data flow managed?</i>
<p>2. Preparatory phase of action plan: 2.3. Ethical and legal consideration</p>	<p>Which ethical and legal aspects should be considered in the implementation of the hybrid model in your country? In your action plan, subchapter 2.2. Ethical and legal considerations, describe how you are going to deal with them. While doing that, add agreed-upon general content (valid for all pilots) in and out of the charts below into this chapter as well.</p>

Example of the answers agreed upon by PROCAREFUL consortium partners:

Ethical & legal consideration(s)	Handling
<p>Compliance with European privacy legislation (GDPR)</p>	<p>To ensure full compliance with national and European legislation, [name of partner] implemented the following actions:</p> <ul style="list-style-type: none"> • Joint Controllershship Agreement has been stipulated with the Consortium • Informative and Consent form are provided to participants • Data Protection Impact Assessment has been conducted • Policy privacy and adoption of security measures as mentioned in Enisa Handbook for security of personal data processing have been established
<p>Ethics committee involvement</p>	<p>The ethical aspect was analysed through specific meetings between team members and experts</p>



PROCAREFUL

	<p>supporting [name of partner] on ethical and privacy issues.</p> <p>Due to the aims of PROCAREFUL it is not mandatory and required to apply to the Ethics Committee.</p>
<p><i>What will be the data flow in your pilot (who will see what, where will information be stored, where it will go)? Do you foresee any exceptions in your pilot? Write that based on what you understand now in a way that you can use to present it to your end-users (use simple language). What will you need to ensure privacy of data / what will you need from legal perspective?</i></p>	

Data	Access
Provided by older people	Formal caregivers (Social worker, Care worker), Administrative profiles (Social worker coordinator/Home care service responsible, Service coordinator / Nursing home coordinator, Project managers), Informal caregivers (if they will be involved)
Provided by informal carers	Administrative profiles (Social worker coordinator/Home care service responsible, Service coordinator / Nursing home coordinator, Project managers), Formal caregivers (Social worker, Care worker)
Provided by the formal carer	Administrative profiles (Social worker coordinator/Home care service responsible, Service coordinator / Nursing home coordinator, Project managers)
Other:	



2.3. RECRUITMENT

Topic	RECRUITEMENT
Information	For successful pilot implementation, it is important to engage the right people, understand their situation, and give them tools that can enable them to carry out the intervention well.
2. Preparatory phase of action plan: 2.4. Recruitment	After working on the co-design phase, you have a better understanding of who can best benefit from the PROCAREFUL hybrid solution and who might be ready to participate with you. In order to include formal carers, informal carers and older people who can best benefit from our preventive solutions, who do you have to engage? When? And how? Include the answers to the questions below into your action plan, chapter 2 Preparatory phase of action plan, subchapter 2.4. Recruitment.

	<i>When do you plan to carry out a recruitment? Why then?</i>	<i>How do you plan to recruit this group of people? Are they affiliated with an organisation, and will that affect how you recruit them?</i>	<i>What challenges do you expect? Will you need to expand the target group in order to fulfil the targeted number?</i>
INFORMAL CARERS			
FORMAL CARERS			

- *If you already carried out part of the recruitment, describe the recruitment process?*
- *Do you plan to engage managers? How and when in the process?*
- *Do you plan to engage another group of people? How and when in the process?*

2.4. ORGANIZATIONAL DIMENSION

Topic	PEOPLE AND PROCESSES
Information	<p>Continuous involvement of key stakeholders: Involving all key stakeholders—older people in need of care, informal carers, formal carers, managers, and policymakers—in every stage of the process, from needs assessment to co-design, preparation, implementation, and assessment, is crucial for several reasons:</p> <ol style="list-style-type: none"> 1. Effective Preparation: Involving stakeholders in the preparation phase helps identify potential barriers and enablers early on. Carers and managers can highlight logistical and training needs, while policymakers can address regulatory and policy-related concerns. This collaborative preparation leads to a robust and realistic implementation plan. 2. Smooth Implementation: Active participation from all stakeholders during implementation ensures smoother execution. Continuous feedback from end-users allows for real-time adjustments, while managers ensure that resources are



	<p>appropriately allocated and processes are followed. Policymakers can provide necessary regulatory support and adjustments as needed.</p> <p>3. Comprehensive Assessment: In the assessment phase, stakeholder involvement ensures a thorough and multidimensional evaluation of the solution’s effectiveness. Older people and carers can provide firsthand feedback on usability and impact, managers can assess operational outcomes, and policymakers can evaluate broader implications for healthcare policies and practices.</p> <p>4. Sustainability and Scalability: Engaging all relevant parties from the beginning ensures that the solutions developed are sustainable and scalable. Input from policymakers and managers helps plan for long-term integration and potential expansion, ensuring the technology can adapt to future needs and broader applications.</p> <p>In summary, involving all important stakeholders at every stage of the process—from needs assessment to co-design, preparation, implementation, and assessment—is essential for creating effective, user-centered, and sustainable solutions in the home care environment. This inclusive approach ensures that the solutions are practical, relevant, and supported by all parties involved, leading to better outcomes and higher satisfaction for all stakeholders.</p>
<p>2. Preparatory phase of action plan: 2.5. Continuous involvement of stakeholders</p>	<p>It is important to identify key stakeholders for your pilot context as an important factor for the success of model implementation. A list of project members and stakeholders will help you to further coordinate communication and involvement in your pilot. Think of the following questions:</p> <ul style="list-style-type: none"> • <i>Who in the home care facility you’ll be working with is needed and should be involved to introduce new technology? (include all levels, decision making)</i> • <i>Who in the home care environment and community you’ll be working with is needed and should be involved to introduce new technology? (include all levels, decision making)</i> • <i>Who are the opinion leaders?</i> • <i>Who needs to be informed about the change?</i> <p>Include the answers to the questions below into your action plan, chapter 2 Preparatory phase of action plan, subchapter 2.5. Continuous involvement of stakeholders.</p>

