Support 4 Resilience

Funded by the European Union

DELIVERABLE No. – D3.3

Final version dated 26/10/2025

Project Acronym	Support4Resilience
Project Full Name	Strengthening resilience and mental wellbeing through the Support4Resilience toolbox for leaders in elderly care
Grant Agreement No.	Project 101136291
Programme / Call/ Instrument	HORIZON-HLTH-2023-CARE-04/Horizon Europe
Lead Beneficiary	University of Stavanger
Start date of Project	01.03.2024
Duration	48 months
Deliverable No.	D3.3
Type of Deliverable	R- Document, Report
Document name	20251026-S4R_D3.3_Intervention design _FINAL
Work Package	WP3
Task No.	3.3.
Dissemination Level	PU-Public
Contractual Submission Date	26.10.2025 (Month 20)
Actual Submission Date	20.10.2025
Main Author(s)	Malin Rosell Magerøy (UIS) Cecilie Haraldseid- Driftland (UiS)
Institution	University of Stavanger
E-mail	malin.r.mageroy@uis.no
Abstract	This deliverable outlines the S4R toolbox intervention design, including its principles, contexts, team roles, and phases, guided by the MRC framework to ensure adaptable, evidence-based implementation across healthcare settings.

Support4Resilience
Funded by the European Union

DISCLAIMER

The work associated with this report has been carried out in accordance with the highest technical standards and Support4Resilience partners have endeavoured to achieve the degree of accuracy and reliability appropriate to the work in question. However, since the partners have no control over the use to which the information contained within the report is to be put by any other party, any other such party shall be deemed to have satisfied itself as to the suitability and reliability of the information in relation to any particular use, purpose or application.

Under no circumstances will any of the partners, their servants, employees or agents accept any liability whatsoever arising out of any error or inaccuracy contained in this report (or any further consolidation, summary, publication or dissemination of the information contained within this report) and/or the connected work and disclaim all liability for any loss, damage, expenses, claims or infringement of third-party rights.

Support 4 Resilience
Funded by the European Union

Table of Contents

Support 4 Resilience
Funded by the European Union

VERSION HISTORY

Date	Version	Editors	Status
08.10.2025	1.0	Malin R. Magerøy, Cecilie Haraldseid-Driftland	Draft circulated for comments
13.10.2025	2.0	Malin R. Magerøy, Cecilie Haraldseid-Driftland	Revised with comments and amendments. Final draft circulated.
20.10.2025	FINAL		Uploaded to EU portal after WPCT approval

1 EXECUTIVE SUMMARY

The Support4Resilience (S4R) project is dedicated to developing, implementing and evaluating a research-based Toolbox to support healthcare leaders in improving healthcare workers' and informal caregivers' resilience and mental wellbeing in elderly care.

Deliverable D3.3 outlines the intervention design of the Support4Resilience (S4R) toolbox, describing its underlying principles, contextual settings, and the composition and responsibilities of the different intervention teams, as well as the sequential phases of the intervention. The design is guided by the Medical Research Council (MRC) framework for complex interventions and provides a structured yet adaptable framework that supports implementation across diverse healthcare contexts and countries, promoting consistency, local relevance, and sustainability in strengthening organizational resilience and mental wellbeing in elderly care.

The toolbox will be implemented in six different countries: Finland, the Netherlands, Romania, Italy, Spain, and Norway. The S4R intervention will last 12 months, and consist of three different phases, each of which will correspond with the different tools in the toolbox.

Support 4 Resilience
Funded by the European Union

2 AIM

This document aims to present the Support4Resilience (S4R) toolbox intervention design, outlining its guiding principles, contextual settings, team structures, and sequential implementation phases within the MRC framework for complex interventions.

3 IMPLEMENTATION FRAMEWORK

Support4Resilience aims to strengthen organizational resilience and promote mental wellbeing among staff in elderly care services across diverse contexts. Developing interventions that support these goals requires a systematic and theory-informed approach. Given the complexity of healthcare environments—characterized by high demands, emotional strain, and organizational pressures—interventions must be designed in alignment with the contextual and structural factors that influence implementation and the sustainability of improvements.

