Support 4 Resilience

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Abstract	This report highlights the role of frontline leaders in mediating resilience, providing insights for theory development, policy recommendations, and practical implementation across European healthcare systems.

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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.

S4R will identify resilience and mental wellbeing factors among healthcare workers and informal caregivers; explore their perspectives and needs; develop new theory on the relationship between individual and organizational resilience, and mental wellbeing; and develop policy recommendations and cost-effective interventions. The Toolbox with tailormade resources for policy and practical use will be available through an open access S4R Resource Bank.

The key goals of deliverable 5.7 are (1) to produce practical and context sensitive implementation recommendations to support the implementation and use of the S4R toolbox, (2) develop and innovate concepts and theoretical frameworks related to health system resilience that integrates professional wellbeing and individual and organizational resilience and (3) provide policymakers with recommendations and interventions to strengthen older person care systems across Europe. This report presents a research agenda for implementing and evaluating the S4R toolbox and WP5 deliverables, including the research questions, strategy, and activities that will inform the project's theoretical contributions and its implementation and policy recommendations.

2 INTRODUCTION

Older person care across welfare states is under increasing and significant pressure. Rapid demographic aging, accompanied by a rising number of patients with comorbidities and chronic health conditions, is driving change in both the nature and the demand for services. At the same time, structural workforce shortages undermine the capacity to meet these needs (Burau et al., 2022). These workforce challenges stem from longstanding problems in the working conditions of healthcare workers. For years, care workers report experiencing a lack of autonomy, voice and career prospects, while facing heavy workloads and challenging organizational environments (Correia et al., 2025; Duijs et al., 2023; Knutsen Glette & co, 2025; Kuhlmann et al., 2024). These conditions fuel cycles of stress, burnout, and turnover, intensifying pressure on remaining staff and creating exit spirals.

The sector is further marked by high levels of service fragmentation and complex regulatory and governance frameworks (van Pijkeren et al., 2024; Schuurmans et al., 2025), while risks and recourses vary significantly across geographic regions and between community-based and institutional care settings (Johannessen et al., 2021). Together, these factors strain the continuity of care and the adaptive capacities of healthcare systems. In this context, strengthening the resilience of European older person care systems has emerged as a top priority for policymakers, healthcare managers, and academics alike (Burau et al., 2024; Oprea et al., 2025; WHO, 2022).

One of the objectives of the Support4Resilience (S4R) project is to map the policy trends and strategies that European countries adopt to make older person care more resilient. We did this through a cross-country comparative analysis. The comparative findings demonstrate that although labor trends, workforce challenges, and the organization of elderly care vary considerably across countries, policy strategies follow remarkably similar patterns (Felder & co, 2025). These include ageing-in-place policies that promote homecare and community-based services while increasingly involving and giving responsibility to informal caregivers; workforce initiatives such as task differentiation, upskilling, and job crafting to optimize staff use and career pathways; integration of services to align regulatory and financial regimes and reduce professional silos; and the use of technology to support these policies and transitions.

2.1 FOCUS OF S4R: FRONTLINE LEADERS

Within this context, the S4R project focuses specifically on the role of frontline leaders in adopting, implementing and making sense of these change processes and in fostering the resilience of older person care systems. Frontline leaders are targeted because they are in the ‘multiple middle’ (Oldenhof, 2015), positioned between policy change, organizational management, and frontline practice. Research has extensively shown that this position enables them to play a critical and strategic role in change processes and in promoting individual and organizational resilience (Akerjordet et al., 2018; Bowman, 2022; Knutsen Glette & co, 2025; Lyng et al., 2021). At the same time, their position is often precarious, as they need to navigate and mediate between different organizational levels, value complexities and manage (new) vulnerabilities and interdependencies

between patients and formal and informal caregivers (Felder et al., 2024; Gräler, 2024; Oldenhof, 2015).
In the literature, healthcare resilience is increasingly approached and conceptualized as a relational and layered phenomenon (Borst et al., 2023; Knutsen Glette & co, 2025). Rather than framing resilience as an individual capacity or systemic outcome, resilience is considered an adaptive capacity that emerges from the relational dynamics between institutional layers and interdependent systems, arising through the continuous work of connecting, coordinating, and adapting practices across systemic and organizational networks and boundaries (Borst et al., 2023; Wiig et al., 2020).