- *Who in the home care facility you’ll be working with is needed and should be involved to introduce new technology? (include all levels, decision making; be as concrete as possible)*
- *Who in the home care environment and community you’ll be working with is needed and should be involved to introduce new technology? (include all levels, decision making; be as concrete as possible)*
- *Who are the opinion leaders in home care provider organization and in the community? (be as concrete as possible)*
- *Who needs to be informed about the change?*
- *What is your plan to continuously include them?*

<p>Information</p>	<p>Understanding the current situation is vital for implementing a new solution and for integrating the new model as seamlessly as possible into the existing processes.</p>
<p>Introduction to the action plan: 1.3. Understanding of the current situation</p>	<p>Think about the home care organization you’ll be working with and the informal carer situation. You might not have all the answers now, but it is important to start thinking about those things.</p> <p>Include the answers to the questions below into your action plan, chapter 1 Introduction to the action plan, subchapter 1.3. Understanding of the current situation.</p>



- Please describe the current situation and workflow in which you want to insert the model into - how does the work process look like now for a. formal carer and b. informal carers?
- How will the PROCAREFUL model influence the organizational process for a. formal carers and their organization, b. for informal carers?
- What do you want to change? What are your expected results?

2.5. NON-TECHNICAL ASPECT OF THE MODEL

Topic	PREPARATION FOR NON-TECHNICAL ASPECT OF THE MODEL
Information	<p>PROCAREFUL hybrid model consists of two parts: of technical solution and non-technical solution - part of the model, where we want to improve personal segment of care, especially in the field of prevention.</p> <p>If we want to change the way we provide care and if we want to work more preventively, mind shift is required: from service orientated care to personal, emphatic care and from reactive care to proactive, preventive care. And this mind shift have to happen on all levels: from developers (so all of us) to people we will work with.</p>
Preparatory phase of action plan: 2.6. Non-technical aspect of the model	<p>Think about prevention, habits development, ageing and illness. We will use these answers to further develop non-technical aspect of the PROCAREFUL hybrid model. Please integrate them also in your action plan, into subchapter on non-technical aspect of the model, describing it as basis for improving of the field. Add to that, the plan for non-technical aspect of the model implementation described in the training document.</p>

- Describe what do you understand under the term healthcare prevention?
- Working on prevention often means one has to change a bad habit or develop a new good habit. Think about yourself: how easy or difficult do you find it to change a bad habit or introduce a new good one? What helps you when you want to do that? (write for all the members of national teams)
- Think about an older person you know. Choose a person who is cognitively still completely or almost completely fit, but requires some help due to other conditions or old age. What kind of person is he/she? Describe him/her in two-three sentences. What kind of help does he/she needs? Who provides this help? Do you think he/she could benefit from preventive support (cognitive, physical and/or social) - if yes, what would benefit him/her most? (write for all the members of national teams)
- Do you know person living with chronic illness or infirmity? You can think of same person as before or someone else. What does it mean to live with chronic illness or infirmity? (write for all the members of national teams)

2.6. GOAL SETTING AND FUTURE CONSIDERATIONS

Topic	GOAL SETTING
Information	<p>Concrete, realistic, and shared goals are motivators and provide a clear guideline. They should be regularly reviewed and adjusted as needed throughout the process. Develop the objectives associated with product implementation and make them transparent. It is useful to document goals and evaluate their achievement regularly: Has the intended</p>



	result been achieved? What supportive factors and barriers have you identified throughout the process? Involve a whole national group and end-users in the goal setting process to increase their motivation.
4 Post implementation phase of action plan: 4.1. Sustainability - goal setting	Clearly define strategic and operative goals of implementing the new technology which are SMART: specific, measurable, achievable, relevant and time bound. Elaborate on how you are going to achieve these goals, i.e., define measures (using the chart below) and include that into your action plan chapter 4 Post-implementation phase, subchapter 4.1. Sustainability - goal setting.

