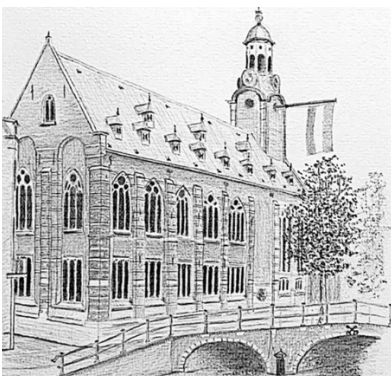


ABSTRACT BOOK



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

**Program
Resilient Health Care Society
Meeting 2026**

Program Resilient Health Care Society Meeting 2026

MAIN CONFERENCE

Location: Academy Building (*room: Telders Auditorium*), Rapenburg 73, Leiden, Netherlands

Time management sessions

ABSTRACTS: 10 mins presentation + 3 min Q&A each + 10 min group discussion end of session

SHORT ABSTRACTS: 4 mins presentation + 10 min group discussion end of session

INSTRUCTIONS FOR ABSTRACT BOOK:

[Please click on the presenter to navigate to the corresponding abstract in this document.](#)

TIME	Monday August 17th - Program DAY 1
8.45 - 9.15	Registration & Coffee
9.15 - 9.30 (15 mins)	Welcome by hosts
9.30 - 10.35 (65 mins) Chair: Tarcisio Saurin	<u>SESSION I - Abstract presentations</u> Subtheme: Technical tools & infrastructure 1 <i>Navigating Social Capital: A Refined Resilience Engineering-Based Debriefing Model for Systemic Coordination and Infrastructure Resilience in Healthcare Simulations.</i> Patterson et al (USA) 2 <i>Comparing built environment hazards in pre- and post-occupancy Emergency Department simulations using FRAM and HART.</i> Ransolin et al (Australia) 3 <i>Implementing resilience engineering to lead resilience-driven work systems' improvement - A DAMIL approach.</i> Chuang et al (Taiwan) 4 <i>The ADAPTER-Health questionnaire: A tool for measuring Team Resilience in healthcare.</i> Brugman et al (The Netherlands)
10.35 - 11.05 (30 mins)	Coffee break

11.05 - 11.55 (50 mins)	SESSION II - Abstract presentations Subtheme: Coordination of care (systems)
Chair: Inger Bergerød	1 <i>Graceful Adaptations Through Team Interactions: Managing Nursing Staffing and Care Quality in a Hemodialysis Center During Pandemic Surges.</i> Chen et al (Taiwan) 2 <i>Digital Resilience of Hospitals in Saxony (DiReK).</i> Förster et al (Germany) 3 <i>When Compliance Meets Complexity: A Paradigm Shift Perspective on the UK Maternity Safety Crisis.</i> Wijeratne et al (UK)
11.55 - 12.05 (10 mins)	Intermezzo

12.05 - 12.30 (25 mins)	SESSION III - Short abstract presentations Subthemes: Coordination of care (systems) & Cultural, psychological & team dynamics
Chair: Jaap Hamming	1 <i>When the going gets tough, the tough get going - How to safely continue patient treatment during and after supplier bankruptcy.</i> Frijns et al (The Netherlands) 2 <i>Social Capital as a Double-Edged Resource? Everyday Resilient Coordination, Learning and the Normalisation of Fragility.</i> Ghazali et al (UK) 3 <i>Mental wellbeing and organisational resilience amongst elderly care workers in Europe and Australia. Results from a cross-country qualitative study.</i> Fagerdal et al (Norway et al) 4 <i>Analysis of Intrahospital Transport of Critical Pediatric Patients on mechanical ventilation Using FRAM.</i> Tokuhira et al (Japan)
12.30 - 14.00 (90 mins)	Lunch break with tour outside in groups
14.00 - 14.30 (30 mins)	SESSION IV - Short abstract presentations Subtheme 3: Collective reflection, learning & education
Chair: Takeru Abe	1 <i>Collective reflection and learning following the Green Cross method.</i> Birkeli et al (Norway) 2 <i>Strategies and tools to learn from work that go well within healthcare patient safety practices: a mixed methods systematic review.</i> Birkeli et al (Norway) 3 <i>Making variability visible and learnable in robotic OR: a monitoring-learning loop for collective adaptation in robotic-assisted surgery</i> Chiu et al (Taiwan) 4 <i>Supporting Systemic Investigation of Harmful Incidents Using LLM-Assisted FRAM Modelling: An Educational Approach from Japan</i> Takizawa et al (Japan)

14.30 - 15.35 (65 mins) Chair: Ellen Deutsch	<u>SESSION V - Abstract presentations</u> Subtheme 3: Collective reflection, learning & education <i>The reality of designing resilient healthcare systems - the intersection of people, tools, processes, and systems.</i> Austin et al (Australia) <i>Exploring Resilience-Focused Debriefing to learn Team Resilience in Interprofessional Simulation-Based Team Training.</i> Amorøe et al (Sweden et al) <i>Scaling up a Learning from Excellence tool as Safety-II intervention: Exploring collective reflection, learning, and education in hospital wards.</i> Hybinette et al (Sweden) <i>Leadership behaviors enabling tacit knowledge integration in surgical multidisciplinary team meetings and their association with perceived meeting quality.</i> Steen et al (The Netherlands)
15.35 - 16.05 (30 mins)	Tea break
16.05 - 16.35 (30 mins)	Invited presentation on leadership in healthcare by Eduard Schmidt, MSc, PhD - Assistant Professor at the Institute of Public Administration, Leiden University
16.35 - 17.05 (30 mins) Chair: Janet Long	<u>SESSION VI - Short abstract presentations</u> Subtheme 3. Collective reflection, learning & education <i>Augmenting Medical Accident Report Analysis with Generative AI through Dialogue between Multi-Agent with Safety-I and Safety-II Perspectives.</i> Kobayashi et al (Japan) <i>Scenario-Based Adaptation with Resilience-Focused Debriefing: Residents as Teachers Using a 4S Operating Room Board Game for Team and Sociotechnical Resilience.</i> Guo or Chen et al (Taiwan) <i>Learning and improving after impactful events: Operationalising Safety II and restorative just culture to strengthen healthcare system resilience.</i> Grasveld et al (The Netherlands) <i>Strengthening Mental Well-being and Organizational Resilience in Elderly Care: Designing and Implementing the Support4Resilience Toolbox Across Multiple Countries.</i> Magerøy et al (Norway) <i>Mapping the Educational Translation of Resilience Engineering through a Scoping Review.</i> Tzu-Ruei Liao et al (Taiwan)
17.10 - 17.15 (5 mins)	Closure by hosts
17.30 - 18.15	Canal boat tour from Academy Building to restaurant

18.15 - 22.00	Dinner buffet at Grand Café 'De Burcht', Burgsteeg 13, Leiden
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TIME	Tuesday August 18 th - Program DAY 2
9.00	Venue open
9.15 - 9.55 (40 mins) Chair: Axel Ros	<u>SESSION VII - Abstract presentations</u> Subtheme 4. Leadership, management & governance 1 <i>Implementing a Facility-Level Emergency Response System for War-Related Combined Threats: A Practice-Based Model from Ukraine.</i> Moskalenko et al (Ukraine) 2 <i>Healthcare workers, leaders and informal caregivers' perspectives on resilient performance in elderly care: a cross-country study.</i> Bø Lyng et al (Norway)
9.55 - 10.05 (10 mins)	Intermezzo with interaction (details will follow)
10.05 - 10.30 (25 mins) Chair: Kazue Nakajima	<u>SESSION VIII - Short abstract presentations</u> Subtheme 4. Leadership, management & governance 1 <i>Exploring Leadership to Promote Mental Wellbeing, Resilience, and Quality in Elderly Care Services: Qualitative Cross-Country Insights from Europe and Australia.</i> Magerøy et al (Norway) 2 <i>Exploring the relationship between incident reporting policies, leadership expectations, and the nature of healthcare worker behaviours in a Mental Health program at a mid-size Canadian tertiary hospital: A qualitative study.</i> Petersen et al (Canada/Norway) 3 <i>Leadership strategies and practices supporting staff mental wellbeing individual and organisational resilience in homecare.</i> Sedgh et al (Norway/Australia)
10.30 - 11.10 (40 mins)	Coffee break
11.10 - 12.15 (65 mins)	<u>SESSION IX - Break-out session regarding RHC & hospital leadership</u> Moderated discussion in two break-out rooms followed by plenary discussion <i>Moderators: Roland Bal & Siri Wiig</i>
12.15 - 13.10 (55 mins)	Lunch break
13.15 - 14.15 (60 mins)	<u>RHCS General Assembly meeting</u> <i>optional for non-members; welcome if interested</i>
14:15-14:25	<u>Restroom break</u>

14.25 - 14.50 (25 mins) Chair: Tarcisio Saurin	SESSION X - Short abstract presentations Subtheme 1. Clinical teams & 'teams of teams' 1 <i>Understanding Teamwork in Mental Healthcare: A Scoping Review.</i> Ortega Vega et al (UK) 2 <i>Team resilience in intraoperative anaesthesia care.</i> Olin et al (Sweden) 3 <i>Applying the DAMIL approach - a resilience-driven work system improvement method to shorten the ultra-long-term hospitalization in hospital medicine ward.</i> Chen et al (Taiwan)
14.50 - 15.15 (25 mins)	Perspective talk by Jaap Hamming, MD, PhD, Emeritus Professor of Surgery
15.15 - 15.55 (40 mins) Chair: Jaap Hamming	SESSION XI - Abstract presentations Subtheme 2. Patient centeredness & involvement 1 <i>Crises in the hospital Emergency Department: ideas from patients on how to improve system resilience and deliver quality care.</i> Clay-Williams et al (Australia) 2 <i>Informal caregivers' contributions to resilient healthcare: A cross-country study from elderly care services in Europe and Australia.</i> Guise et al (Norway et al)
15.55 - 16.25 (30 mins)	Tea break
16.25 - 17.40 (65 mins) Chair: Robyn Clay-Williams	SESSION XII - Abstract presentations Subtheme 5. Cultural, psychological & team dynamics 1 <i>Exploring the complexity of responding to suspected intrapartum fetal deterioration.</i> O'Hara et al (UK) 2 <i>Co-designing a team-based reflexive programme to support safer response to suspected intrapartum fetal deterioration.</i> Van der Scheer et al (UK) 3 <i>"We're all invested in the team and our work": A qualitative analysis of social capital as a source of resilience in hospital teams.</i> Long et al (Australia) 4 <i>Culture exploration in a newborn delivery room team.</i> Ades et al (USA)
17.40 - 17.45 (5 mins)	Closure by hosts
18.00 - 20.30	Dinner at Hortus Oranjerie Rapenburg 73, Leiden (next door)