To ensure both practical relevance and scientific rigor, the intervention design is guided by the Medical Research Council (MRC) framework for complex interventions (Skivington et al., 2021). The updated MRC framework provides a comprehensive guide that emphasizes theoretical foundations, stakeholder engagement, contextual analysis, and progressive adaptation. It consists of four main phases: *development, implementation, feasibility, and evaluation*. Each phase includes core elements that must be considered throughout the process: understanding context, developing, refining and re-testing programme theory, engaging stakeholders, identifying key uncertainties, refining the intervention, and considering economic factors. A research programme may begin at any phase, and repeating phases is encouraged to ensure continuous improvement. These core elements should be addressed iteratively to build a robust development process grounded in theory and context. The MRC framework has been used as the foundation for planning this intervention and will continue to guide all stages of implementation, feasibility testing, and evaluation.

4 CONTEXTS

The intervention will be implemented across six countries—Norway, Finland, Romania, Italy, Spain, and the Netherlands—organized into four distinct test cases. These test cases were selected to reflect the diversity of elderly care structures across Europe and to enable evaluation of the intervention in varied organizational and cultural contexts.

Test Case 1: Norway and Finland

This test case focuses exclusively on homecare services, which represent a well-established and common model of care delivery in both countries. Each country has recruited 15 homecare units, for a total of 30 units. Each unit includes approximately 30 staff members and one frontline leader. The selected units represent variations in

geographical location (urban and rural) and travel distance for healthcare workers and informal caregivers.

Test Case 2: Spain

This test case will be conducted in public residential care institutions in Spain. This context is particularly relevant for several European countries where elderly care is primarily provided through publicly funded services. By testing the intervention within public sector settings, the project enhances its relevance and transferability to similar service models across Europe.

Test Case 3: Italy and the Netherlands

This test case applies the intervention in private residential care settings. In Italy, implementation will involve one of the consortium partners (FCCM), with approximately 450 employees and 500 residents. The Netherlands will contribute additional perspectives from the private sector, allowing for comparative insights into non-public care models.

Test Case 4: Romania

Representing a region where homecare services and residential care homes are less common, this testcase focuses on the hospital-to-home interface. In Romania, elderly care is mainly provided by hospitals or family members. The intervention will be tested in one hospital, providing valuable insights into transitional care and opportunities to strengthen organizational resilience within this type of healthcare system.

5 INTERVENTION TEAMS: ROLES AND COMPOSITION

The intervention design is structured around four teams, each with specific roles and responsibilities throughout the intervention. These teams are the Intervention Design Team, the Principal Learning Collaborative, the Local Learning Collaborative, and the Activities with Staff group. See Table 1:

Team	Members	Main tasks
Intervention Design Team	6-8 researchers from consortium coordinator	Plan intervention phases and steps, train PLC members, prepare written material for empirical partners, collect feedback and revise content and intervention tasks if needed. Host PLCs
Principal Learning Collaborative	Intervention team members and 1-2 representatives from all empirical partners	Prepare meetings in the local learning collaboratives, adapt intervention design to local context, provide feedback from local context to IDT to ensure necessary adaptations and adjustments.
Local learning Collaboratives	Empirical partners from local region and all frontline leaders involved in the implementation	Prepare meetings in the local learning collaborative
Activities with staff	Leaders and staff at own unit	Perform activities suggested by the S4R toolbox together with own unit leader

Table 1: Overview of intervention design teams, participants and tasks.

Support 4 Resilience
Funded by the European Union

5.1 INTERVENTION DESIGN TEAM (IDT)

The Intervention Design Team (IDT) consists of a group of 6–8 researchers. The team's main responsibility is to plan all stages of the implementation process, including developing the written materials required for conducting all workshops within the intervention. The IDT is also responsible for training all members of the Principal Learning Collaborative (PLC), thereby equipping empirical partners with the necessary information and training to ensure smooth implementation in their respective countries.

The IDT hosts the PLC meetings and supports empirical partners in planning their Local Learning Collaboratives (LLCs). It also facilitates continuous feedback loops between the IDT, PLCs, and LLCs, revising the intervention as needed based on input received. Particular attention is paid to the core elements outlined in the MRC framework. The team is led by researchers from the University of Stavanger (UiS) and will hold regular meetings both before and throughout the entire intervention period.