Strategic/operative goals	Description
Goals of your organization (for all partners in the national team)	
Goals for older people (as you understand them now)	
Goals for informal carers (as you understand them now)	
Goals for formal carers (as you understand them now)	
Goals for home care provider (as you understand them now)	

Topic	ANALYSIS OF THE FUTURE SITUATION
Information	When implementing new solutions, it is essential to look beyond the current benefits and implications and also think about their long-term relevance. Questions about the usefulness and durability of the solution over 10-15 years, the need for updates or upgrades, the ability to adapt to changing infrastructure and standards, and the ability to identify potential future problems are essential. A complete picture ensures, that the chosen solution will not only be successful in the short term but will also be able to meet changing needs and challenges in the long term.
4 Post implementation phase of action plan: 4.2. Sustainability - future considerations	Future of the PROCAREFUL hybrid model: Think about the time after the pilot implementation and project end. Include the answers to the questions below into your action plan chapter 4 Post-implementation phase, subchapter 4.2. Sustainability - future considerations.

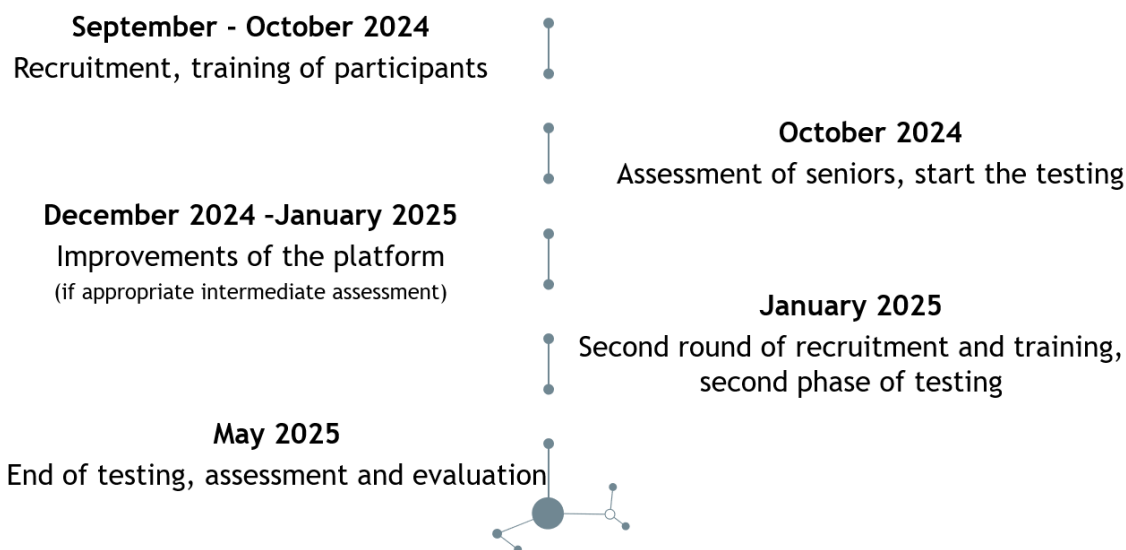
- *At this preparatory phase, where do you see usefulness of the solution beyond the project - in what way and where concretely can solution be useful?*
- *What other potential risks and challenges could arise in the future and what strategies can we develop to address them?*
- *How do you think will solution be accepted by different target groups and will regular training continue to be required to ensure smooth integration?*



3. IMPLEMENTATION PHASE

3.1. IMPLEMENTATION FRAMEWORK

TIMEFRAME for pilot implementation



Duration of the Pilots: The pilot phase will span from September 2024 to June 2025, divided into two cycles: the first cycle from September/October to December 2024, and the second cycle from January to June 2025.

Recruitment: Recruitment will occur in two rounds: the first round from May to September 2024, and the second round in January 2025. This phased approach aims to mitigate drop-out rates and allow for additional participants if needed.

Number of Participants: The PROCAREFUL model will be operational over 12 months across five pilot locations, targeting a total of 135 users. The distribution is as follows: 30 participants in Treviso (IT), 30 in Split (HR), 30 in Baden-Württemberg (DE), 15 in Log-Dräger municipality (SLO), and 30 in Lublin (PL).

Topic	PILOT IMPLEMENTATION
Information	<p>The purpose of pilots while testing a newly developed digital solution is to evaluate its effectiveness and usability in real-world settings on a smaller scale before full deployment. For the PROCAREFUL hybrid home care model, this means testing the model in six countries with a total of 135 individuals to assess its usefulness across different care contexts. The PROCAREFUL model aims to prevent cognitive decline, physical decline, and social isolation in adults aged 55+. By encouraging the development of healthy habits and leveraging digital tools and modern care practices, the model seeks to improve or maintain the mental, social, and physical wellness and autonomy of older adults. Pilots help identify potential issues, gather user feedback, and ensure the solution is refined and optimized for broader implementation.</p> <p>During the initial weeks of implementing the hybrid, it's crucial for the project manager or designated personnel to allocate adequate resources for on-site support. This</p>