TIME	Wednesday August 19 th - Program DAY 3
9.00	Venue open
9.15 - 10.25 (70 mins)	Future session by Siri Wiig, Axel Ros & Takeru Abe
10.25 - 11.00 (35 mins)	Coffee break
11.00 - 12.05 (65 mins) Chair: Ellen Deutsch	<u>SESSION XIII - Abstract presentations</u> Subtheme 1. Clinical teams & ‘teams of teams’ 1 <i>From silos to shared space: how workspace design improved resilience in an acute hospital response team.</i> Saurin et al (Brazil) 2 <i>Social processes as adaptations in and across hospital teams.</i> Long et al (Australia) 3 <i>Navigating medication administration in ambulance teams: a sociotechnical perspective on adaptive work in prehospital care.</i> Odberg et al (Norway) 4 <i>Redesigning information dynamics for sustainable medical team Resilience: The Synergy of Digital Integration and the Art of "粋 Iki".</i> Sato et al (Japan)
12.05 - 13.05 (60 mins)	Lunch break
13.05 - 14.10 (65 mins) Chair: Kazue Nakajima	<u>SESSION XIV - Abstract presentations</u> Subtheme 8. Advancing theory & analytical tools 1 <i>Resilience Through Connection: Advancing Collaboration Across Systems and Societies.</i> Bergerød et al (Norway et al) 2 <i>Translating Resilience into Practice: What Matters, What’s Hard, and What Works.</i> Haraldseid et al (Norway et al) 3 <i>Team resilience of preclinical and clinical teams: Exploratory field studies based on indicators of non-technical skills from CRM.</i> Mühlbradt et al (Germany) 4 <i>Complexity in Resilient Healthcare Navigating Team Performance Across Ordered and Unordered Domain.</i> Odberg et al (Norway)
14.10 - 14.50 (40 mins)	Perspective talk: ‘Lessons learned from the Dutch national program on patient safety/Safety-II’ by Ada van den Bos, PhD & Gijs Boss, MSc, PhD candidate

14.50 - 15.10 (20 mins)	SESSION XV - Short abstract presentations Subtheme 8. Advancing theory & analytical tools
Chair: Mary Patterson	1. <i>Defining and conceptualising adaptive capacity in health care - a scoping review.</i> Farrow et al (Australia) 2. <i>Six steps to reconcile Work-as-Imagined (WAI) and Work-as-Done (WAD) in FRAM visualizations.</i> Uema et al (Japan) (Abstract not available per request authors)
15.10 - 15.20 (10 mins)	Next year's meeting
15.20 - 15.30 (10 mins)	Recap & closure by hosts
15.30 - 16.00 (30 mins)	Farewell Drinks & Snacks

Monday August 17th

SESSION I - Abstract presentations
Subtheme: Technical tools & infrastructure

Abstract format



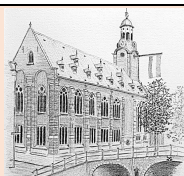
RHCS 2026

Resilient Health Care Society
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Title	Navigating Social Capital: A Refined RE-Based Debriefing Model for Systemic Coordination and Infrastructure Resilience in Healthcare Simulations
Authors and affiliations	Mary D. Patterson, University of Florida; Maritza Plaza-Verduin, University of Florida; Ellen S. Deutsch, USA
Background	While resilient performance in healthcare is built on a foundation of expertise and infrastructure, it is also essential to navigate social capital which includes the social networks, trust, and interactions within clinical teams and "teams of teams." Following feedback from the RHCS 2025 meeting, we refined a RE-based debriefing model for simulation focused on healthcare systems to explore how sociotechnical infrastructure and social processes influence the coordination of care.
Main objective	This paper presents the results of a pilot of a modified, six-phase debriefing framework for in situ simulation that integrates: PEARLS for Systems Integration (PSI); CARES; RIH; the Resilient Attributes models of Resilience Engineering (RE), and elements of Darwin Resilience Management Guidelines (DRMG) to enhance collective reflection and learning. The pilot was conducted in five emergency departments in our health system.
Main text <i>Max 300 words.</i>	• Methods: The refined model was utilized in a pilot study to evaluate multi-level objectives across micro, meso, and macro system layers. It employs SEIPS 3.0 and the CARE model to analyze demand-capacity misalignments and the sociotechnical factors shaping Work-as-Done (WAD). Facilitators utilize double-loop learning to challenge underlying assumptions and "theories-in-use" regarding technical tools and infrastructure. • Results: Pilot results indicate the model successfully identifies gaps in the coordination of care that surface during team interactions. Findings show that structured reflection on social capital improves a team's ability to anticipate, monitor and respond to systemic stressors by leveraging the team strengths and social networks for shared sense-making. • Implications: This approach transforms debriefing into a tool for systemic coordination, facilitating "work-as-it-could-be-done" by moving beyond surface-level corrections and individual errors to the fundamental redesign of sociotechnical infrastructures.

	<i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	This model operationalizes social capital to strengthen systemic resilience through practical simulation applications.
Related subtheme <i>please select 1</i>	<u>1. Clinical teams & 'teams of teams'</u> 2. Patient centeredness & involvement 3. Collective reflection, learning & education 4. Leadership, management & governance 5. Cultural, psychological & team dynamics 6. Coordination of care (systems) 7. Technical tools & infrastructure 8. Advancing theory & analytical tools
More information: lumc.nl/rhcs2026	

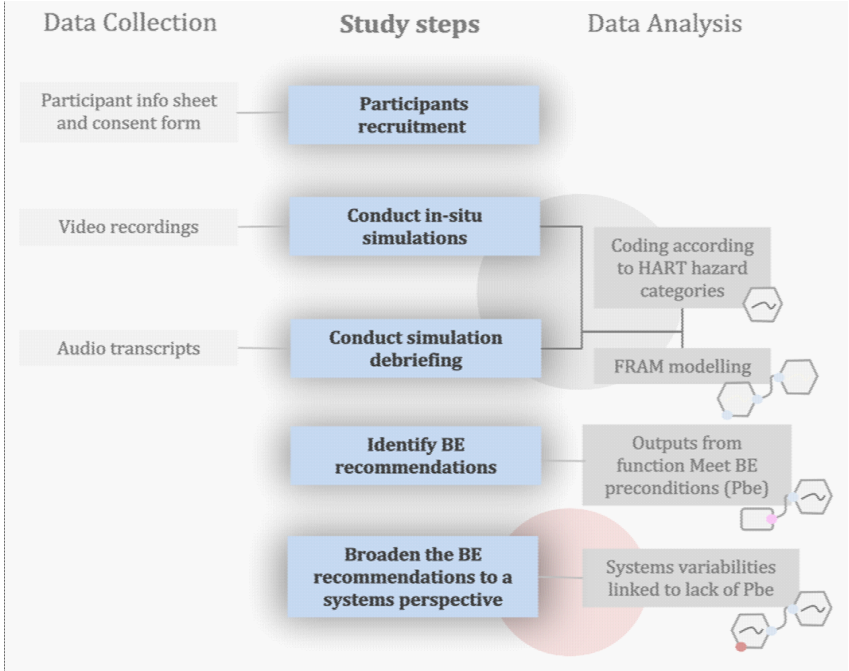
Abstract format



RHCS 2026

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Title	Comparing built environment hazards in pre- and post-occupancy Emergency Department simulations using FRAM and HART
Authors and affiliations	Dr Natália Ransolin ¹ , Dr Colleen Cheek ¹ , Matthew Wooler ² , Prof Robyn Clay-Williams ¹ ¹ Australian Institute of Health Innovation (AIHI)/ Macquarie University ² Tasmanian Health Service (THS-NW)
Background	Healthcare built environments (BE) significantly influence team performance, system resilience, and patient safety. Video-recorded in-situ simulations, when analysed with Human Factors and Ergonomics (HFE) approaches, such as the Functional Resonance Analysis Method (FRAM), and the Hazard Assessment Remediation Tool (HART), provide a structured approach for identifying and addressing BE hazards. This study focuses on a regional Emergency Department (ED) in Tasmania, Australia, exploring BE hazards and adaptations across its lifecycle.
Main objective	The aim of this study was to compare BE hazards and mitigation strategies identified in the ED resuscitation bay during the pre-occupancy commissioning phase with those observed 10 years post-occupancy, after both routine use and adaptations introduced during the COVID-19 pandemic. An emphasis was placed on assessing the implications of BE residual hazards, implementing recommendations, and identifying emerging issues.
Main text <i>Max 300 words.</i>	Method (Figure below): Video-recorded in-situ simulations (~10 minutes each), focused on two emergency scenarios, were analysed using HART and FRAM. Each 10-second video fragment was associated with HART and FRAM elements. FRAM models for each emergency scenario were developed based on the simulation videos and debriefings from current staff. HART categories (i.e., slip/trip/fall/injury risk; impaired access to patient or equipment; obstructed path; poor visibility; and infection risk) helped identify hazards - where latent conditions represent potential for harm, and active hazards are demonstrated instances in which that harm occurs. Hazards were then translated into potential and actual variabilities in the FRAM function outputs. Recommendations for improving the ED BE were then linked to the preconditions of FRAM functions as a strategy to mitigate the output variabilities. Results: Pre-occupancy analysis identified 45 BE hazards and 18 BE recommendations to address variability in team and system performance. The recommendations were evaluated during post-occupancy analysis to assess their implementation and impact on daily work. Moreover, new BE hazards were identified in post-occupancy analysis, such as space overcrowding and repurposed workflows introduced during the pandemic. From the 18 BE recommendations, some were met after the occupancy, such as “basic equipment and consumables placed outside of treatment rooms”, which supported workflow efficiency amid pandemic

	demands. However, certain recommendations, including “emergency exit buttons installed in isolation rooms near the door,” were not implemented, resulting in persistent latent hazards, such as restricted access and obstructed pathways. Implications for Research and Practice: This study highlights the utility of in-situ simulations and the integration of HFE tools, such as FRAM and HART, to assess team resilience within healthcare infrastructure and propose recommendations for improvement. Findings emphasise the need for ongoing evaluation of BE adaptations to enhance socio-technical resilience, optimise team performance, and guide future facility designs in dynamic healthcare contexts.  Source: Ransolin, N., Cheek, C., Wooler, M., Towle, N., & Clay-Williams, R. (2025). Identifying Hospital Built Environment Hazards Using HART and FRAM Frameworks: A Clinical Simulation Study. <i>Human Factors and Ergonomics in Manufacturing & Service Industries</i>, 35(4), e70015.
	For research projects please include following sections: - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	Proposal of an integration of FRAM with HART to analyse healthcare resilience and infrastructure
Related subtheme please select 1	1. Clinical teams & ‘teams of teams’ 2. Patient centeredness & involvement 3. Collective reflection, learning & education 4. Leadership, management & governance 5. Cultural, psychological & team dynamics 6. Coordination of care (systems) 7. Technical tools & infrastructure