Frontline leaders are critical nodes where these connections happen. They are tasked with the daily work of creating the conditions in which individuals, teams and the organization can adapt, learn and innovate in response to changing and increasingly demanding circumstances. However, knowledge of the mechanisms, interactions and practices that enable and support frontline leaders in this work is currently largely lacking. The S4R project seeks to address this gap by developing, implementing and evaluating a digital and interventionist S4R toolbox for frontline leaders using cross-country and interdisciplinary action research.

3 RESEARCH AGENDA

The main output of the S4R project and the key goal of deliverable 5.7 (development of policy implications, theory, and implementation recommendations) is to (1) produce practical and context sensitive implementation recommendations to support the implementation and use of the S4R toolbox, (2) develop and innovate concepts and theoretical frameworks related to health system resilience that integrates professional wellbeing and individual and organizational resilience and (3) provide policy makers with recommendations and interventions to strengthen older person care systems across Europe.

The aim of this report is to set out a research agenda that presents and guides how we will move from our ongoing research activities and findings to the formulation of theoretical contributions and implementation and policy recommendations, as required for deliverable 5.3. To this end, the report first introduces the scope of the S4R project in more detail, outlines our research approach and progress to date, and situates the project within wider debates on health system resilience. It then presents insights on the role of frontline leaders in supporting individual and organizational resilience, based on the literature reviews conducted within the project. Finally, it presents the research agenda for the next phase of the project (the implementation and evaluation of the S4R toolbox), which forms the foundation for the project's implications and recommendations for policy, practice and theory.

3.1 S4R PROJECT BACKGROUND AND PROGRESS

The S4R project is a four-year interdisciplinary, action-oriented research program established to support healthcare leaders with research-based tools, strategies and interventions to enhance professional wellbeing and individual and organizational resilience. The project is led by the Centre for Resilience in Healthcare (SHARE) of the

University of Stavanger and includes partners from six European countries (Spain, Italy, Romania, Finland, the Netherlands, Cyprus) and Australia. The key intervention of the S4R project is the development, implementation, and evaluation of a digital S4R toolbox, designed to support frontline leaders in their daily work of strengthening the adaptive capacities and resilient performance of healthcare organizations and workers. Specifically, the S4R toolbox is an online platform that provides frontline leaders with insights, interventions, and reflexive tools derived from both scientific literature as well as the 'work as done' and innovative ideas from work practice collected from the diverse national and healthcare context included in the project.

3.2 RESEARCH ACTIVITIES IN WP1 AND WP2

In the first (input) phase of our project (WP 1 and 2), we conducted three review studies examining the role of frontline leaders as mediators between individual and organizational resilience and in supporting professional wellbeing. We also performed a contextual mapping of the different characteristics, challenges and policy strategies and trends of older person care systems across the project partners' countries. Together, these studies inform both the content of the toolbox and guide the development of deliverable 5.7 (development of policy implications, theory, and implementation recommendations). One review has been published (Ellis et al., 2025), and two are in their final stages. Preliminary insights will be discussed in this report.

Furthermore, we conducted both qualitative and quantitative cross-country data collection in the participating countries healthcare settings. The quantitative research involved a baseline survey mapping a wide range of individual and organizational factors—including mental wellbeing, job satisfaction, level of job control, learning culture, leadership support—at the recruited sites in each country. The qualitative research involved interviews and focus groups with informal caregivers, healthcare workers and frontline leaders. These interviews explored, for example, challenges in everyday tasks, types of adverse events, situational support, adaptations that have been made or are needed, solutions to improve working and caring conditions, and strategies employed by frontline leaders to strengthen professional wellbeing, team dynamics and organizational learning. Data collection has recently concluded and is currently under analysis.