PROCAREFUL

	<p>approach ensures that you can offer immediate assistance and guidance while closely observing and addressing any concerns or issues that arise in practice.</p> <p>At the beginning, pay special attention to technological part of the solution. Establish regular feedback loops to continuously assess and refine the system. Demonstrating proactive efforts to address any negative impacts to your staff will help maintain motivation and encourage effective use of the new solution (for more information check section 3.3.).</p>
<p>Implementation phase of action plan: 3.1. Overview of pilot implementation plan</p>	<p>To effectively plan and implement your pilot, add concrete dates to establish milestones for key events throughout the implementation. This will facilitate progress monitoring and serve as a motivational tool. Tailoring the milestones to your pilot situation you can add additional milestone, if you feel something is missing.</p> <p>Describe your plan for pilot implementation (from two stage recruitment, institutions involved, locations and steps during the implementation) as part of your action plan, chapter 4. Implementation phase, subchapter 3.1. Overview of pilot implementation plan. Use chart below to help you with important milestones.</p>

Milestone	Scheduled Deadline	Actual Deadline
Recruitment - 1 st round		
Training of carers - 1 st round		
Training of seniors - 1 st round		
Assessment of seniors and start of them using platform - 1 st round		
First part of continuous training and intermediate assessment		
Recruitment - 2 st round		
Training of carers - 2 st round		
Training of seniors - 2 st round		
Assessment of seniors and start of them using platform - 2 st round		
Second part of continuous training		
Third part of continuous training		
Fourth part of continuous training		
End of testing, assessment and evaluation		
Celebration (to thank the participants)		

*Recommendation: Carers and trainers starting in the first round are encouraged to carry out the testing till the end of the testing (May 2025).



3.2. COMMUNICATION

Topic	COMMUNICATION
<p>Information</p>	<p>When pilot testing, crucial elements of communication include:</p> <ol style="list-style-type: none"> 1. Clarity of Objectives and Expectations: Clearly outline the goals, expected outcomes, and specific roles of each stakeholder. This ensures everyone understands the purpose of the pilot and their responsibilities. 2. Regular Updates: Provide consistent updates on the progress of the pilot, including successes, challenges, and any changes to the plan. Regular communication keeps all parties informed and engaged. 3. Open Feedback Channels: Establish mechanisms for stakeholders to provide feedback easily and regularly. This helps in identifying issues early and making necessary adjustments. 4. Immediate Support: Ensure that there are clear channels for stakeholders to seek help and support when issues arise. Prompt resolution of problems prevents disruption and maintains trust. 5. Transparency: Be open about what is working and what isn't. Transparency builds trust and helps manage expectations, reducing resistance and fostering a collaborative environment. 6. Documentation and Reporting: Keep detailed records of communications, feedback, and decisions made during the pilot. This documentation supports accountability and provides a basis for evaluating the pilot's success. <p>Effective communication in these areas ensures that the pilot testing is carried out smoothly and that all stakeholders – formal carers, their managers, informal carers, seniors and pilot implementation teams – are aligned and informed throughout the process.</p>
<p>Implementation phase of action plan: 3.2. Communication</p>	<p>Clear communication of key information, roles, and responsibilities for troubleshooting is essential for smooth pilot testing and helps build trust among participants. To facilitate this, each PROCAREFUL pilot will use a Pilot ID card. This card provides a central location for all critical information related to the pilot implementation. Along with this instruction, partners have received a PowerPoint template for the Pilot ID card where they could input the relevant details.</p> <p>Here are some tips for filling out the Pilot ID card:</p> <ul style="list-style-type: none"> • NAME OF THE PILOT: Specify the name you and the participants will use to refer to your pilot. • NAME OF ORGANISATION IN CHARGE OF THE PILOT: Enter the name of the partner organization responsible for implementing the pilot. • SHORT DESCRIPTION OF THE PILOT: Provide a brief description of the pilot. Adjust or expand upon this description as necessary to accurately reflect your pilot. • TIMEFRAME FOR IMPLEMENTATION OF THE ACTIONS: Modify the timeframe as needed to align with your pilot's schedule. • PILOT IMPLEMENTATION TEAM: List all individuals who will oversee the pilot's implementation.



PROCAREFUL

	<ul style="list-style-type: none"> • MAIN CONTACT PERSON: Identify the person who will handle all questions related to pilot implementation and testing, including direct contact with participants and communication with the technical partner. • TECHNICAL SUPPORT EMAIL: Use the provided email address to contact the technical partner for any technical issues. Participants who do not speak English should reach out to the main contact person for assistance with resolving technical problems. <p>Describe the importance of clear communication with all stakeholders in your action plan, chapter 3. Implementation phase, subchapter 3.2. Communication; include your ID card into this chapter (you can find an example of the ID card below).</p>
--	--

NAME OF THE PILOT

Name of organisation in charge of the pilot

[add logo]

SHORT DESCRIPTION OF THE PILOT



PROCAREFUL hybrid home care model will be tested in [name of the pilot] with [number] individuals to assess usefulness of the model across different care contexts. This model itself aims to prevent cognitive decline, physical decline, and social isolation in adults aged 55+. By encouraging the development of healthy habits and leveraging digital tools and modern care practices, the model seeks to improve or maintain the mental, social, and physical wellness and autonomy of older adults.