	8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Abstract format



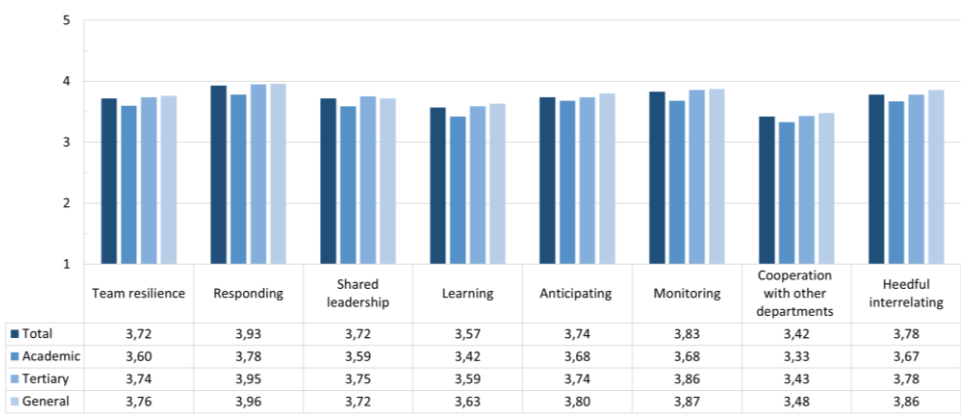
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Title	Implementing resilience engineering to lead resilience-driven work systems' improvement – A DAMIL approach
Authors and affiliations	Sheuwen Chuang¹, Kuan-Yuan Chen², Yuarn-Jang Lee^{3,4}, Hsin-Yi Chiu⁵ ¹ Graduate Institute of Data Science, College of Management, Taipei Medical University, Taiwan ² Shuang Ho Hospital, Taipei Medical University/Division of Pulmonary Medicine, Department of Internal Medicine, Taiwan ³ Shuang Ho Hospital, Taipei Medical University/Division of Infectious Diseases, Department of Internal Medicine, Taiwan ⁴ Division of Infectious Diseases, Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University, Taiwan ⁵ Thoracic division, Surgery department, Taipei Medical University Hospital, Taiwan
Background	Resilience engineering (RE) has evolved from an alternative perspective on safety to a comprehensive framework for understanding and enhancing organizational performance in complexity over the past two decades. Despite well-established theories, the field needs more forward-looking implementation methods to translate theory into actionable improvement processes.
Main objective	The paper proposes a systematic improvement approach that bridges theory and practice, enabling organizations to move beyond conceptual understanding toward genuine enhancement of adaptive capacity across all performance dimensions.
Main text (293 words) Max 300 words.	A novel approach, DAMIL, consists of five steps: Define, Analyze, Measure, Identify, and Learn & improve. Its processes are not strictly linear; instead, it follows an iterative, feedback-driven cycle that supports a holistic and effective approach to performance-improvement project management (Figure 1). Figure 1. DAMIL architecture The DAMIL approach is grounded in multi-disciplinarity. Each step accordingly incorporates system concepts, RE theories/methods (e.g., WAI/WAD, RAG), cause-effect analysis, Plan-Do-Check-Act (PDCA), design thinking, and guidance for facilitating learning. It also emphasizes the importance of systems thinking, teamwork, and situational awareness in ensuring coordinated, effective work-system improvement toward resilient performance. The application of the DAMIL approach involves creating and leading resilience-driven work systems through step-by-step improvement.

	DAMIL's five steps guide a project team to gain insight, measure, identify, and improve: 1. Define: Define the target system and issues of resilience strengthening for. 2. Analyze: Systematically analyze factors related to internal and external situations and work-system competence. 3. Measure: Assessing the resilience capabilities of the target system. 4. Identify: Systematically identify the differences between standard specifications/norms of the target system and their actual work. 5. Learn & improve: Continuous facilitating learning and correction through PDCA cycle. The final goal of DAMIL is to achieve the organization's desired performance safely, alongside enhancing the system's resilience potential. In step five, two improvement strategies are used: facilitating learning and corrective interventions, which together form a dual-loop improvement model. The innovative DAMIL approach is not only a theoretical exercise but also a practical contribution to the broader field of resilience health care. It can equip staff with RE knowledge, structured analytical skills, and tools to manage systemic resilience capabilities toward targeted performance. A demonstration case in hospital medicine of a Taiwan medical center was tested and had evidenced the method's effectiveness. <i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	The DAMIL approach has the potential to improve individuals' perceptions of systems and resilience engineering and to strengthen the overall capacity of healthcare work systems to sustain and enhance system performance of essential services.
Related subtheme	7. Technical tools & infrastructure
More information: lumc.nl/rhcs2026	

Abstract format  RHCS 2026 Resilient Health Care Society 15th Annual Meeting August 17-19, 2026 Leiden, The Netherlands	
Title	The ADAPTER-Health questionnaire: A tool for measuring Team Resilience in healthcare
Authors and affiliations	Ilja M. Brugman Msc 1 2 3 *; Dr. Caroline Schlinkert^{1 3}; Dr. Linda van Eikenhorst^{1 3}; Prof. Dr. Cordula Wagner^{1 2 3} 1 Netherlands Institute for Health Services Research (NIVEL), Utrecht, The Netherlands 2 Amsterdam UMC location Vrije Universiteit Amsterdam, Public and Occupational Health, Boelelaan 1117, Amsterdam, The Netherlands 3 Amsterdam Public Health, Quality of Care, Amsterdam, The Netherlands * Corresponding author at: Otterstraat 118-124, 3513 CR, P/O Box 1568 3500 BN, Utrecht, the Netherlands (e-mail: i.brugman@nivel.nl).
Background	Resilient healthcare teams can recognize risks early, adjust to dynamic situations, and maintain high standards of care even under pressure. This makes them a critical component in patient safety. Mapping and monitoring resilient performance on a team level could potentially give new insights on patient safety in hospital care teams. Furthermore it contributes to a more practice-oriented understanding of resilience in action, grounded in a Safety-II perspective.
Main objective	Our goal was to gain insight in the factors contributing to resilient team performance in Dutch hospitals. To do so, we validated the ADAPTER-Health questionnaire in the healthcare setting and investigated relevant moderating factors.
Main text <i>Max 300 words.</i>	Methods The ADAPTER-Health questionnaire was developed and then administered on 42 wards across 15 Dutch hospitals, resulting in 622 responses. Confirmatory Factor Analysis was used for validation. ANOVAs were used to analyse the data followed by post hoc comparisons. Several moderators were examined: hospital type, medical specialty, profession, patient interaction, and work experience. Results Factor analysis provided sufficient justification for validation of the ADAPTER-Health. The subscales responding, shared leadership, learning, anticipating, monitoring, cooperation with other departments and heedful interrelating, showed positive correlations with team resilience, ranging from moderate to strong. Respondents were generally positive (3.7 out of 5, see Figure 1) about the team resilience on their ward. Cooperation with other departments and learning scored lowest and responding and monitoring highest. Hospital type was the only consistent moderating factor on team resilience (see Figure 1). Affiliation with medical specialty, profession and work experience gave more inconsistent results on subscale levels.

	Figure 1 ADAPTER-health (sub)scores by hospital type <table><tr><th></th><th>Team resilience</th><th>Responding</th><th>Shared leadership</th><th>Learning</th><th>Anticipating</th><th>Monitoring</th><th>Cooperation with other departments</th><th>Heedful interrelating</th></tr><tr><td>Total</td><td>3,72</td><td>3,93</td><td>3,72</td><td>3,57</td><td>3,74</td><td>3,83</td><td>3,42</td><td>3,78</td></tr><tr><td>Academic</td><td>3,60</td><td>3,78</td><td>3,59</td><td>3,42</td><td>3,68</td><td>3,68</td><td>3,33</td><td>3,67</td></tr><tr><td>Tertiary</td><td>3,74</td><td>3,95</td><td>3,75</td><td>3,59</td><td>3,74</td><td>3,86</td><td>3,43</td><td>3,78</td></tr><tr><td>General</td><td>3,76</td><td>3,96</td><td>3,72</td><td>3,63</td><td>3,80</td><td>3,87</td><td>3,48</td><td>3,86</td></tr></table> Conclusions and implications for research and practice The ADAPTER-Health questionnaire can be used for monitoring and opening the conversation on team resilience. The subscales can function as starting points for learning about a teams’ resilient performance. To improve generalizability, the ADAPTER-Health could be administered across diverse healthcare settings.		Team resilience	Responding	Shared leadership	Learning	Anticipating	Monitoring	Cooperation with other departments	Heedful interrelating	Total	3,72	3,93	3,72	3,57	3,74	3,83	3,42	3,78	Academic	3,60	3,78	3,59	3,42	3,68	3,68	3,33	3,67	Tertiary	3,74	3,95	3,75	3,59	3,74	3,86	3,43	3,78	General	3,76	3,96	3,72	3,63	3,80	3,87	3,48	3,86
	Team resilience	Responding	Shared leadership	Learning	Anticipating	Monitoring	Cooperation with other departments	Heedful interrelating																																						
Total	3,72	3,93	3,72	3,57	3,74	3,83	3,42	3,78																																						
Academic	3,60	3,78	3,59	3,42	3,68	3,68	3,33	3,67																																						
Tertiary	3,74	3,95	3,75	3,59	3,74	3,86	3,43	3,78																																						
General	3,76	3,96	3,72	3,63	3,80	3,87	3,48	3,86																																						
Relevance to RHC	With this study we want to show that questionnaires are a suitable but underexplored step in operationalizing Safety-II through team resilience in healthcare.																																													
Related subtheme <i>please select 1</i>	8. Advancing theory & analytical tools																																													
More information: lumc.nl/rhcs2026																																														

Monday August 17th

SESSION II - Abstract presentations
Subtheme: Coordination of care (systems)

Abstract format



RHCS 2026

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Title	Graceful Adaptations Through Team Interactions: Managing Nursing Staffing and Care Quality in a Hemodialysis Center During Pandemic Surges.
Authors and affiliations	Ching-Yi Chen^{1*}, Sheuwen Chuang², Fei-yan Hu³, Tu Tuan Tran⁴, Hsi-Hsien Chen⁵ Affiliations: ¹ Division of Nephrology, Dept. of Internal Medicine, Taipei Medical University Hospital; Dept. of General Medicine, School of Medicine, College of Medicine, Taipei Medical University, Taiwan. ² Graduate Institute of Data Science, Taipei Medical University, Taiwan. ³ Hemodialysis Center, Taipei Medical University Hospital; Dept. of Nursing, Taipei Medical University Hospital, Taiwan. ⁴ Dept. of Internal Medicine, Thai Nguyen University of Medicine and Pharmacy; Dept. of Nephro-Urology and Dialysis, Thai Nguyen National Hospital, Vietnam. ⁵ Division of Nephrology, Dept. of Internal Medicine, Taipei Medical University Hospital; TMU Research Center of Urology and Kidney, Taiwan. *Corresponding Author, Email: sundaybecky@gmail.com
Background	Hemodialysis centers (HDCs) faced unique challenges during COVID-19, as vulnerable patient populations required frequent treatments while maintaining essential care amid nursing shortages. However, HDC's chronological adaptations and their impacts on quality remain underreported.
Main objective	To examine how adaptation patterns evolved to deal with challenges during the prolonged COVID-19 pandemic by applying resilience engineering concepts to enhance future dialysis system preparedness.
Main text <i>Max 300 words.</i>	Methods A mixed-methods study was conducted at a 60-bed hemodialysis center in a Taiwanese metropolitan hospital facing persistent pandemic surges. Quantitative data—including dialysis volumes, confirmed patient numbers, nursing overtime hours, and seven post-dialysis safety indicators (e.g., blood urea nitrogen, potassium, albumin)—were analyzed alongside national COVID-19 incidence rates. Additionally, qualitative data were gathered using the Critical Incident Technique through semi-structured interviews (90–120 minutes each) with seven key clinical informants. Process tracing analysis derived from Resilience Engineering was applied to examine the operational strain and organizational responses.