3.3 RESEARCH ACTIVITIES IN WP3 AND WP4

In the second (output) phase of the project (WP 3 and 4), we will implement and evaluate the S4R digital toolbox. The interventions consist of three stages, corresponding to the different tools in the toolbox, focusing respectively on awareness (mapping the status of the local department, team and challenges), understanding (learning and composing an action plan), and reframing (adjusting and reframing work processes, practices and routines). During these stages, frontline leaders will engage with different elements of the toolbox. They will first map the situated 'status' of their teams and gain insight into the status of current work practices and resilient capacities within their own unit. In this phase, frontline leaders and healthcare workers collectively explore in focus groups specific themes and challenges to deepen and reframe with the S4R toolbox. Next, frontline leaders will learn about available solutions, interventions and strategies for

addressing challenges, changes, and risks. Finally, they will work to reframe and innovate the identified themes and work practices.
The full intervention is planned to take 12 months. Six local learning collaboratives will be established comprising consortium researchers and local stakeholders from the healthcare settings. In addition, one principal collaborative will bring together representatives from all six empirical partners. The toolbox will be implemented in home care (Norway), as well as in private (the Netherlands, Italy) and public (Spain, Romania) healthcare organizations.

In the following, and to guide and contextualize the research agenda for implementing and evaluating the S4R toolbox and WP5 deliverables, we continue with situating the project within scientific debates on health system resilience and highlight the role of frontline leaders in mediating and supporting individual and organizational resilience. We then present the research agenda, including the strategy, approach, and key questions that will inform the project's theoretical contributions and its implementation and policy recommendations.

4 WHAT IS RESILIENCE? EXPLORING DEBATES AND BOUNDARIES

In recent years, policymaking aimed at strengthening health system resilience has co-evolved with a rapidly expanding body of resilience research across diverse academic disciplines (Copeland et al., 2023; Hillmann & Guenther, 2021). Yet health system resilience is also a contested concept (Saulnier & Topp, 2024). Different fields define and frame it in varying ways, with diverse assumptions about what resilience is, how it emerges, and how it can be supported—each carrying different implications for research, policy and practice.

In the literature, two broad perspectives can be found. The first, increasingly dominant in health services research and safety science, adopts a structural perspective. Here, resilience is understood and presented as a capacity or outcome that individuals and healthcare organizations either lack or possess. Resilience is moreover mostly understood as reactive, focused on absorbing adversity and pressures and maintaining or restoring a state of stability (Topp, 2020). Treating resilience as a (reactive) property carries the assumption that it can be built and designed into systems by putting the right structures, interventions and routines in place. Such an approach resonates with the managerial and evaluative logics of contemporary healthcare policy (Bourrier, 2019): it frames resilience as something we can rationally invest in, structure, and optimize, much like organizational efficiency, effectiveness or quality and safety. Recent WHO policy advice (WHO, 2023), for example, highlights key components or 'building blocks' of resilient older person care systems, including governance, workforce, integrated service delivery, and digital technology. The premise holds that if these structures are in place and well-designed, health systems will be better equipped to adapt to pressures and challenges.

By contrast, scholars in the social sciences have moved away from approaching resilience as a fixed 'thing'. Instead, this literature conceptualizes resilience as a relational phenomenon, drawing attention to the translational and practical work involved

(Borst et al., 2023; Knutsen Glette & co, 2025). From this perspective, resilience is seen as adaptive capacity that emerges from the relational interplay between institutional layers, interdependent systems, and the continuous work of translating and aligning dynamic practices and processes across organizational and systemic levels (Borst et al., 2023; Wiig et al., 2020). Here, resilience is not about the ability of individuals or organizations to bounce back or return to a stable prior state, but about ongoing learning, adaption and transformation. Moreover, in this perspective, resilience is not seen as an (a priori desirable) outcome but as a mechanism that contributes to high quality care (ibid.).