TIMEFRAME for implementation of the actions

- [Sep]–[Oct] Recruitment, training of participants
- [Oct] Assessment of participants, start the testing
- [Dec]–[Jan] Improvements of the platform
- [Jan] Second round of recruitment and training, second phase of testing
- [May] End of testing and evaluation

PILOT IMPLEMENTATION TEAM

[Name, Surname, Organisation];
[Name, Surname, Organisation]



[add photo]



Main contact person
for all questions related to testing
[Name, Surname, Contact]



Technical support -
for all technical problems
procareful.support@britenet.eu
Use this email to contact technical partner directly in English (in case of language barrier please contact the main contact person).

3.3. MONITORING OF THE IMPLEMENTATION AND TROUBLESHOOTING

Topic	MONITORING AND TROUBLESHOOTING
Information	<p>Regular monitoring during the introduction of a new digital solution involves several key steps. Each step is designed to ensure the successful testing and adoption of the technology while addressing challenges as they arise. Below are the steps with PROCAREFUL adjusted examples:</p> <ol style="list-style-type: none"> 1. Establish Clear Benchmarks and KPIs <p>In the PROCAREFUL model, benchmarks and KPIs are integral to the assessment tool. The platform facilitates a thorough evaluation of seniors' cognitive, physical, and social conditions with the goal of crafting personalized care plans tailored to individual needs. The assessment includes evaluations of cognitive, physical, and social domains, along with sleep quality and overall well-being. The platform guides assessors through the process, providing necessary tests and questionnaires, and generates a detailed final report that summarizes the scores and includes the seniors' responses.</p>



During the pilot activities, assessments will be conducted at three key stages:

- **Initial assessment:** Prior to defining the personalized care plan
- **Intermediate assessment:** After three to four months of training
- **Final assessment:** At the conclusion of the pilot

Furthermore, the PROCAREFUL platform supports additional assessments if there are indications of decline or the need to adjust the care plan, such as modifying exercise routines.

For more information on the assessment, including battery of questionnaires and KPIs look up the deliverable D 1.3.1. Document that presents the PROCAREFUL model training manual.

2. Conduct Regular Feedback Sessions

During the pilots, regular meetings will be held at two levels:

- **National Group Meetings:** Formal carers, informal carers, and seniors will convene 3-4 times to share experiences, provide feedback, and receive additional training on the non-technical aspects of the platform (see section 3.4 for more details).
- **International Team Meetings:** The international team of pilot implementation leaders will meet weekly from September 19 to November 14, and subsequently every second Thursday of the month until the end of the pilot. Technical partners and developers responsible for the non-technical aspects of the solution will regularly attend these meetings. These sessions will provide the consortium with opportunities for regular feedback, troubleshooting, progress reviews, and ongoing training on the non-technical components of the platform (see section 3.4 for more details).

In addition to these meetings, the pilot implementation team will engage with formal and informal carers and seniors individually to facilitate continuous feedback, address issues, and review progress on the ground.

3. Troubleshoot Issues Immediately (described above)

4. Regularly Review Progress Against Benchmarks (described above)

5. Adjust Training and Support Based on Feedback

During the pilots continuous training will be carried out for non-technical part of the solution and if needed also for technical platform, supporting participants in testing.

6. Communicate Successes and Improvements

During the pilots, special attention will be given to update participants and other stakeholders on the positive outcomes of the hybrid model; smaller and bigger successes can boost morale, motivation and reinforce the value of the new technology.

7. Engage Stakeholders in Continuous Improvement

A key goal of testing the PROCAREFUL hybrid model is to improve the solution. Therefore, actively involving all stakeholders in this process is essential. In addition to individual engagement, stakeholders will participate in 3-4 group meetings during the testing phase to take part in more in-depth discussions. Furthermore, a final evaluation will be conducted to assess overall progress and gather comprehensive feedback.

8. Document and Report Findings



	<p>During PROCAREFUL testing phase regular reports that document the monitoring process, issues encountered, solutions implemented, and the outcomes achieved, will be prepared and delivered in deliverables 2.3. Furthermore, those reports can be shared with stakeholders to ensure transparency and continuous support.</p> <p>By following these steps, you can ensure that the digital solution is effectively tested and as much as possible integrated into the long-term home environment, with issues being resolved quickly and participants being continuously motivated by the positive impact of the new hybrid model.</p>
<p>Implementation phase of action plan: 3.3. Monitoring and troubleshooting</p>	<p>To ensure regular feedback, facilitate immediate troubleshooting, and review progress, regular meetings will be held as part of the PROCAREFUL pilot implementation on both local and international level. Describe the importance and mode of regular meetings on both levels in your pilot action plan, chapter 3. Implementation phase, subchapter 3.3. Monitoring and troubleshooting. Include the questions that will be asked in both meetings and emphasise the importance of preparedness.</p>

Questions for regular international team meetings:

- *What is your current situation (status) when it comes to implementation?*
- *How many participants do you currently have in your pilot? And how are they doing?*
- *(when relevant) How is your onboarding process going?*
- *(when relevant) Did you observe any non-technical segments of the model being developed in your pilot? In what way?*
- *What is going well?*

A tentative list of questions for local (national) group meetings:

- *How did you find PROCAREFUL platform:*
 - *What did you like?*
 - *What bothered you or you would like to change?*
 - *Do you have any suggestions?*
- *Did you observe any non-technical segments (understanding of old age, illness, better communication, more interactions...) of the model being developed in your pilot? In what way?*

Do you have anything else you want to communicate? Any issues? Or is there something you want to mention that you think is going well? Are there problems - technical or non-technical issues you struggle with?