	Results Across three distinct pandemic waves in 2021–2022, the center experienced a paradox of lower overall throughput but higher nursing workload due to a 25% staff infection rate and strict isolation protocols. Therefore, nursing management enacted twelve major adaptations over time, categorized into four resilience patterns: matching, extending, sustaining, and transforming. Key operational adjustments included stretching mandated nurse-to-patient ratios progressively (from 1:4 to 1:6 for non-confirmed cases, and 1:1 to 1:3 for confirmed cases), temporarily shortening dialysis sessions from four to three hours, and utilizing extensive flexible overtime. To manage isolation room saturation, the center reconfigured physical spaces to create a dedicated zone for day-and-night by-purposes utilization control and replaced PCR testing with rapid screening. Despite severe strain, essential services were maintained, and pre-dialysis uremic toxin markers remained within established safety ranges. The observed declines in nutritional indicators were attributed to acute COVID-19 infection effects rather than dialysis inadequacy, offset by proactive interdepartmental collaboration for post-dialysis blood testing. Implications for research and practice The findings demonstrate that dynamic workforce reconfiguration, policy changes, and cross-unit coordination are vital and can be considered core components of future health crises preparedness.
Relevance to RHC	The center's responses demonstrate "graceful extensibility"—the systemic ability to stretch performance boundaries through anticipation, synchronization, and proactive learning across units and layers over time, which is the core capacity to sustain life-saving services.
Related subtheme <i>please select 1</i>	<i>1. Clinical teams & 'teams of teams'</i>
More information: lumc.nl/rhcs2026	

Abstract format

Title	Digital Resilience of Hospitals in Saxony (DiReK)
Authors and affiliations	Förster, Charlotte, University of Technology Chemnitz, Chemnitz, Germany Schuth, Stephanie, University of Applied Sciences for Social Work, Education and Nursing, Dresden, Germany Geithner, Silke, University of Applied Sciences for Social Work, Education and Nursing, Dresden, Germany
Background	Digital transformation is changing the way hospitals operate fundamentally. Digital technologies are being used in various ways to provide patient care. This makes digital skills essential for healthcare workers. However, digital technologies bring not only opportunities, such as improving care quality, but also risks, such as cyberattacks and power outages. These risks are not marginal phenomena; they pose an enormous challenge to critical infrastructure, as evidenced by the recent power outage in Berlin and cyberattack on Frankfurt University Hospital. For this reason, it is crucial for hospitals to address the consequences of critical security incidents. To understand how hospitals deal with risks imposed by digital transformation, we introduce the concept of digital resilience.
Main objective	Our research project aims to gain insight into how hospitals manage digital risks, build digital resilience, and how these efforts affect their overall organizational resilience.
Main text <i>Max 300 words.</i>	Method. To answer our research question, "How do hospitals deal with the risk resulting from the application of digital technologies in patient care, and how does this affect organizational resilience?" we used a qualitative and quantitative approach. The online survey aims to provide basic information about the actual digital and organizational resilience level of hospitals in Saxony. Since the beginning of 2025, six case studies have been conducted to understand the application of digital tools in hospitals, the associated risks and opportunities, and their impact on organizational resilience. Each hospital represents a potential case. Interviews were conducted with hospital leaders to gain insight into their strategic perspective on the risks and opportunities associated with digital tools and leading IT staff to gain in-depth knowledge of the digital technologies used. Results: We are currently collecting and evaluating data. We expect to present results from 50 interviews (six hospitals) supplement with additional information from quantitative questionnaires. In addition to providing general insights into digital risks in the hospital context, this study shows how hospitals (1) anticipate (2) cope with and (3) adapt to critical security incidents. The data currently available already points to a very heterogeneous assessment of digital risks and opportunities.

	Implications for research and practice: By combining digital risk governance and resilience theory, we hope to support hospitals in maintaining their ability to act in digital crises.
Relevance to RHC	Our study shows that the digital resilience of hospitals is not only about the technical aspects, but also about the human interface. Our research project therefore clearly demonstrates that it is the socio-technical infrastructure which makes a hospital resilient — or not.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. Technical tools & infrastructure 8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Abstract format



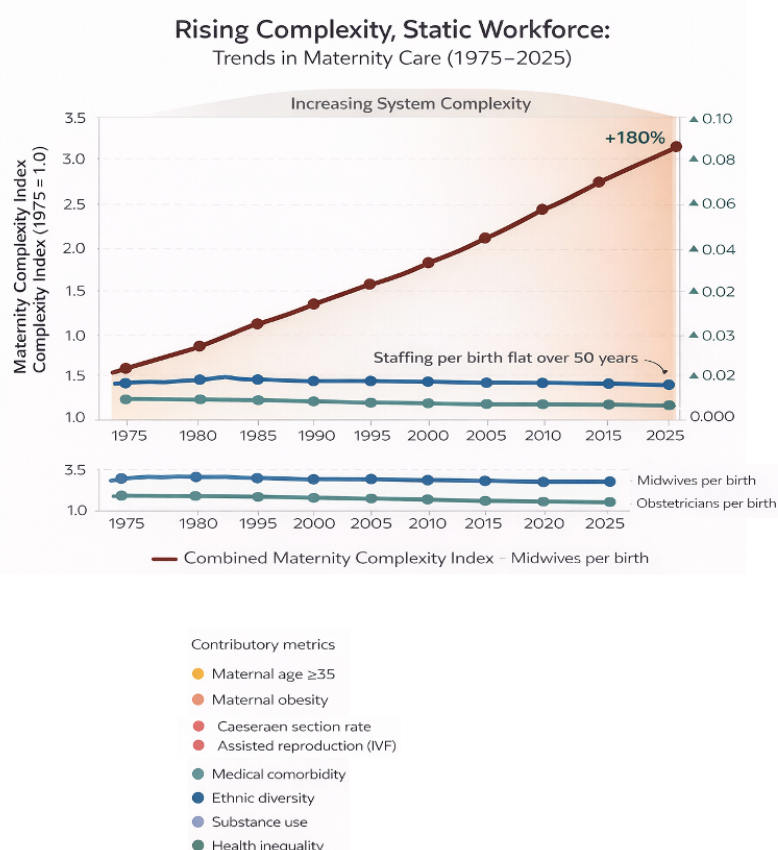
RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	When Compliance Meets Complexity: A Paradigm Shift Perspective on the UK Maternity Safety Crisis
Authors and affiliations	*Dr Dileep Wijeratne Leeds Teaching Hospitals NHS Trust, UK Professor Jane O'Hara The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK.
Background	Over the past two decades, maternity services in the United Kingdom have been subject to repeated national investigations following adverse outcomes. These investigations frequently attribute failures to deficiencies in professionalism, teamwork, culture and leadership. While such factors can contribute to safety events, this framing risks obscuring deeper systemic dynamics. Over the past four decades the complexity of maternity care has increased substantially due to demographic, clinical, and social changes, including rising maternal age, obesity and medical comorbidity, improved neonatal care, assisted reproductive technologies, and widening socioeconomic and ethnic disparities. At the same time, there has been no proportionate increase in workforce capacity or organisational resources to match these rising demands. As a result, safe care increasingly depends on coordination across multiple interacting clinical teams operating within increasingly constrained systems.
Main objective	To explore how prevailing safety paradigms influence team behaviour, the interpretation of safety crises, and the types of organisational responses proposed in maternity care.
Main text <i>Max 300 words.</i>	Drawing on Thomas Kuhn's theory of scientific revolutions, we propose that repeated safety investigations in maternity care may represent signals of paradigm strain within existing safety governance models. Using longitudinal indicators of maternal risk and service complexity (1975–2025), we illustrate how the clinical and social context of maternity care has evolved significantly over time. Despite these changes, many governance approaches remain rooted in compliance-oriented safety paradigms that prioritise guideline adherence, retrospective investigation, and individual accountability. While these mechanisms aim to improve safety, they may also shape team interactions in unintended ways. In highly regulated environments, strong compliance pressures can narrow discretionary space for clinical judgement, discourage speaking up, and shift attention toward defensiveness rather than real-time coordination.

In complex socio-technical maternity systems, safe performance increasingly emerges from the adaptive capacity of teams of teams, including obstetric sub-specialties, midwifery, anaesthesia, neonatology, and community services. This dynamic often reflects the gap between *work-as-imagined* in policies, guidelines and investigations and *work-as-done* by frontline teams navigating real-world constraints. However, safety paradigms do not only shape team behaviour; they also influence how safety crises are interpreted, and which solutions are proposed. Compliance-oriented paradigms tend to frame adverse outcomes primarily as failures of rule adherence or professional conduct, leading to recommendations focused on training, oversight, and accountability.

From a complexity perspective, safety emerges through interactions between people, teams, and organisational structures rather than through rule adherence alone. A shift toward a resilience-oriented paradigm which emphasises psychological safety, collective reflection, rapid organisational learning and adaptive coordination between teams, provides a more powerful framework for understanding safety and designing interventions capable of supporting safe performance in increasingly complex maternity systems. Safety paradigms do not simply shape how care is delivered; they shape how safety crises are understood and therefore how systems change is approached.



Relevance to RHC

This work contributes to the theoretical development of Resilient Health Care by examining how safety paradigms shape both team interactions and the interpretation of system failures within complex socio-technical environments. By linking increasing system complexity to patterns of governance, investigation, and organisational response, the analysis

	highlights the importance of psychological safety, collective reflection, and adaptive coordination between interdependent clinical teams in sustaining resilient healthcare performance.
Related subtheme <i>please select 1</i>	8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Monday August 17th

SESSION III - Short abstract presentations
Subthemes: Coordination of care (systems)
& Cultural, psychological & team dynamics

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	When the going gets tough, the tough get going - How to safely continue patient treatment during and after supplier bankruptcy
Authors and affiliations	Loes Frijns – van Zijp, Catharina Hospital Eindhoven
Background	An MR-linac was installed at our Radiotherapy department. Since only a single system was installed, there is no redundancy in case of (technical) failure. Since it is essential for radiotherapy treatment to continue the treatment-scheme, the need for back-up procedures is crucial.
Main objective	Share an inspiring example of how healthcare professionals can adapt their processes in order to safely continue patient treatment.
Main text <i>Max 300 words.</i>	At the end of 2021 the state-of-the art MR-linac treatment unit was installed at the Radiotherapy department at the Catharina Hospital Eindhoven. Extensive prospective risk analyses were performed at various time-points before the clinical introduction of this new type of treatment. However, in none of the scenarios it was foreseen that the supplier of this technology would file for bankruptcy. From July 2023 a precarious period started when the supplier filed for bankruptcy. As a consequence, spare parts and technical support were sparse or sometimes no longer available. The main focus of our department was to continue safe and effective patient treatments with the MR-linac. In the weeks, months and years after the bankruptcy the healthcare professionals locally, nationally and internationally teamed-up to strengthen their knowledge in order to continue treatments. The resilience that was shown by the various teams during the different phases in this time period is an impressive example of how healthcare professionals can reinforce each other in facing this challenging situation.
Relevance to RHC	In the two years after the supplier bankruptcy, a lot of interesting initiatives arose in order to continue safe treatment of patients. Especially the resourcefulness of the employees (clinical, technical and management) during this time period is an inspiring example to share with other healthcare professionals.
Related subtheme <i>please select 1</i>	6. Coordination of care (systems)

More information: lumc.nl/rhcs2026

Abstract format



RHCS 2026

Resilient Health Care Society
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Leiden, The Netherlands

Title	Social Capital as a Double-Edged Resource? Everyday Resilient Coordination, Learning and the Normalisation of Fragility
Authors and affiliations	Mawaddah Ghazali <i>Analytics, Technology and Operations Department (ATOD), Leeds University Business School, University of Leeds, United Kingdom.</i> E-mail: m.b.ghazali@leeds.ac.uk Chee Yew Wong <i>Analytics, Technology and Operations Department (ATOD), Leeds University Business School, University of Leeds, United Kingdom.</i> E-mail: c.y.wong@leeds.ac.uk Paola Sakai <i>Sustainability Research Institute, School of Earth, Environment, and Sustainability, University of Leeds, United Kingdom.</i> E-mail: p.h.m.d.oca@leeds.ac.uk Valentina Lichtner <i>Division of Nursing, Midwifery and Social Work, School of Health Science, University of Manchester, United Kingdom.</i> E-mail: valentina.lichtner@manchester.ac.uk
Background	In flood-prone settings, healthcare services are frequently disrupted by recurrent flood events that vary in intensity and duration. In many such contexts, continuity of care depends not only on formal emergency arrangements but also on everyday coordination and team interactions that manage disruption. While social capital is widely recognised as a key resource for resilience, less attention has been paid to whether and how reliance on social capital shapes collective learning and longer-term resilience trajectories in healthcare systems.
Main objective	To explore how everyday coordination and social capital influence healthcare delivery during recurrent flooding, and how they may support or constrain collective learning for longer-term resilience.
Main text <i>Max 300 words.</i> (word counts:300)	Methods: A qualitative case study of a Malaysian district health system exposed to recurrent flooding. Interviews conducted on 16 participants, with fieldwork observation and document analysis. Results: In this setting, resilience is enacted primarily through everyday and relationship-based coordination. Clinic teams routinely mobilise social capital; understood here as trusted relationships, shared norms, and reciprocal practices across community and health actors, to anticipate and manage disruption. In this setting, social capital operates