5.2 PRINCIPAL LEARNING COLLABORATIVE (PLC)

The Principal Learning Collaborative (PLC) comprises the intervention team and representatives from all empirical partners (NOR, NED, ROM, IT, FI, ES), totaling approximately 20 members. The main aim of the PLC is to provide all empirical consortium partners with the knowledge and training necessary for effective implementation in their respective countries.

Each PLC meeting will focus on how the upcoming phase should be adapted to local cultural contexts and stakeholder needs, and on planning the corresponding Local Learning Collaboratives (LLCs) in each country. The PLC will meet every two months (six meetings in total), with each session held prior to the start of a new intervention phase. The PLC will be hosted by the IDT and will ensure that feedback is systematically collected from all empirical partners throughout the process.

5.3 LOCAL LEARNING COLLABORATIVES (LCC)

A Local Learning Collaborative (LLC) will be established in each of the six empirical countries. Each LLC will consist of 2–4 representatives from the local consortium partner and a group of frontline leaders from that country. The main purpose of each LLC is to train frontline leaders in using the digital toolbox, gather feedback and experiences from leaders after each phase, and prepare them for upcoming activities with their staff.

The number of LLCs will vary by country, depending on local context and practical considerations. Some partners may be able to gather all frontline leaders in a single LLC, while others may require several separate groups. Each empirical partner is responsible

for hosting the LLCs in their region and for providing feedback from each phase to the PLC. A total of six LLC meetings will be held in each country over the 12-month intervention period.

5.4 ACTIVITIES WITH STAFF (AWT)

In addition to participating in the Local Learning Collaborative, each frontline leader is responsible for conducting regular activities with their local staff within their own unit. The specific activities will be guided by the S4R toolbox and may vary across organizations, depending on local context and input.

Each frontline leader must conduct a minimum of six activities during the 12-month intervention, involving at least 15 staff members per session. These activities should take place before the next LLC meeting (within two months). Frontline leaders are also responsible for providing feedback to the LLC, contributing to the continuous refinement of the toolbox and intervention design.

5.5 INTERVENTION TEAM STRUCTURE

The IDT holds overall responsibility for the intervention and its phases, in collaboration with the PLC. The number of LLCs and Activities with Staff (AWS) will vary by country, depending on local context and the number of participating organizations at each site. An overview of the overall team structure is provided in Figure 1.