The S4R builds on and aims to innovate this relational literature. We define resilience in healthcare as "the capacity to adapt to challenges and changes at different system levels to maintain high quality care" (Wiig et al., 2020: 6). Healthcare resilience, in this view, is an ongoing, co-created accomplishment: built through ongoing learning and the everyday work of connecting, coordinating, and adapting structures, processes, routines and care work. This literature thereby directs analytical attention towards practice—towards what actors actually do to be resilient—and towards the mechanisms, activities, and interactive processes that enable individuals and organizations to adapt, learn, and innovate in response to increasingly demanding circumstances, change or crisis.

This is not to say that structures do not matter. Rather, a practice turn invites us to be attentive to both the structural and relational dimensions of health system resilience, and to the translational work through which actors make formal structures meaningful, workable and stable 'on the ground'. It is in this ongoing and dynamic interaction between structure and practice that resilience emerges—with middle managers positioned at the very center of these dynamics.

4.1 IN THE MULTIPLE MIDDLE

Frontline leaders are therefore of special interest in the S4R project. They are critical change agents at the organizational level and positioned at the forefront of challenges and change in the sector. In their daily work, they interpret and implement change processes, mediate between organizational levels, and respond to the immediate operational demands of their teams and individual healthcare workers. The literature has extensively examined this role, emphasizing frontline leaders' role as strategic and discursive change agents and their contributions to strengthening individual and organizational resilience (Oldenhof, 2015). At the same time, however, the role of frontline leaders itself is becoming increasingly precarious.

In a system under sustained pressure, leadership practices are shifting. Frontline leaders increasingly face and need to deal with difficult choices, value conflicts and the challenge of managing vulnerable caring networks of patients, informal caregivers and healthcare workers. In today's older person care systems, patients present themselves with increasingly complex needs and conditions; healthcare workers struggle with the compounding of precarious working conditions and precarious life circumstances—such as financial instability or the strain of combining paid work with unpaid caregiving responsibilities (Charlesworth et al., 2015; Duijs et al., 2023; Kalleberg & Vallas, 2017; Vosko & Zukewich, 2005); and informal caregivers are expected to fill systemic gaps in ways that are unequally distributed, and often gendered and racialized (Felder & co, 2025; Shrestha et al., 2023; Zygouri et al., 2021). These overlapping precarities create

a fragile and interdependent care network in which the pressures experienced by one group reverberate across others. Frontline leaders are directly confronted with this reality, and it is reshaping the dynamics of their work.

Frontline leaders are furthermore positioned—and expected—to both make sense and translate large scale change processes at the organizational while creating (and upholding) the conditions and learning environment that enable teams and individual care workers to innovate and reframe care practices in response to, and to deal with, changing circumstances. Our comparative research shows such translational work of frontline leaders include, for example, managing trade-offs and unknown territories of hiring and integrating auxiliary and self-employed workers to support care teams; involving informal networks and caregivers; experimenting with role differentiation and task shifting; and implementing new digital technologies and (community and regional) service models (Felder & co, 2025). In practice, this requires frontline leaders to find ways to establish time-spaces to engage in long-term innovations or 'second order/divergent learning' (Cunha & Clegg, 2019; Edmondson, 2004)—which can be challenging given the pressures on primary care processes, professional wellbeing and staff shortages.