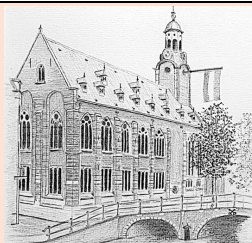
	through and beyond formal governance structures and socio-technical infrastructures, complementing rather than replacing them. Village heads act as trusted early-warning nodes, alerting health staff to rising water levels, while WhatsApp groups function as the primary coordination platform for updating staff rosters, monitoring clinic conditions, and reallocating services in real time. At the clinic level, teams rely on repeated, experience-based practices to sustain continuity of care. Equipment is elevated during periods of heavy rain, vaccines are relocated in anticipation of power loss, and vulnerable patients are advised to relocate pre-emptively. When transport or communication systems fail, staff draw on personal resources, community support, and locally accepted arrangements with nearby community facilities. These practices are widely shared, rarely questioned, and described by staff as “how things are done”. Over time, repetition of these workarounds stabilises coordination. Familiar routines and strong relational ties enable rapid responses and reinforce confidence that flooding is manageable. However, this effectiveness produces a paradox. Because disruptions are routinely managed and absorbed locally, flood events rarely trigger structured post-event review, training, simulation or escalation beyond the district level. Effective coping may reduce visibility of infrastructural vulnerabilities, dampen pressure for system-level change, and unintentionally shield higher-level structures from scrutiny. Implications: Social capital may therefore operate as a double-edged resource: enabling everyday resilient performance, while potentially stabilising fragile socio-technical arrangements and limiting opportunities for deeper organisational reflection and system-level adaptation. <i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	1) Illuminates how social capital embedded in everyday team and community coordination supports resilient healthcare performance under recurrent disruption. 2) Illustrates how interactions between teams and socio-technical infrastructures sustain work-as-done while potentially normalising underlying system fragilities. 3) Contributes empirical insight into how resilience achieved through everyday coordination may shape learning differently at local and system levels.
Related subtheme <i>please select 1</i>	<i>Coordination of care (systems)</i>
More information: lumc.nl/rhcs2026	

Abstract format

Title	Mental wellbeing and organisational resilience amongst elderly care workers in Europe and Australia. Results from a cross-country qualitative study
Authors and affiliations	Birte Fagerdal, University of Stavanger, Paola Cantarelli, Sant'Anna School of Advanced Studies, Viola Caseti, Universitat Jaume I De Castellon, Martijn Felder, Erasmus Universiteit Rotterdam, Mari Lahti, University of Eastern Finland, Kristian Odberg, NTNU, Florin Tibu, Universitatea Stefan cel Mare din Suceava, Louise Ellis, Macquaire Univesity, and Hilda Bø Lyng, University of Stavanger
Background	There is an ongoing crisis in elderly healthcare in Europe and other parts of the world. Demands from a growing elderly population with increasing multimorbidity combined with mounting workforce shortages has set a strain on healthcare throughout Europe. The result is poor mental wellbeing and burnout amongst healthcare workers, in addition to healthcare workers leaving their trade. These pressing issues are likely to impact healthcare quality in elderly care throughout the systems.
Main objective	The aim of this study was to explore what factors influence healthcare workers' mental wellbeing and resilience in six European countries and Australia
Main text <i>Max 300 words.</i>	Methods: Throught the Support4Resilience (S4R) project a qualitative study was conducted among healthcare workers by empirical partners in six European countries (and Australia). The empirical settings varied, but they were all situated within elderly care. Semi-structured interviews were conducted, resulting in a total of 122 interviews. A template was used by all empirical partners to conduct framework analysis of their country data and report data collected. The cross-country datasets were merged, and a qualitative analysis was performed combining a deductive-inductive approach creating themes. Results: The two-phased analysis resulted in similarities in factors important for mental wellbeing and resilience. Positive factors influencing mental wellbeing were: (1) positive and trusting work environment, (2) variety in tasks and sense of independence in their roles, (3) functional tool and (4) leadership support. Factors affecting workers mental wellbeing negatively were: (1) emotional and physical stressors inherent in their work, (2) high workload, (3) malfunctioning equipment and (4) expectations from patients' families. Factors influencing organisational resilience and quality of care: (1) commitment and ability, (2) collaboration, teamwork and communication, (3) competence and staffing, (4) adequate equipment and (5) leadership support. Implications: The correspondences in factors important for mental wellbeing and resilience indicate interdependencies. Interventions and

	improvement efforts can therefore strengthen both resilience and mental wellbeing. There are several priorities for strengthening these in elderly care organisations. Cultivating a more positive work environment is necessary for healthcare workers mental wellbeing and resilience. Providing necessary equipment enables workers to do their job properly and create variety and independence in daily activities. Maintaining professional competence should be actively supported. And finally, the significant importance of leadership support necessitates providing leaders the tools and competence needed to support working conditions and hence mental wellbeing and organisational resilience. <i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	Elaborates on factors important for psychological and team dynamics and the role of leaders and the organisational level.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>
More information:	

Abstract format



RHCS 2026

Resilient Health Care Society
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Title	Analysis of Intrahospital Transport of Critical Pediatric Patients on mechanical ventilation Using FRAM
Authors and affiliations	Natsuko Tokuhira, Aoi Uema, Mitsuhiro Matsumoto, Harumi Kitamura, Kazue Nakajima, Osaka University Hosupital
Background	Intrahospital transport (IHT) critically ill patients on mechanical ventilation (MV) from the Intensive Care Unit (ICU) to imaging departments for examinations, and safely returning them to the ICU, requires continuous monitoring of respiratory and circulatory status during transport. It also demands prompt responses to changes in patient condition, often with limited manpower, equipment, and medications. This process inherently carries high risks, especially in pediatric patients, where sedation and stable airway management are demonstrably more challenging compared to adults.
Main objective	To identify proactive intervention points for safer IHT of critically ill patients on MV
Main text <i>Max 300 words.</i>	Methods: To understand the interacting factors involved in safely transporting patients from the ICU to examination departments and back, two intensive care specialists observed and described a single case of a pediatric patient on MV using the Functional Resonance Analysis Method (FRAM). Results: Analysis of the IHT process identified five key functions: to decide on the examination, to select transport team members, to depart from the ICU, to respond to changes in patient condition, to safely return to the ICU. It was observed that while the ICU environment offers abundant resources, including monitoring equipment, medications, and multidisciplinary support, there are significant constraints on the skills of accompanying team members, available equipment, medications, and manpower when responding to patient deterioration during transport or in examination rooms post-ICU departure. Consequently, "to stabilize the patient for transport" –identified as a crucial precondition for ICU departure – was found to be a key proactive factor in minimizing performance variability during IHT t and ensuring a safe return to the ICU. Since patient stabilization within the ICU prior to IHT of pediatric patients on MV is the key, it is crucial to provide thorough education on the importance of sedation and airway management and to use checklists focused on patient stability
Relevance to RHC	using the Functional Resonance Analysis Method (FRAM).
Related subtheme <i>please select 1</i>	5. Cultural, psychological & team dynamics

More information: lumc.nl/rhcs2026

Monday August 17th

SESSION IV - Short abstract presentations
**Subtheme 3: Collective reflection,
learning & education**

Abstract format



RHCS 2026

Resilient Health Care Society
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Title	Collective reflection and learning following the Green Cross method (1, 2)
Authors and affiliations	Gørill Birkeli ^{1,2}, Randi Ballangrud ³, Hilde Jacobsen ⁴, Ellen Catharina Tveter Deilkås ^{5,6}, Anne Karin Lindahl ^{1,2}
Background	The Green Cross method contributes to interprofessional discussions around patient safety incidents in daily safety briefings and weekly reflections. The Green Cross method was implemented in a Norwegian postanaesthesia care unit in February 2019. The purpose of this presentation is to report the findings following the implementation of the Green Cross method over a period of four years (2019-2022) regarding:
Main objective	How does the Green Cross method affect collective reflection and learning in a postanaesthesia care unit?
Main text	Methods Focus group interviews of healthcare professionals (total n=45), who were interviewed <i>before</i> the Green Cross method, <i>after 3 months (n= 22) and then, after 3 years (n=23)</i>. Data were analyzed using content analysis. Results The categories were: <i>Before the GC method:</i> Limited openness and learning <i>After 3 months of implementation:</i> 'A learning environment is emerging' <i>After 3 years of implementation:</i> 'Continuing to facilitate open communication', and 'Expressing a desire for more interprofessional collaboration regarding improvements'. Implications for research and practice Interprofessional reflections may improve interprofessional learning and can be encouraged. However, hospitals do not facilitate interprofessional discussions for clinicians, which is a major barrier to reflexive spaces. More studies are needed that look at how such interprofessional reflections enhance the interprofessional teams' ability to adjust practices before, during and after care delivery.
Relevance to RHC	This is an example of reflexive spaces and how it can be routinely embedded in everyday practice.
Related subtheme	<i>3. Collective reflection, learning & education</i>

- Jacobsen HK, Ballangrud R, Birkeli GH. Learning from patient safety incidents: The Green Cross method. Nursing in critical care. 2024.
- Birkeli GH, Ballangrud R, Jacobsen HK, Tveter ECT, Lindahl AK. Green cross method in a postanaesthesia care unit: A qualitative study of the healthcare professionals' experiences after 3 years, including the COVID-19 pandemic period. BMJ Open Quality. 2023;12(2):e002247.

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Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
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Title	Strategies and tools to learn from work that go well within healthcare patient safety practices: a mixed methods systematic review (1)
Authors and affiliations	Gørill Birkeli ^{1,2} , Anne Karin Lindahl ^{1,2} , Åse Marit Hammersbøen ³ , Ellen Catharina Tveter Deilkås ^{4,5} and Randi Ballangrud ⁶
Background	Safety-II is a new approach to patient safety that is characterised by learning from work that goes well, including learning from success and work-as-done. Practical tools to facilitate learning from work that go well are starting to emerge within healthcare patient safety practices.
Main objective	In absence of a systematic review of such learning tools, the aim of the study was to provide an overview of strategies and tools for healthcare professionals to learn from work that goes well in healthcare patient safety practices.
Main text <i>Max 300 words.</i>	Method: Systematic review Results: Out of 5298 records screened, 126 articles were retrieved for evaluation, and 22 articles were included, describing 16 unique tools. Five tools were not empirically evaluated. Most learning tools were aimed at healthcare professionals in hospitals units (68%) and were generally welcomed by healthcare professionals. Tools intended for learning across the organisation were second most frequent (23%), followed by tools intended for learning between hospitals (9%). Most studies focused on validating the tools' ability to provide insights into work-as-done, and their effect on staff wellbeing. Few studies focused on patient outcomes. We suggest that future research focuses on measuring patient safety outcomes and exploring how this is impacted by learning tools, as well as whether increased understanding and application of the Safety-II concept improves patient safety. Learning in healthcare is not easy, as healthcare is a complex non-linear system. Further development of practical tools is needed to learn from both errors and success, to improve patient safety.
Relevance to RHC	The review shows a growing number of practical Safety-II tools, which may help understand and learn from the constant adaptations made by healthcare professionals every day to keep patients safe.
Related subtheme <i>please select 1</i>	<i>3. Collective reflection, learning & education</i>

1. Birkeli GH, Lindahl AK, Hammersbøen ÅM, Deilkås ECT, Ballangrud R. Strategies and tools to learn from work that goes well within healthcare patient safety practices: a mixed methods systematic review. BMC Health Services Research. 2025;25(538).