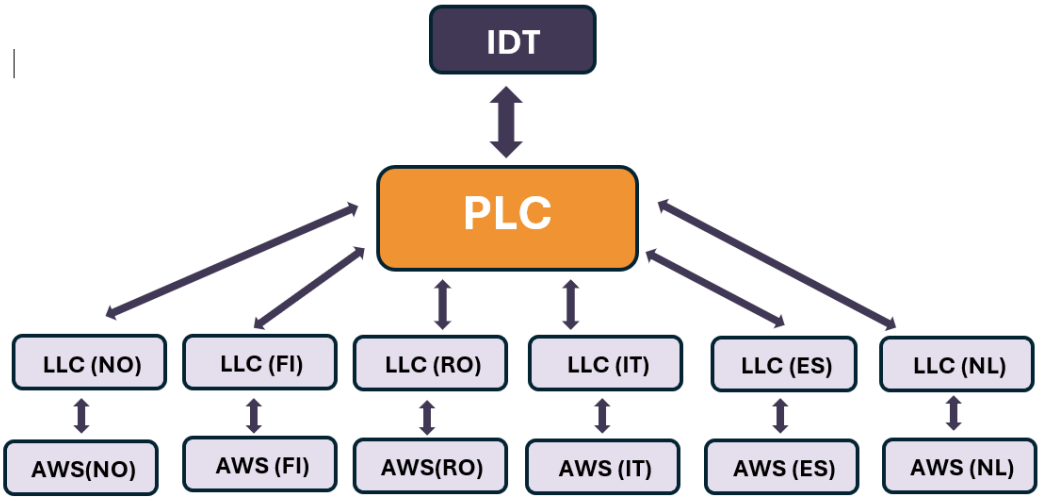

Figure 1: Overview of intervention team structure

6 IMPLEMENTATION

6.1 UNDERLYING INTERVENTION DESIGN PRINCIPLES

Given the demanding and often stressful nature of work in elderly care, the intervention design must be closely aligned with everyday practice to avoid being perceived as an additional burden by leaders (Lawton & Thomas, 2022). Furthermore, the variation in contexts and settings across countries and organizations requires a flexible and context-sensitive approach. To ensure feasibility and relevance across diverse environments, the intervention is built on three overarching principles: the Train-the-Trainer methodology, structured adaptability, and a collaborative, reflective, cross-stakeholder approach. These principles are informed by key theoretical frameworks that emphasize capacity building, contextual alignment, and sustainable learning.

6.1.1 Train the Trainer methodology

The Train-the-Trainer (TTT) model is central to the intervention's implementation strategy and aligns with the MRC framework's focus on capacity building and sustainability within complex systems.

TTT is recognized as a cost-effective and scalable approach for disseminating knowledge and fostering innovation (Pearce et al., 2012). By equipping key personnel with context-specific skills, the model promotes local ownership and autonomy, reducing reliance on external facilitators and supporting long-term integration. Local staff possess valuable contextual knowledge, allowing them to tailor training activities to their unit's specific needs and circumstances. The TTT approach also facilitates broader knowledge sharing, minimizing the risk of dependency on a single gatekeeper and promoting a shared understanding across organizational levels. This is particularly important when introducing complex concepts such as organizational resilience, as it ensures that competence is distributed widely and that the work can continue sustainably without external researchers or consultants.

The TTT approach is applied at two levels within the intervention design. First, the Intervention Design Team (IDT) uses the approach to train all empirical partners through the Principal Learning Collaborative (PLC). Since the PLC includes members from each empirical partner, the TTT design allows space for cultural and contextual adaptation in each country. Second, members of the PLC apply the TTT approach within their Local Learning Collaboratives (LLCs), where empirical partners train frontline leaders in how to use the S4R toolbox. During this stage, frontline leaders receive guidance on how to adapt and apply the toolbox within their own units and local contexts.

6.1.2 Structured Adaptability

The second guiding principle of the intervention is structured adaptability, which combines a clear overarching framework with the flexibility required to accommodate diverse local contexts. This principle is directly informed by the MRC framework for complex interventions (Craig et al., 2008; Skrivington et al., 2021; Greenhalgh et al., 2008, Sun et al., 2024, Wensing & Strasner, 2023), which emphasizes designing interventions that are both theoretically robust and practically adaptable to real-world complexity.

While the intervention provides a coherent structure—including defined phases, tools, and recommended practices—it also allows teams to adapt to their specific contexts, in line with MRC guidance. Participants are given access to a toolbox that supports mental wellbeing and organizational resilience, along with an intervention design describing how to use the tools between workshops and engage staff effectively. However, the use of the toolbox is intentionally flexible. Leaders are encouraged to follow the recommended structure, such as conducting a set number of meetings with staff during Tool 2, but they may adjust the format, frequency, and integration based on what works best locally. The toolbox remains accessible throughout the intervention period, supporting ongoing engagement and adaptation. adaptation.

Structured adaptability ensures that the intervention is not perceived as rigid or top-down but as a supportive framework that promotes local ownership, relevance, and sustainability. By balancing structure with adaptability, the intervention fosters meaningful engagement, supports continuous learning, and enhances the likelihood of long-term integration—key objectives highlighted in the MRC framework.

6.1.3 Collaborative, reflective and cross stakeholder level approach

The third foundational principle of the intervention emphasizes collaboration, reflection, and engagement across stakeholder level - an essential approach for addressing complex challenges in healthcare.

The intervention is designed to promote shared learning, structured reflection, and dialogue across professional roles, organizational levels, and national contexts. This principle is operationalized through the Principal Learning Collaboratives (PLCs), Local Learning Collaboratives (LLCs), and structured staff activities. These collaborative arenas allow participants to share experiences, co-develop insights, and build a culture of mutual learning, psychological safety, and collective inquiry. At the unit level, leaders and staff participate in joint reflection sessions that reinforce continuous improvement and organizational resilience.