4.2 FRONTLINE LEADERS AS INTERMEDIARIES OF INDIVIDUAL AND ORGANIZATIONAL RESILIENCE

It is therefore not so surprising that frontline leader's role in fostering individual and organizational resilience have received much attention in earlier scholarship. Yet, reflecting more structural approaches to resilience, much of the existing literature approaches individual and organizational resilience as separate constructs and fields of study, providing little insight into how leadership practices actively connect, mediate, and support both (Knutsen Glette & co, 2025). Similarly, research on how multi-level factors (individual, organizational, systemic) and interventions interact to shape healthcare workers' wellbeing, and how frontline leaders can use this knowledge to foster individual and organizational resilience is largely lacking (Ellis et al., 2025).
In the first phase of our project (WP1), we therefore reviewed the scientific literature to explore how individual and organizational resilience intersect, how leadership mediates and contributes to this intersection, and what multi-level strategies and interventions frontline leaders can use to enhance professional well-being and, consequently, the resilient performance of healthcare workers and organizations.

Review findings underscore that individual and organizational resilience are co-constitutive and mutually dependent, as "resilient organizations enhance individual resilience, and resilient individuals, in turn, bolster organizational resilience" (Knutsen Glette & co, 2025) p. 30). Frontline leaders take a central position in these dynamics, enabling them to mediate and influence both dimensions (ibid). The literature also identifies a range of multi-level interventions to foster professional wellbeing, including individual and team focused interventions and organizational and broader system-level strategies.

At individual and team levels, key strategies include fostering teamwork- and dynamics, safe working conditions, reflexive spaces to share experiences and mobilize input for

decision making, and establishing training and learning infrastructures (Ellis et al., 2025). Here, relational leadership is also emphasized as crucial: by offering emotional support, being accessible, fostering trust and respect, and nurturing collaborative cultures, frontline leaders can support the individual resilience of healthcare workers (Ellis et al., 2025). At the organizational level, the literature shows that leaders contribute by translating and implementing targeted organizational measures, such as time-spaces to experiment with new ways of working, coordinating and integrating services and professional domains, allocation of resources, and inclusive decision-making structures. Through these practices and strategies, frontline leaders can mediate and connect individual and organizational resilience.

Our review findings, however, also show that existing (digital) tools to support team leaders in this work largely lean towards interventions at the individual level (Vartiainen et al. 2025; Kapitsaki et al. 2025). These tools include for instance stress-management and work–life balance e-modules, meditation and tai chi apps, and gamified well-being apps (Kapitsaki et al. 2025). More reflexive and collaborative formats, such as scenario-based interactive games and online platforms for surveys or discussions that generate input for team reflection and learning, are also in use (ibid). The S4R toolbox seeks to innovate by developing and incorporating multi-level interventions and digital tools that address not only individual and team needs, but also the broader organizational and systemic contexts in which these actors operate.

5 RESEARCH AGENDA

In this section, we set out the research questions, strategy, and activities that will guide the next phase of our research work during WP 3 (toolbox development), WP 4 (toolbox implementation and evaluation), and WP 5 (theory and policy recommendations).

To briefly recap, we have recently concluded the first round of cross-country data collection. This includes I) a baseline survey mapping individual and organizational factors and characteristics at the participating healthcare sites across the partner countries, and II) qualitative data collection through focus groups and interviews with frontline leaders, healthcare professionals, and informal caregivers. The analysis of these data is currently ongoing. The emerging insights will inform both the development, implementation, and evaluation of the S4R toolbox and the theoretical and policy outputs under WP5.

Starting in January 2026, we will initiate the implementation and evaluation of the S4R toolbox at the recruited sites, which includes public and private healthcare organizations as well as home care providers. To support this process, local learning collaboratives will be established. These will bring together consortium researchers and local stakeholders (e.g. managers, frontline leaders, researchers) from the participating healthcare settings. The collaboratives will function as platforms for joint learning and play a central role in supporting and evaluating the toolbox implementation, while also contributing to the development of theory and implementation and policy recommendations (deliverable 5.3).

The remainder of this section is structured as follows. First, we outline the key research questions that will shape our ongoing research activities. We then present our research strategy and specific activities through which we aim to address these questions.