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RHCS 2026 Abstract

Title	Making variability visible and learnable in robotic OR: a monitoring-learning loop for collective adaptation in robotic-assisted surgery
Authors and affiliations	Hsin-Yi Chiu, Wei-Lin Wang, Po-Li Wei Surgery Department, Taipei Medical University Hospital, Taipei, Taiwan, Republic of China
Background	Robotic-assisted surgery (RAS) operating rooms are sociotechnical systems in which small workflow variations and coordination frictions can accumulate into inefficiency and latent safety risk. In resilient health care, such variability must be made visible, discussable, and learnable across interprofessional teams rather than managed through compliance alone.
Main objective	To examine whether a SEIPS 2.0-guided monitoring-learning feedback loop could strengthen adaptive capacity in a robotic OR programme.
Main text	Methods: At an academic medical centre, we linked interprofessional simulation-based robotic OR training to checklist/SOP reinforcement, monthly multidisciplinary dashboard review, SPC-style visualisation, and structured review of rare adverse events. The intervention targeted multiple work-system elements, with emphasis on docking/undocking, troubleshooting, role-based communication, and checklist use. Performance signals were reviewed across professional groups to support shared reflection and iterative adjustment. We compared a baseline period (Jan-Dec 2024) with an implementation period (Jan-Oct 2025). Results: We analysed 579 RAS cases (baseline n=269; implementation n=310). Case complexity was slightly higher during implementation (mean CCI 2.53 vs 2.68). Using the 2024 centreline as reference, 8 of 10 implementation months showed preoperative preparation times below baseline without breaches of baseline-derived control limits. Mean preparation time decreased by 2.7 minutes (-4.5%). Operative time (-2.1%) and length of stay (-6.3%) also improved. Rare-event review functioned as a balancing mechanism for collective learning rather than as evidence of simple causal attribution. Implications for research and practice: Linking simulation, standardisation, and dashboard-enabled review may operationalise resilient performance by supporting anticipation, monitoring, coordinated response, and collective learning in everyday robotic OR work.
Relevance to RHC	The study contributes to RHC by showing how monitoring infrastructure can turn routine performance signals into shared reflection and adaptive adjustment in perioperative care.
Related subtheme	3. Collective reflection, learning & education

Submission in PDF format via e-mail to rhcs2026@lumc.nl before March 15, 2026

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Supporting Systemic Investigation of Harmful Incidents Using LLM-Assisted FRAM Modelling: An Educational Approach from Japan
Authors and affiliations	Makiko Takizawa, M.D., Ph.D. Department of Patient Safety, Saitama Medical University General Medical Center Department of Healthcare Quality and Safety, Chiba University Graduate School of Medicine
Background	In Japan, investigation of unexpected deaths related to medical care is a legal obligation under the Medical Accident Investigation System (MAIS). However, there is a growing need for training patient safety specialists capable of conducting systemic investigations of harmful incidents. This study explores whether LLM-supported FRAM analysis can help develop such capability.
Main objective	This study aims to explore an educational approach in which patient safety specialists learn systemic investigation of harmful incidents by constructing and discussing FRAM models with analytical support from LLMs.
Main text <i>Max 300 words.</i>	Methods The proposed training program uses a publicly available harmful-incident investigation report produced under the MAIS as a learning case. Participants construct a FRAM model to identify key system functions and potential sources of performance variability. LLMs are used as analytical support tools to generate candidate functions, suggest couplings, and highlight possible variability. These outputs are critically examined and refined through structured discussion. Results Exploratory application suggested that LLM-assisted analysis was particularly useful in supporting the construction of FRAM models and facilitating structured discussion during the modelling process. The LLM was also able to identify logical gaps in the improvement measures proposed in the original investigation report. However, its ability to identify broader contextual or systemic factors remained limited. Implications for research and practice Combining FRAM modelling, structured discussion, and LLM-assisted analysis may provide a practical educational approach for developing systemic investigation capability among patient safety specialists.
Relevance to RHC	This study explores how LLM-assisted FRAM modelling can support learning from harmful incidents by facilitating systemic investigation and deeper examination of performance variability in complex healthcare systems.
Related subtheme <i>please select 1</i>	<i>3. Collective reflection, learning & education</i>

More information: lumc.nl/rhcs2026

Monday August 17th

**SESSION V - Abstract presentations
Subtheme 3: Collective reflection,
learning & education**

Abstract format

Title	The reality of designing resilient healthcare systems - the intersection of people, tools, processes, and systems
Authors and affiliations	Elizabeth Austin Supported by members of the Human Factors and Resilience research team (Robyn Clay-Williams, Colleen Cheek, Lieke Richardson, Natália Ransolin, Magali Ampaire, Emilie Francis-Auton, Amanda Dominello, Shai Grigg), AIHI, Macquarie University
Background	Our governments continue to expect our health systems to respond flexibly and deliver high-quality care amid increasing service demands and constrained budgets. It's critical that our healthcare system is able to withstand, absorb, and recover from shocks, stresses, or disruptions while maintaining its core purpose of providing high-quality care. Thus, the question is, how can researchers and health system stakeholders work together to understand and improve resilient healthcare performance? Over the last four years we have applied Experience-Based Co-Design (EBCD) and a System Model (i.e., the Work Domain Analysis model - WDA) to improve ED care experiences for people who are older, are living with a disability or mental health condition, are Aboriginal and Torres Strait Islander, or come from multicultural backgrounds. The MyED project is a collaboration between researchers, clinicians, and consumers, and provides a foundation for appreciating how researchers and healthcare stakeholders can work together to understand and improve resilient healthcare performance.
Main objective	Our overarching research objective is to co-design strategies to improve ED care. Our presentation focuses on the application of a research project in a resilient healthcare system, and the lessons learned, addressing the important question of how external research teams contribute to resilient healthcare performance.
Main text <i>Max 300 words.</i>	Method To conduct this project, we applied EBCD to develop innovations to improve care experiences. In this session, we will present our process for understanding and improving resilient healthcare performance, focusing on the lessons learned from the process. Results In our presentation, we will present the co-design process and how the process evolved over the course of the project as lessons were learnt, including the challenges and successes of collaborating with healthcare stakeholders and different community groups. Over the five years, our approach to the application of EBCD was adapted as lessons were learnt about recruitment, the conduct of co-design workshops, analysis, idea development and implementation, and collaboration. For instance, the conduct of the co-design workshops were

	adjusted to meet the needs of the community members (e.g., mental health co-design workshops were online, whereas older adult workshops were face-to-face). Similarly, the idea development and implementation – the collaboration between researchers and health system stakeholders was adapted depending on the cohort, healthcare site, and stakeholders involved. Anecdotally, we found that the co-design workshops were an intervention in and of themselves, with clinicians' behaviours and attitudes changing as a result of participation, providing clinicians with insights into the extent to which existing interventions designed to meet consumer needs were not working. Similarly, community members learnt about clinician experiences of care delivery and the constraints that they work within – beyond the heavy workload. As researchers, navigating the dynamics of research project outcome needs and healthcare stakeholder urgency for implementing change was challenging. Implications for research and practice The MyED project provides concrete insights into how research teams can work with healthcare teams to improve healthcare delivery, as well as the research practices that could be routinely embedded into healthcare systems to support system adjustments (i.e., system learning), independent of research projects. <i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	The MyED project aimed to co-design and implement innovations in care delivery to improve care experiences. Researchers worked with healthcare stakeholders and community to co-design of innovations in ED care. Over the five-year project, lessons were learnt about collaborating on the design of a resilient healthcare system. In our presentation, we will present reflections on the co-design process, how we adapted the process over the five years as lessons were learnt, and how we navigated the collaboration with healthcare stakeholders and community to improve system resilience. In presenting these reflections, we will address the important question about how external research teams contribute to resilient healthcare performance.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	<i>Exploring Resilience-Focused Debriefing to learn Team Resilience in Interprofessional Simulation-Based Team Training</i>
Authors and affiliations	Torben Nordahl Amorøe^{1,2}, Hans Rystedt², Lena Oxelmark³, Peter Dieckmann^{4,5,6}, Karin Jonsson⁷, Cecilia Escher^{8,9}, Johan Creutzfeldt^{8,9}, Paulin Andréll^{10,1} ¹ Department of Anesthesiology and Intensive Care Medicine, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden ² Simulation Centre, Department of Research, Development, Education and Innovation, Sahlgrenska University Hospital, Gothenburg, Region Västra Götaland, Sweden ³ Institute of Health and Care Sciences, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden ⁴ Copenhagen Academy for Medical Education and Simulation (CAMES), Center for Human Resources, Capital Region of Denmark, Herlev Hospital, Herlev, Denmark ⁵ Department of Quality and Health Technology, University of Stavanger, Stavanger, Norway ⁶ Department of Public Health, University of Copenhagen, Copenhagen, Denmark ⁷ Department of Nursing, Umeå University, Umeå, Sweden ⁸ Department of Clinical Science, Intervention, and Technology, Karolinska Institute, Stockholm, Sweden ⁹ Center for Advanced Medical Simulation and Training, Karolinska University Hospital, Stockholm, Sweden ¹⁰ Department of Anaesthesiology, Intensive Care Medicine and Pain medicine, Sahlgrenska University Hospital, Gothenburg, Region Västra Götaland, Sweden,
Background	Interprofessional simulation-based education (IPSE) is widely used to help healthcare students prepare for the dynamic and often unpredictable nature of clinical work. Yet, educational strategies that explicitly engage with concepts of complexity and resilience remain limited. This study examined whether a resilience-focused debriefing (RFD) approach—structured to highlight complexity, adaptive capacity, and resilient performance—could strengthen students’ interprofessional teamwork.
Main objective	

Main text <i>Max 300 words.</i>	Methods: Using a convergent mixed-methods design, medical and nursing students completed a one-day IPSE program involving five scenarios of increasing complexity. Trained facilitators conducted debriefings using the RFD method. Qualitative material from recorded debriefings underwent topic analysis. Quantitative data included pre- and post-course assessments of team performance using the Team Emergency Assessment Measure TEAM, as well as student ratings of perceived scenario challenges. Results: The study demonstrated that RFD supported healthcare students in directing their attention toward the complexity of interprofessional teamwork in acute, rapidly changing scenarios, enabling them to identify successful actions as well as understand how they managed challenging moments. The significant reduction in perceived challenges across scenarios indicates that students developed a greater tolerance for complexity. TEAM scores remained at an acceptable level before and after the intervention. Although no statistically significant improvement in team performance was detected, the overall integrated findings suggest that RFD may still contribute to strengthening interprofessional teamwork. Implications for research and practice RFD can be applied in IPSE likely increasing students awareness to complexity and resilience. However, more research for effects on teamwork and how to measure team work that involves resilient performances is needed. <i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	By using resilience-focused debriefing to highlight real-time adaptations and teamwork strategies, the study offers a practical way to develop the capacities that underpin resilient performance in healthcare systems.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
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Leiden, The Netherlands