3.4. TRAINING AND CONTINUOUS EDUCATION

Topic	TRAINING
<p>Information</p>	<p>The training is delivered in two phases:</p> <ol style="list-style-type: none"> 1. Online Train-the-Trainers Training: <ul style="list-style-type: none"> ○ Structure: This training is structured over two days, totalling 20 hours of instruction, divided into 8 hours of theory and 12 hours of individual practical work. ○ Timing: Theoretical training will take place on August 8-9th, from 9:00 AM to 1:00 PM. ○ Language: English.



	<ul style="list-style-type: none"> ○ Participants: Trainers who will subsequently train the pilot sites, at least 2-3 representatives from each organisation, including formal and informal carers. ○ Content: The training will cover familiarisation with the platform and the core concepts and methodologies of the PROCAREFUL model, preparing trainers for localised training. <p>2. On-site Training at Pilot Sites:</p> <ul style="list-style-type: none"> ○ Structure: <ul style="list-style-type: none"> ▪ For formal and informal carers, the training is structured over one or two days, including 4 hours of theory and, if possible, 4 hours of individual practical work. ▪ For seniors, the training focuses mostly on pilot and platform understanding and is structured over one day, with 2-3 hours of theory and practice. ▪ Both types of training can be conducted in groups or individually, depending on the needs and possibilities of the local trainers. ○ Timing: September, up to the first part of October for seniors. ○ Language: National languages of the pilot sites. ○ Participants: Formal carers, informal carers, and seniors. ○ Content: The training will focus on the practical application of the PROCAREFUL model, tailored to local contexts. <p>For more information on trainings and trainings' content look up the deliverable D 1.3.1. Document that presents the PROCAREFUL model training manual.</p>
<p>Implementation phase of action plan: 3.4. Training and continuous education</p>	<p>Describe the importance of training and training plan in your action plan, chapter 3. Implementation phase, subchapter 3.4. Training and continuous education.</p>

Topic	CONTINUOUS EDUCATION
<p>Information</p>	<p>During the pilots, regular meetings will be held to ensure continuous education for participants. These meetings are crucial for imparting knowledge related to the non-technical aspects of the model, and they also provide opportunities for troubleshooting technical issues and offering additional training as needed. The meetings are structured as follows:</p> <ul style="list-style-type: none"> • National Group Meetings: Formal carers, informal carers, and seniors will meet 3-4 times to receive further training on the non-technical aspects of the platform. These sessions will use a group social learning methodology to deepen participants' understanding of aging, living with illness and frailty, and to promote healthy habits, effective communication, and better motivation. • International Team Meetings: These meetings will be conducted to train the international team of pilot implementation leaders, enabling them to carry out the additional training sessions effectively. • If needed, individual technical trainings will be organised as well.



Implementation phase of action plan: 3.4. Training and continuous education	Describe the importance of continuous education and plan for it in your action plan, chapter 3. Implementation phase, subchapter 3.4. Training and continuous education.
--	--

3.5. EVALUATION FRAMEWORK

The impact evaluation will assess the changes generated in the governance and organizational model of care provision in the 5 pilot sites. To this aim, the PROCAREFUL evaluation model will employ a multidimensional approach combining qualitative and quantitative methodologies. The envisaged approach incorporates stakeholders' perspectives and governance frameworks to ensure a holistic understanding of the effectiveness of ICT-based integrated care. Through the evidence of impact, the evaluation model is intended to serve as a valuable resource for informing and shaping policy strategies, enabling well-informed decision-making, and driving sustainable enhancements in healthcare delivery.

A tentative list of core actions can provide an initial outlook on the evaluation process:

1. Definition of a preliminary set of dimensions covering different aspects of care
2. Selection and involvement of key stakeholders
3. Elaboration of an impact map
4. Construction of a battery of impact indicators
5. Data collection and analysis (including pre-post questionnaire)
6. Elaboration and report

Evaluating the impact of innovative services and care provision models on organizational aspects, particularly change management, is a crucial component in understanding and optimizing the transformation of healthcare delivery and the digitalization of healthcare systems. The PROCAREFUL evaluation focuses on how innovation influences organizational structures, processes, culture, and management practices. A comprehensive set of criteria will be established to effectively measure the impact of ICT in integrated care. For each of these dimensions, a set of indicators will be developed.

The following is a preliminary list to be updated with the support of all relevant stakeholders engaged in the pilot activities:

1. Clinical Outcomes
 - a. Physical & Cognitive Improvements
 - b. Adherence to Treatment & Motivation
 - c. Preventive Care & Behavioral Changes
2. Operational Efficiency
 - a. Efficiency of Care Delivery
 - b. Productivity of Care Providers
 - c. Resource Utilization
3. End-users Experience
 - a. Satisfaction of Care Beneficiaries
 - b. Usability and Accessibility
 - c. Quality of Care
4. Management and Coordination
 - a. Data Utilization
 - b. Care Coordination
 - c. Information Sharing
5. Patient Empowerment and Health Literacy



- a. Empowerment
- b. Health Literacy
- c. Self-Management
- 6. Sustainability and Scalability
 - a. Sustainability
 - b. Scalability

To ensure that end users are empowered, the evaluation will need the active involvement of multiple stakeholders from the beginning. This will help gather comprehensive input to address the real needs and barriers to effective care provision. Following this approach, the evaluation team will create and distribute a questionnaire before and after the pilot implementation to collect both quantitative and qualitative data on all aspects of care.