5.1 RESEARCH QUESTIONS

(1) Produce practical and context sensitive implementation recommendations to support the implementation and use of the S4R toolbox.

1.1 Frontline leader practices and needs

- What challenges do frontline leaders encounter across different older person care systems and contexts in the participating countries?
- What are strategies and activities frontline leaders use to deal with these challenges?
- What priorities do they identify in their work?
- How do frontline leaders collaborate with and manage their teams to address these priorities?
- How do frontline leaders create and uphold learning environments?
- What forms of support do they need to succeed in their role?

1.2 Role of toolbox and implementation strategies

- How can the S4R toolbox provide meaningful digital support to frontline leaders in meeting their needs?
- How can the S4R toolbox be integrated into everyday team management and care practices?
- What challenges arise in the day-to-day use of the toolbox, and what broader implementation challenges exist?

1.3 Organizational support

- What organizational support is required to enable frontline leaders to translate policy and organizational change processes into local practice?
- What types of organizational support are needed to strengthen the wellbeing and position of middle managers?

(2) Develop and innovate concepts and theoretical frameworks related to health system resilience that integrates professional wellbeing and individual and organizational resilience.

- How can we understand and articulate the practices, activities and mechanisms through which frontline leaders support individual and organizational resilience?
- How does the relational work of frontline leaders contribute to health system resilience?
- How can the concept of health system resilience be further theorized and innovated as a multi-level phenomenon?

(3) Provide policymakers with recommendations and interventions to strengthen older person care systems across Europe.

- What structural and policy challenges currently affect older person care systems across participating countries?
- How can health system resilience, including professional wellbeing and individual and organizational resilience, be supported at the macro level?
- How can digital tools, like the S4R toolbox, be scaled or supported through national/regional policy frameworks?
- How can cross-country learning inform policy adaptation and the transfer of best practices across European older person care systems?

5.2 RESEARCH ACTIVITIES

To answer these research questions, we will undertake a series of research activities during the next phase of the project (WP 4 and WP5).
In WP 4, local learning collaboratives will be established at the participating healthcare organizations, bringing together S4R researchers and organizational stakeholders. These collaboratives will explore the value of the S4R toolbox in terms of usability, technical features, support for frontline leaders, performance, effectiveness, and cost-effectiveness. This approach will enable a reflexive and formative evaluation of the implementation, use, and value of the toolbox, while also providing important input for the development of theoretical insights and policy recommendations (WP5). Specifically, the evaluation of the S4R toolbox will follow three complementary approaches: process evaluation, effectiveness evaluation and cost-effectiveness evaluation.

During the process evaluation, qualitative data collection will be conducted to understand how the toolbox is used in practice. Focus groups and training sessions will be organized to introduce and guide participants in the use of the toolbox, as well as to reflect on its application and value in local practice. These sessions and interviews will also provide opportunities to collaborate with frontline leaders in experimenting with and reframing work practices and processes, using the toolbox environment to do so.

Findings from the local collaboratives and qualitative evaluations will be discussed within the wider S4R research group. Thematic reflection sessions will be organized to triangulate insights relevant for WP5 deliverables. In addition, a broad range of stakeholder engagement activities and meetings—involving patients, informal caregivers, healthcare workers, frontline leaders, and policy makers—will ensure that the research questions that target different system levels are addressed comprehensively and inform WP5 outputs. Finally, the effectiveness of the S4R toolbox will be evaluated using a cluster randomized controlled trial while the cost-effectiveness of the toolbox will be evaluated using a two-arm cluster randomized controlled trial (cRCT) in two countries (Finland and Norway). Both the effectiveness and the cost will be assessed to provide robust evidence for decision-makers at organizational, national, and EU levels.

In WP5 we will integrate these findings to advance theory about organizational resilience in older person care and the role of middle managers in enhancing organizational resilience and develop an implementation strategy for the toolbox.

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