Title	Scaling up a Learning from Excellence tool as Safety-II intervention: Exploring collective reflection, learning, and education in hospital wards
Authors and affiliations	Karl Hybinette RN, PhD, Karolinska Institutet, Sweden Kiku Pukk-Härenstam MD, Associate Professor, Karolinska Institutet, Sweden
Background	Traditional patient-safety systems are largely based on <i>Safety-I</i> principles, focusing on identifying and preventing errors through incident reporting. While valuable, such systems primarily capture episodes of failure and provide limited insight into how healthcare professionals successfully adapt to complex and variable clinical conditions. The <i>Learning from Excellence</i> (LfE) approach represents a complementary <i>Safety-II</i> intervention, encouraging staff to report and reflect on instances of outstanding practice, situations where individuals or teams effectively manage challenging circumstances, prevent deterioration, or sustain high-quality care through adaptive performance. By making successful work visible, LfE aims to support collective learning, strengthen professional culture, and broaden the knowledge base for improvement.
Main objective	This study aims to explore how scaling up a Learning from Excellence reporting tool influences collective reflection, learning, and educational practices within clinical teams.
Main text <i>Max 300 words.</i>	Methods: The LfE tool was initially piloted in a neonatal intensive care unit (NICU), where staff were invited to submit brief reports describing episodes in which colleagues demonstrated exceptional problem-solving, teamwork, or anticipatory action in everyday clinical work or in response to emerging incidents. Building on the pilot experience, the intervention will now be implemented across several hospital wards. The scale-up process will involve local facilitation, integration with existing incident-reporting systems, and structured opportunities for team reflection. The study will use a mixed-methods implementation design, combining analysis of submitted excellence reports, observations of reflective meetings, and interviews with staff to examine how the tool shapes learning processes and educational dialogue in practice. Results: Pilot data is available, Scale up work in progress For research projects please include following sections: - Methods: Building on the pilot experience, the intervention will now be implemented across several hospital wards. The scale-up process will involve local facilitation, integration with existing incident-reporting systems, and structured opportunities for team reflection. The study will use a mixed-methods implementation design, combining analysis of submitted excellence reports, observations of reflective meetings, and interviews with staff to examine how the tool shapes learning processes and educational dialogue in practice. - Results: Pilot data is available, Scale up work in progress

	- Implications for research and practice: The findings will provide insights into how mechanisms for recognizing and discussing excellence may foster shared learning, support professional development, and contribute to a more balanced and generative patient-safety culture at scale. - Optional: 1 table or figure
Relevance to RHC	This study is relevant because it operationalizes several of the core concepts of resilience and Safety-II in a real clinical implementation. 1. Empirically studying everyday adaptive performance 2. Expanding learning systems in healthcare that are biased toward failure data with successful work and effective adaptations. 3. Exploring cultural change in safety management
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. Collective reflection, learning & education 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Abstract format



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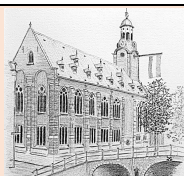
Title	Leadership behaviors enabling tacit knowledge integration in surgical multidisciplinary team meetings and their association with perceived meeting quality
Authors and affiliations	Charlie A. Steen, MSc Department of Vascular Surgery, Leiden University Medical Center, Albinusdreef 2, 2333 ZG Leiden, the Netherlands Institute of Public Administration, Leiden University, Turfmarkt 99, 2511 DP The Hague, the Netherlands Dr. Eduard (J. E. T.) Schmidt Institute of Public Administration, Leiden University, Turfmarkt 99, 2511 DP The Hague, the Netherlands Em. Prof. Dr. Jaap F. Hamming, MD Department of Vascular Surgery, Leiden University Medical Center, Albinusdreef 2, 2333 ZG Leiden, the Netherlands Dr. Abbey Schepers, MD Department of Vascular Surgery, Leiden University Medical Center, Albinusdreef 2, 2333 ZG Leiden, the Netherlands
Background	Multidisciplinary team meetings (MDTMs) play a pivotal role in clinical decision-making in surgical care and integrate diverse professional expertise to support high-quality, patient-centered decisions. Like other reflective practices, such as morbidity and mortality meetings, MDTM can function as learning platforms where teams interpret information and align perspectives, supporting team reflexivity and resilience (Verhagen et al., 2023). While evidence-based guidelines and protocols are essential inputs to MDTMs, decision-making in complex clinical situations also relies heavily on tacit knowledge (TK) and creating good team dynamics (Greenhalgh et al., 2008; Soukup et al., 2018). TK includes professional experience, intuition, and contextual judgement. Leadership is crucial for creating good team dynamics under which TK is voiced, legitimized, and integrated through collective reflection and coordination of perspectives. However, empirical evidence on what specific leadership behaviors enable TK use in surgical MDTMs remains limited. This study is part of a broader PhD project examining how informal everyday practices that shape surgical care quality can be leveraged from a leadership perspective.
Main objective	To examine whether leadership behaviors theorized to stimulate tacit knowledge use are associated with higher perceived quality of multidisciplinary team meetings.

Main text <i>Max 300 words.</i>	Methods We conduct an observational mixed-methods study in 20 surgical MDTMs at a tertiary academic hospital. Leadership behaviors are systematically coded using a structured observation framework capturing tacit knowledge—stimulating behaviors across task-, relations-, and change-oriented domains, informed by our prior work (submitted) and leadership theory (building on the taxonomy of Gary Yukl). In addition, after each meeting, participating healthcare professionals complete a brief questionnaire evaluating their perceived meeting quality across domains such as information quality, integration of perspectives and decision-making clarity. Quantitative analyses then explore associations between leadership behavior categories and meeting-level quality ratings. Fieldnotes and open-ended responses are analyzed thematically to contextualize quantitative findings. Results (anticipated) Data collection is ongoing. The results will show what leadership behaviors stimulating the use of TK are associated with higher perceived meeting quality. We will do so quantitatively by exploring associations between specific leadership behaviors and the perceived quality of the MDTMs; and qualitatively by presenting fieldnote results that illustrate how these leadership behaviors operate in practice. Hereby we demonstrate how informal practices may lead to improved health care. Implications for research & practice By empirically linking leadership behaviors to perceived MDTM quality, this study advances understanding of leadership as a critical social condition for high-quality surgical care. Findings will contribute to validating a leadership behavior taxonomy tailored to tacit knowledge use and may inform leadership development, MDTM design, and organizational learning strategies. Ultimately, this work aims to strengthen reflective capacity and adaptive decision-making in surgical teams, thereby enhancing resilience in complex care environments.
Relevance to RHC	The RHCS 2026 theme highlights the need to understand preconditions, drivers of resilient team performance, and how reflective practices enhance adaptive capacity before, during, and after care delivery. This study directly addresses this theme by examining how leadership behaviors stimulate TK use and how these behaviors relate to perceived MDTM quality.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & ‘teams of teams’</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Monday August 17th

SESSION VI - Short abstract presentations
Subtheme 3. Collective reflection,
learning & education

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Augmenting Medical Accident Report Analysis with Generative AI through Dialogue between Multi-Agent with Safety-I and Safety-II Perspectives
Authors and affiliations	Kotaro Kobayashi ¹ , Makiko Takizawa ² , Toru Hashimoto ¹ , Aoi Uema ³ , Kazue Nakajima ³ ¹ Department of Patient Safety, Kurashiki Central Hospital ² Department of Patient Safety, Saitama Medical University General Medical Center ³ Department of Clinical Quality Management, The University of Osaka Hospital
Background	Reports under Japan's Medical Accident Investigation System (MAIS) often lack a systems perspective, limiting effective and proactive measures. A new methodology is needed to transform these challenges into organizational learning.
Main objective	We developed a generative AI multi-agent system to review investigation reports from Safety-I and Safety-II perspectives.
Main text	We built the system with Large Language Models (LLMs) and deployed three AI agents: a moderator and two patient safety experts. "Dr. Safety-I" is an exacting reductionist. This agent focuses on individual performance in a bimodal way and insists that strict adherence to rules and rigorous self-reflection are essential to prevent fatal incidents. "Dr. Safety-II" is a decisive systems thinker. This agent champions organizational adaptability, arguing that safety arises from performance adjustment and cross-boundary collaboration rather than reliance on compliance alone. We then applied this multi-agent system to an investigation report on a patient death related to COVID-19 vaccination conducted in a mass vaccination setting, which was conducted under the MAIS and became publicly available. The system output was generated as a dialogue transcript recording the debate between the AI agents. While the original investigation report strongly emphasized the poor performance of the health care personnel involved and proposed conventional preventive measures, such as more detailed manuals for medical staff, the agents, in contrast, proposed concrete, cognitive-based solutions through rigorous debate. For example, they suggested implementing an emergency decision flowchart on the pre-vaccination screening binders. The limitation included that the AI agents failed to identify environmental issues at a mass vaccination site, requiring a different approach than in a hospital setting.
Relevance to RHC	This study demonstrates that Generative AI enables the practical application of Safety-II perspectives. Furthermore, integrating this approach into the MAIS reporting process has the potential to implement Safety-II theory throughout Japan.

Related subtheme	<i>3. Collective reflection, learning & education</i>
More information: lumc.nl/rhcs2026	

Title

Scenario-Based Adaptation with Resilience-Focused Debriefing: Residents as Teachers Using a 4S Operating Room Board Game for Team and Sociotechnical Resilience

Authors:

Chien-Yu Jonathan Chen. MD. PhD.^{1,2}, Shu-Liu Guo. MSN. PhD.^{3,4}, Hsin-Yi Chiu, MD. PhD.^{2,5}, Ling-Cheng Mong. DDS. PhD candidate⁶

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Department of Family Dentistry, Taipei Medical University Hospital, Taipei, Taiwan

Subtheme

Collective reflection, learning & education

Abstract

Background: Operating room work depends on dynamic coordination across staff, space, systems, and material resources. Yet physicians are often trained to solve problems as individual experts rather than as members of a sociotechnical team. To address this gap, we developed a scenario-based board game for operating room learning that uses resilience-focused debriefing and positions residents as teachers.

Main objective: To describe a scenario-based board game, facilitated by residents as teachers, that develops physicians' capacity to recognize and

enact team and sociotechnical resilience in routine and disrupted operating room work.

Main text: The game was co-designed by physicians, nurses, and educators. In teams of four, physician players complete a day's required surgical cases using a Monopoly-style board, dice-based movement, chance cards, and 40 scenarios derived from common operating room situations. Each task requires collaborative decisions across 4S resources. The learning focus is not individual success, but team behaviours that support resilient performance: anticipatory communication, speaking up, cross-checking, role flexibility, resource reallocation, escalation, and recovery. Preconditions and drivers of resilience are made visible through shared goals, explicit resource constraints, structured prompts, and resident facilitation. Trust, cohesion, and mutual understanding are built through joint task completion and a shared 4S language for negotiating trade-offs. Brief team huddles before and during play, followed by resilience-focused debriefing, help learners examine how teams adjust before, during, and after care. The format is designed to transfer into routine and unplanned work, including pre-list briefings, intraoperative pauses, and post-case reflection.

Relevance to RHC/related subtheme: This educational design addresses resilient performance as an emergent property of teamwork and sociotechnical coordination rather than individual heroics. It aligns with Collective reflection, learning & education; Clinical teams & teams of teams; Coordination of care (systems); and Technical tools & infrastructure.