This approach recognizes that complex healthcare challenges require learning across boundaries. By facilitating interaction between teams, institutions, and countries, the

intervention draws on diverse perspectives and experiences, enhancing collective understanding and adaptive capacity. Collaborative learning arenas that bridge organizational and hierarchical boundaries foster trust, shared understanding, and innovation (Haraldseid-Driftland et al., 2023). These qualities are vital for building resilient organizations capable of sustaining change over time.

Furthermore, this principle reflects core concepts from implementation science, emphasizing stakeholder engagement, contextual responsiveness, and iterative learning. By embedding reflection into everyday routines, the intervention supports long-term relevance, local ownership, and meaningful participation across varied settings.

6.2 INTERVENTION DESIGN PHASES

The S4R intervention is structured into three sequential phases, each aligned with a specific tool in the S4R toolbox. Throughout these phases, frontline leaders engage with different components of the toolbox and participate in activities designed to strengthen mental wellbeing and organizational resilience.

The full intervention spans 12 months. Six learning collaboratives will be established—one in each participating country - alongside a Principal Learning Collaborative (PLC) that brings together representatives from all six countries. In each country, a designated intervention team, composed of consortium partners, will be responsible for coordinating the Local Learning Collaborative (LLC) and overseeing the overall implementation of the intervention at the national level (figure 2). These teams ensure that the intervention is delivered consistently while allowing for cultural and contextual adaptation.

To support implementation, workshop templates will be developed, outlining the content, instructions, and required materials. Frontline leaders will also receive a practical guide explaining how to use the tools between workshops and how to engage staff effectively. These resources enable a structured yet flexible approach, ensuring coherence across sites while promoting local ownership and adaptability.

This phase and collaborative structure reflect key principles from established intervention frameworks, emphasizing iterative development, stakeholder involvement, and contextual sensitivity. It also supports outcomes such as adaptation, effective implementation, and long-term sustainability by embedding the intervention into existing organizational routines and encouraging active engagement across all levels. See Figure 2 for an overview of the collaborative structure and Table 1 for a summary of the workshop components.

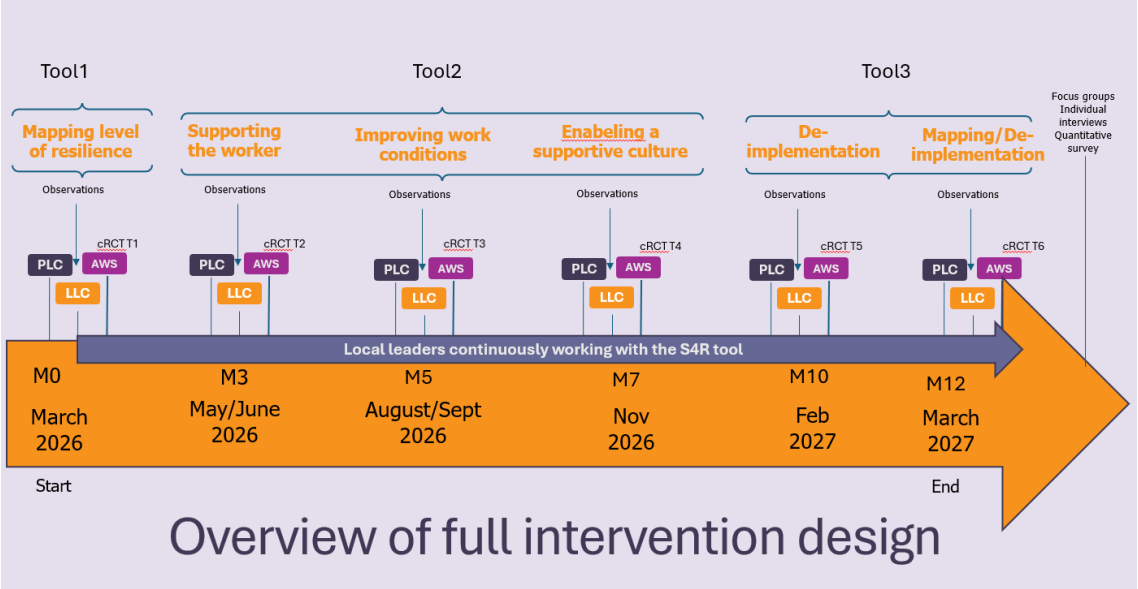

Figure 2: Overview of intervention design.