To clarify, a **pre-questionnaire** will be administered before the pilot implementation to establish the baseline— creating a reference point against which change can be measured. It will provide information addressing indicators such as beneficiaries' health status, providers' workload, and systems' usability. **The post-questionnaire** will be administered after the pilots to compare responses and measure changes over time.

The pre-post-analysis will consider multiple perspectives, promoting participation and ownership to improve the acceptance and long-term viability of the PROCAREFUL model. Furthermore, by gathering data before and after the interventions, the questionnaires will help establish causal relationships between the pilots and health outcomes. The overall objective is to gain insight into specific areas where the PROCAREFUL model is most effective and to maximize continuous improvement.

To summarize, the evaluation aims to build a model to quantify the changes generated by the pilots. These changes are expected to provide a thorough understanding of the impact of project activities on system organization and quality of care, offering actionable insights to guide future improvements and policy strategies.

<p>Implementation phase of action plan: 3.5. Evaluation</p>	<p>Insert evaluation framework into your action plan, chapter 3. Implementation phase, subchapter 3.5. Evaluation.</p>
---	--



4. POST-IMPLEMENTATION PHASE

4.1. CELEBRATION AND NEXT STEPS AT PILOT SITES

Topic	END OF THE PILOTS
Information	Celebrating and acknowledging participants at the end of the pilot is crucial for recognizing their contributions and fostering a sense of accomplishment. It helps build morale and reinforces the value of their involvement. Additionally, outlining the next steps at the pilot sites ensures a smooth transition from the pilot phase to full implementation, maintaining momentum and clarity on future actions. This approach not only honours the participants' efforts but also sets the stage for continued success and engagement.
4 Post implementation phase of action plan: 4.3. Sustainability - celebration and next steps	Map next steps after the end of the pilot. Plan for an event at the end of the pilot. Include those steps and plan for an event into your action plan, chapter 4 Post-implementation phase, subchapter 4.3. Sustainability - celebration and next steps.

4.2. DEFINITION OF THE CARE AND DIGITAL COMPETENCES TO BE UPSKILLED FROM CARERS PERSPECTIVE

PROCAREFUL hybrid model is designed to prevent or slow down cognitive and physical decline and reduce social isolation. By promoting the development and maintenance of healthy habits, the model aims to enhance people's well-being, sustaining their autonomy and independence.

A key component of the model is the digital platform that supports the creation and maintenance of healthy habits in people's daily routines. This platform is not only a tool for self-management, but also serves as a remote monitoring system for healthcare professionals. By enabling remote monitoring, the platform helps to reduce the burden on caregivers and healthcare providers.

The challenge lies in ensuring this platform is adaptable to the diverse care contexts in Central Europe. This includes accommodating varying organizational structures, regulatory environments, and methods of care delivery. The platform should be flexible enough to integrate into different care systems while providing holistic, preventive care. Ultimately, the success of the hybrid model depends on its ability to address these complexities and deliver a comprehensive, user-centred solution that meets the need of seniors and their caregivers.

Building on users and practitioners needs identified in the research phase, the following roles and responsibilities were allocated as part of the platform (Deliverable 1.4.2.):

Role	Description	Responsibilities	Features
Senior	Individuals aged 55 and over who use the platform to enhance their cognitive and physical well-being	Engage actively in cognitive exercises, physical activities, and	<ul style="list-style-type: none"> • Cognitive games • Physical activities: <ul style="list-style-type: none"> ○ Physical activities



	through personalized activities and health monitoring.	personal growth challenges provided on Procareful.	<ul style="list-style-type: none"> ○ Breathing exercises ○ Walking ● Personal growth challenges
Informal Caregiver	Typically family members or friends of seniors who provide unpaid care and support.	<ul style="list-style-type: none"> ● Monitor the well-being and activities of the seniors they care for. ● Participate in communication channels to coordinate care with formal caregivers. ● Assist with daily activities and ensure the senior's comfort and safety. 	<ul style="list-style-type: none"> ● Dashboard with senior engagement data ● Notification Center ● Performance warnings ● Senior profile ● Documents ● Notes ● Care Plan ● Senior Details
Formal Caregiver	Professionals such as health care professionals, psychologists, volunteers who provide professional care and support to seniors.	<ul style="list-style-type: none"> ● Assess the condition and health status of seniors. ● Develop personalized care plans based on assessments and individual needs. ● Monitor condition and track progress over time. ● Communicate effectively with other caregivers and seniors. ● Provide medical, therapeutic, or rehabilitative care as needed. ● Document care provided and maintain accurate records. 	<ul style="list-style-type: none"> ● Dashboard with Senior's engagement data ● Notification Center ● Performance Warnings ● Condition Assessment form ● Care Plan: <ul style="list-style-type: none"> ○ Assigning ○ Building ○ Editing ● Senior Profile <ul style="list-style-type: none"> ○ Documents ○ Notes ○ Care Plan ○ Senior Details
Institution	Care and service providers within a community. It employs caregivers and coordinates resources to ensure seniors' well-being.	<ul style="list-style-type: none"> ● Provide support and services to seniors within the community. ● Employ and manage caregivers to ensure adequate support for seniors. ● Coordinate resources and services to meet the needs of seniors effectively. ● Monitor caregiver workload and roles distribution using Procareful. 	<ul style="list-style-type: none"> ● Dashboard with Institution Data: <ul style="list-style-type: none"> ○ Caregivers workload ○ Roles distribution ○ Statistics ● Users management