6.2.1 Mapping and Identification (Months 0-2)

Phase 1 takes place during months 0–2 and is linked to **Tool 1: The Mapping and Identification Tool**. The purpose of this tool is to raise awareness and identify how leaders, healthcare professionals, and informal caregivers perceive their daily work, mental wellbeing, and organizational resilience within their current healthcare setting.

This phase includes one meeting within the Principal Learning Collaborative (PLC), where participants are introduced to Tool 1 and plan the upcoming workshop in the Local Learning Collaborative (LLC). In the LLC, one workshop will be conducted in which leaders engage with the tool, complete the survey, and generate a QR code to provide digital access for employees and informal caregivers.

Following the workshop, leaders are expected to organize meetings with their staff to review and discuss the survey results within their respective units. These discussions aim to foster shared understanding and initiate reflection on current practices and perceptions related to mental wellbeing and organizational resilience.

6.2.2. Phase 2: Education and Reflection (Months 3-9)

Phase 2 takes place between months 3 and 9 and is centered on **Tool 2: The Reflection and Education Tool**. This tool is designed to promote learning and reflection on how leaders and staff can strengthen mental wellbeing and organizational resilience within their workplace. Tool 2 consists of three modules, each containing two sub-themes, resulting in a total of six sub-themes.

This phase includes three meetings within the Principal Learning Collaborative (PLC) - one for each module. These meetings focus on familiarizing participants with the module content and planning the corresponding workshops within the Local Learning Collaboratives (LLCs). In the LLCs, three workshops will be held to introduce leaders to the modules, guide them in conducting educational activities, and support them in planning the related staff sessions. Reflection and evaluation of previous workshops and staff activities will also be included in the agenda.

The educational component for leaders aims to deepen their understanding of the sub-themes and prepare them to lead reflective activities with their staff. These activities can be conducted at any point during Phase 2 but should ideally be completed before engaging staff in the corresponding topics. Each leader is expected to hold a minimum of three - and preferably six - meetings with staff, one or two per module.

During these meetings, participants will review scenario-based materials and engage in reflective discussions on how the themes relate to their own unit and where improvements can be made. Leaders are encouraged to begin with the module on which they scored highest in Tool 1, although the order may be adjusted to fit local priorities. While one meeting per sub-theme is recommended, leaders may combine sub-themes or focus on fewer topics depending on operational constraints. Throughout these discussions, leaders are likely to identify key insights, ideas, and proposed changes, which will serve as input for the next phase of the intervention.

6.2.3 Phase 3: Re-organizing and De-Implementation (Months 10-12)

Phase 3 takes place during months 10–12 and is linked to **Tool 3: The Re-Organizing Tool**. The purpose of this tool is to support the re-organization or de-implementation of work tasks and processes that are suboptimal or of limited value within the current healthcare setting.

This phase includes one meeting within the Principal Learning Collaborative (PLC), where participants are introduced to Tool 3 and plan the upcoming workshop in the Local Learning Collaborative (LLC). In the LLC, one workshop will be held to familiarize leaders with the purpose and application of the tool and to prepare them for the next cycle of improvement activities.

During this phase, leaders and staff focus on identifying opportunities to improve workflows, including practices that may need to be modified, reorganized, or discontinued. These discussions form the basis for developing a concrete action plan that outlines proposed changes. It is important to note that ideas for re-organization or de-implementation may already emerge during Phase 2 through workshops and staff

Support 4 Resilience
Funded by the European Union

activities. Leaders are expected to integrate these insights into the discussions and planning process during Phase 3.