Head Admin	Technical administrator responsible for managing Procareful at a country level.	<ul style="list-style-type: none"> • Create and manage accounts for institutions within Procareful. • Manage institution owners and their access permissions. • Provide technical support to users of Procareful. 	<ul style="list-style-type: none"> • Create Institution • Manage Institutions <ul style="list-style-type: none"> ○ Managing Institutions Administrators ○ Activating/deactivating institutions
------------	---	--	---

Looking at the responsibilities and features digital competences that can be upskilled can be observed.

From non-technical perspective of the model carers are expected to gain following competences:

- Understanding of ageing and needs in old age
- Understanding and know-how on topic of learning new habits
- Understanding and know-how on topic of holistic health prevention
- Understanding of communication and new communication tools
- Understanding and know-how on topic of motivation

For description of specific competences and skills please refer to Training manual (Deliverable 1.3.1.).

4 Post implementation phase of action plan: 4.4. Sustainability - creation of a value	Think about which competences can be upskilled in your pilot and include them into your action plan, chapter 4 Post-implementation phase, subchapter 4.3. Sustainability - creation of a value.
---	---

4.3. CREATION OF A VALUE PROPOSITION IN TERMS OF BUSINESS MODEL FOR ITS FURTHER SUSTAINABILITY

PROCAREFUL VALUE PROPOSITION

PROCAREFUL is transforming the landscape of home care for individuals aged 55 and older by integrating cutting-edge technology with compassionate care. Our innovative platform is designed to bridge gaps in care access and enhance the quality of life for seniors through a hybrid model that combines technology with human touch.

CORE VALUE PROPOSITION

1. **Enhanced Accessibility and Quality of Care:** PROCAREFUL'S platform increases access to home care services, ensuring that seniors receive high-quality, personalized care regardless of their location. Our MVP features include:
 - **For Institutions:** Streamlined user management tools to track engagement and ensure compliance.
 - **For Carers:** Comprehensive tools for condition assessment, activity recommendations, and efficient communication.
 - **For Seniors:** Engaging cognitive games, physical exercises, and personal growth challenges with an intuitive user interface.
2. **Future-Ready Features:** Post-MVP, PROCAREFUL will further enhance its capabilities with:



- **Advanced Communication Tools:** Real-time in-app chat and push notifications for better coordination.
 - **AI-Driven Insights:** Improved activity recommendations using machine learning.
 - **Community Engagement:** Tools for organizing local events and activities.
 - **Mobile Integration:** Native app for seniors with integration options for other health apps.
 - **Enhanced Gamification:** Reward systems and a broader range of activities to boost engagement.
3. **User-Centric Design:** PROCAREFUL is designed with user needs at the forefront:
 - **Seniors:** A user-friendly platform that supports cognitive and physical health with ease of navigation.
 - **Carers:** Tools that simplify tracking, communication, and engagement.
 - **Institutions:** Administrative features for managing roles, compliance, and user engagement.
 4. **Collaborative Network:** As part of deliverable D 1.4.3, PROCAREFUL has established a Network of Cooperating Organizations. This network connects regional stakeholders to support the architecture and functionality of the PROCAREFUL model in their respective countries. The collaboration fosters the innovative design of the home care model and promotes its adoption, replicability, and sustainability across the Central Europe (CE) area.
 5. **Sustainable Impact:** PROCAREFUL'S hybrid home care model is built for scalability and sustainability. By leveraging digital tools and a network of regional partners, PROCAREFUL ensures that the solution not only addresses current needs but is adaptable and resilient for future demands.

PROCAREFUL is not just a platform; it's a commitment to improving the lives of seniors through innovative technology, non-technical skills and collaborative effort. By bringing together developers, formal and informal cares, older people and other stakeholders PROCAREFUL is paving the way for a future where quality home care is accessible, personalized, and PROACTIVE.

Value proposition will be further supported and enhanced once evaluation results become available.

<p>4 Post implementation phase of action plan: 4.4. Sustainability - creation of a value</p>	<p>Think about the value of the PROCAREFUL hybrid model in terms of potential business model and include that into your action plan, chapter 4 Post-implementation phase, subchapter 4.3. Sustainability - creation of a value.</p>
--	---