	Participants	Activity	Output
Tool 1	PLC & LLC	2-hour workshop: Tailoring intervention to context, introducing resilience and wellbeing concepts	Frontline leaders develop a written process plan (who, when, where, how)
	Frontline leaders, workers, informal caregivers	20-minute individual questionnaire	Automatically generated tool: overview of status based on stakeholder input
	Frontline leaders & healthcare workers	1-hour group discussion on survey results	Priority list of topics for deeper exploration in Tool 2
Tool 2	PLC & LLC	2-hour workshop: Follow-up and planning for Tool 2	Concrete, written action plan for group discussions
	Frontline leaders	Individual training in Tool 2 (Part 1): Learning activities for leaders	Leaders develop understanding of resilience and create action plan for group discussions
	Frontline leaders & healthcare workers	Minimum 3 × 1-hour group discussions using reflexive scenario module	Key learning points identified, and practices reframed
Tool 3	PLC & LLC	2-hour workshop: Follow-up and planning for next iteration	Preparation for continued implementation
	Frontline leaders	Collect input on practices needing change; assess for de-implementation	Action plan: practices to maintain, change, or discontinue
	Frontline leaders & healthcare workers	Provide input on unnecessary practices and action plans	Identification and discontinuation of impractical procedures

Table 2: Overview of participants, activities, and outputs for the different intervention phases.

Support 4 Resilience
Funded by the European Union

7 EVALUATION

In line with the principles outlined in the MRC framework for complex interventions, the intervention is designed to remain adaptive and responsive to emerging insights. A continuous evaluation strategy is embedded throughout the implementation process, enabling systematic collection of feedback from participants, facilitators, and stakeholders. This feedback is used to identify unforeseen challenges, contextual variations, and opportunities for improvement.

Through this ongoing process of learning and adaptation, the intervention design is progressively refined to ensure its relevance, feasibility, and effectiveness across diverse settings. This approach aligns with the MRC's emphasis on iterative development, contextual sensitivity, and stakeholder engagement throughout the intervention lifecycle. Evaluation, refinement, stakeholder involvement, and the continuous testing and retesting of the programme theory will be the main responsibility of the Intervention Design Team (IDT) and will occur throughout the intervention as an integral part of the feedback loops between the various teams.

In addition, observations will be conducted at all Local Learning Collaboratives (LLCs). Each participating country will carry out 3–5 focus group interviews with leaders and 3–5 focus group interviews with healthcare workers (nurses, doctors, and other staff), as well as 10 individual interviews with informal caregivers after the intervention has been completed. The effectiveness of the S4R toolbox will be assessed through both a cluster randomized controlled trial (in Norway and Finland) and a pre–post evaluation using empirical data from WP2 combined with data collected in WP4.

Each participating country is responsible for ensuring that all data generated through the intervention is managed and stored in compliance with national regulations and institutional policies. Likewise, all partners are individually responsible for obtaining ethical approval from their respective ethics committees or institutional review boards before initiating any data collection or implementation activities.

Funded by the European Union

8 REFERENCES

Craig, P. et al., (2008). Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ* 2008; 337 doi: https://doi.org/10.1136/bmj.a1655

Greenhalg, T., et al., (2008). Diffusion of innovations in health service organisations: a systematic literature review.

Haraldseid-Driftland, C., Aase, K., Wiig, S., & Ree, E. (2023). Collaborative learning across levels and boundaries: a qualitative study of resilience training in health and social care services. BMC Health Services Research, 23, 1107. https://doi.org/10.1186/s12913-023-09653-8

Lawton, R. and E.J. Thomas, *Overcoming the 'self-limiting'nature of QI: can we improve the quality of patient care while caring for staff?* 2022, BMJ Publishing Group Ltd.

Pearce, J., et al., *The most effective way of delivering a Train-the-Trainers program: A systematic review.* Journal of Continuing Education in the Health Professions, 2012. **32**(3): p. 215-226.

Skivington, K., et al., (2021). A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance. *BMJ.* https://doi.org/10.1136/bmj.n2061

Sun, L., Booth, A., & Sworn, K. (2024). Adaptability, Scalability and Sustainability (ASaS) of complex health interventions: a systematic review of theories, models and frameworks

Wensing, M., Straßner, C. (2023). Development of Interventions in Health Care. In: Wensing, M., Ullrich, C. (eds) Foundations of Health Services Research. Springer, Cham. https://doi.org/10.1007/978-3-031-29998-8_12