Learning and improving after impactful events: Operationalising Safety II and restorative just culture to strengthen healthcare system resilience

Monica Grasveld and Marjon Havinga

Background

Healthcare organisations often struggle to learn from impactful clinical events without reinforcing blame, moral distress, and professional burnout. Inspired by principles of Safety-II and Restorative Just Culture, we developed a structured method that fosters multidisciplinary team cohesion, reflection, shared ownership, and system-oriented learning following impactful events.

Objectives

The method aims to better understand systemic imperfections by learning from work-as-done rather than focusing on individual failure. It seeks to strengthen care system resilience, enhance psychosocial safety, improve interdisciplinary collaboration and team dynamics, and support professional wellbeing.

Method

The method has been applied in 20 multidisciplinary healthcare cases and consists of four interconnected phases:

1) Restorative Just

A facilitated dialogue involving professionals directly affected by the event. The focus lies on restoring psychological safety, sharing perspectives, and developing a collective narrative of what happened, resulting in a shared timeline and understanding of relevant work processes.

2) Dialogues

Structured team dialogues explore how everyday work normally succeeds, identifying adaptive practices and systemic conditions influencing outcomes. Participants reflect on insights between sessions and jointly identify opportunities for improvement.

3) Micro-experiments

Teams test locally developed improvements in daily practice through small-scale experiments, where success is defined by learning and adaptation rather than predefined performance outcomes.

4) Storytelling

Experiences, insights, and learning outcomes are shared within the wider organisation to stimulate collective learning and strengthen organisational memory.

Conclusion & Implications

Across cases, the method supports system-oriented learning, multidisciplinary collaboration, and psychosocial safety. By operationalising Safety-II and Restorative Just Culture principles into practice, the approach contributes to resilience at micro, meso, and macro levels of healthcare systems.

Monica Grasveld (NRN /MHSc) is a very experienced consultant, trainer and coach in quality improvement and Safety-II in all kind of healthcare settings. She is an ambassador and fellow of the Dutch Safety-II network . She started her not-for-profit organization PPP-Zorg in 2012, with the mission to improve multidisciplinary teamwork and positive experiences for patients and employees in health care institutions. Patients are often involved in the improvement projects.

Marjon Havinga (NRN/MHSc) has more than 20 years experience in quality and safety improvement in health care. She was network initiator at the national Safety II programme “Time to Connect” in the Netherlands. Now she provides strategic advice, works as a trainer and moderates multidisciplinary teams in Restorative Just and Safety II.

Abstract format



RHCS 2026

Resilient Health Care Society
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August 17-19, 2026
Leiden, The Netherlands

Title	Strengthening mental well-being and Organizational Resilience in Elderly Care: Designing and Implementing the Support4Resilience Toolbox Across Multiple Countries.
Authors and affiliations	Malin Rosell Magerøy ^{1*}, Cecilie Haraldseid-Driftland ¹ ¹SHARE, Faculty of Health Sciences, University of Stavanger, Norway Correspondence: Malin Rosell Magerøy; malin.r.mageroy@uis.no
Background	A thriving healthcare workforce depends on supportive structures, shared learning, and the capacity to manage emotional and organizational pressures. Elderly care across Europe face increasing complexity and widening gap between resources and demands, making it essential to equip leaders and staff with tools that foster resilience, wellbeing, and high quality care. The Support4Resilience (S4R) project introduces a structured, theory-informed intervention designed to address these needs.
Main objective	The aim of the intervention design is to strengthen workforce wellbeing and organizational resilience by implementing the S4R toolbox through a multi-level collaborative model that builds competence and promotes reflective practice across diverse elderly care contexts.
Main text	Methods: Guided by the updated Medical Research Council (MRC) framework, the 12-month intervention is being implemented in six European countries across homecare, residential care, and hospital-to-home settings. The design consists of four interconnected learning arenas: 1. Intervention Design Team (IDT): Ensures coherence, quality, and cross-level communication. 2. Principal Learning Collaborative (PLC): Provides international and national training, adapts content, and prepares participants for implementation. 3. Local Learning Collaborative (LLC): Supports frontline leaders in translating PLC plans into local practice and developing reflective skills. 4. Activities With Staff (AWS): Unit-level activities led by frontline leaders to strengthen team culture, psychological safety, mental well-being and organizational resilience by embedding the intervention into daily practice. The model balances structure and flexibility, allowing adaptations across countries and healthcare settings. Results: Early implementation experiences indicate that the multi-level model fosters active engagement among leaders and staff. PLC and LLC create safe learning environments that build competence in reflective facilitation and organizational change. Ongoing pilot testing suggests that the integrated model may enhance workforce wellbeing, leadership capability, and organizational resilience, with further findings expected.

	 Implications for research and practice: Structured multi-level learning systems like S4R may offer an effective approach to strengthening reflective practice, relational culture, and resilient performance. Findings remain preliminary.
Relevance to RHC	The S4R intervention aligns with RHC by strengthening relational, reflective, and learning-oriented practices across care levels. It's multi-level structure supports psychological safety, shared learning, and resilient team cultures, key elements in resilient healthcare systems.
Related subtheme <i>please select</i> 1	3. <i>Collective reflection, learning & education</i>
More information: lumc.nl/rhcs2026	

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Mapping the Educational Translation of Resilience Engineering through a Scoping Review
Authors and affiliations	<u>Chih-Chung Liu</u> ^{1,2} , Tzu-Ruei Liao ¹ , Yu-Hsuan Fan Chiang ¹ , Chuen-Chau Chang ^{1,2} ¹ Department of anesthesiology, Taipei Medical University hospital, Taipei, Taiwan. ² Department of Anesthesiology, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan.
Background	Patient safety education has traditionally followed a Safety-I perspective, emphasizing error detection and protocol compliance. However, modern healthcare systems operate under conditions of complexity and variability where safe performance increasingly depends on adaptive capacity and everyday system functioning, as highlighted in the Safety-II perspective and Resilience Engineering (RE). A central RE concept is the gap between Work-as-Imagined (WAI) and Work-as-Done (WAD), which reflects the difference between formal protocols and real clinical practice. Although these ideas are increasingly discussed in resilient healthcare research, their translation into medical education remains limited, particularly within anesthesiology residency training, where clinicians must routinely manage dynamic perioperative systems and adapt to rapidly changing clinical conditions.
Main objective	To map how Resilience Engineering and Safety-II concepts are practiced in medical education, and to identify emerging educational approaches that support understanding of adaptive clinical work and system resilience.

Main text <i>Max 300 words.</i>	Method A scoping review was conducted to explore how RE and Safety-II are represented and translated into educational contexts. A structured search of the Scopus database (2006–2025) was performed using resilience engineering and medical education–related keywords. Records were screened for relevance to system-level resilience concepts and healthcare education. Eligible studies were charted and analyzed using descriptive and thematic synthesis to identify conceptual orientations, educational strategies, and research gaps. Results A total of 58 identified publications, 10 core studies were included after screening. Across the literature, educational interventions were designed to make the WAI–WAD gap visible and to examine how clinical work succeeds despite variability, competing demands, and system constraints. Educational approaches focused on adaptive performance, trade-offs, and collective sense-making, rather than error identification alone. Simulation-based education (SBE) emerged as the dominant method for translating RE concepts into training environments. Simulation was used not only for technical skill practice but also to rehearse adaptive coordination and system awareness. Additional approaches included Multi-User Virtual Reality (MUVR), medical escape rooms, Video-Reflexive Ethnography (VRE), and Learning-from-Success (LFS) debriefing. These initiatives were implemented across diverse domains including internal medicine, emergency care, anesthesiology, pediatrics, and midwifery leadership, involving learners from undergraduate students to interprofessional clinical teams. Implications for Research and Practice Despite increasing attention to Resilience Engineering (RE), its application in residency education remains limited. For anesthesiology training, RE principles could be integrated into residency curricula to help residents understand system complexity, coordination, and adaptive work in perioperative care. Educational approaches such as simulation-based scenarios, reflective debriefing, and analysis of Work-as-Imagined versus Work-as-Done may support residents in recognising how safe care is achieved under real clinical constraints. Future research should explore how RE-informed training can be embedded within anesthesiology residency programmes and aligned with competency-based assessment to strengthen adaptive capacity in perioperative teams.
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Relevance to RHC	This study contributes to the translation of Resilient Health Care concepts into training and professional development, an area that remains under-explored in the RHC literature. By mapping existing educational applications of RE, the review highlights opportunities to bridge resilient healthcare theory with the preparation of future clinicians, supporting the development of adaptive capacity at the frontline of healthcare systems.
Related subtheme please select 1	1. Clinical teams & ‘teams of teams’ 2. Patient centeredness & involvement 3. Collective reflection, learning & education 4. Leadership, management & governance 5. Cultural, psychological & team dynamics 6. Coordination of care (systems) 7. Technical tools & infrastructure 8. Advancing theory & analytical tools
More information: lumc.nl/rhcs2026	

Tuesday August 18th

SESSION VII - Abstract presentations
**Subtheme 4. Leadership,
management & governance**

Implementing a Facility-Level Emergency Response System for War-Related Combined Threats: A Practice-Based Model from Ukraine

Authors:

Maksym Moskalenko, PhD, Associate Professor; Tetiana Vezhnovets, Professor

Affiliation: Bogomolets National Medical University, Kyiv, Ukraine

Background

Healthcare facilities operating during war face recurrent combined threats that challenge conventional preparedness and governance models. In Ukraine, repeated missile and drone attacks generate cascading effects, including infrastructure disruption, communication failures, power instability, and sudden mass-casualty influxes. Although national civil-protection regulations exist, limited facility-level implementation constrains leadership coordination, accountability, and continuity of inpatient care under extreme uncertainty.

Objective

To design and implement in practice a structured Emergency Response System (ERS) that translates resilience frameworks into a functional, facility-level model for managing war-related combined and multi-hazard threats.

Methods

A practice-based implementation design was applied within the international Safe and Resilient Hospital project. The ERS integrates WHO Health Emergency and Disaster Risk Management (Health-EDRM) principles, the WHO Hospital Safety Index (HSI), and hospital incident command system logic. Development and implementation comprised four components:

- (1) contextual adaptation of HSI indicators to missile- and drone-related threat scenarios;
- (2) development of phase-based response algorithms covering preparedness, response, and recovery;
- (3) role-based structuring of multidisciplinary rapid response teams with defined leadership and coordination functions;
- (4) formal differentiation between strategic governance responsibilities and operational incident command.

The introduction of the ERS into routine practice was supported by structured readiness assessments and simulations, with iterative refinement guided by analysis of team coordination and leadership behaviors during exercises and real incidents.

Results

Implementation in inpatient facilities demonstrated improved role clarity, strengthened coordination between clinical and support services, and enhanced capacity to maintain continuity of care during high-impact incidents. Emergency response shifted from person-dependent

reactions toward institutionalized, system-based processes. Key enabling elements included standardized readiness assessments, phase-specific response algorithms, defined team roles, and clear governance-accountability structures.

Relevance and Implications

The ERS illustrates how leadership, governance, coordination of care, and technical preparedness interact to enable resilient performance under sustained war-related disruption. The model raises critical questions regarding which team behaviors and governance arrangements most effectively support resilience, offering transferable insights for health systems facing complex, compound threats.

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Healthcare workers, leaders and informal caregivers' perspectives on resilient performance in elderly care: a cross-country study
Authors and affiliations	Hilda Bø Lyng, Malin R Magerøy, Birte Fagerdal, Florin Tibu, Syb Kuijper, Viola Casseti, Mari Lahti, Paola Cantarelli, Kristian Odberg, Louise Ellis, Cecilie Haraldseid-Driftland and Siri Wiig
Background	Elderly care services increasingly face a substantial mismatch between available capacity and growing demand. Resilience in healthcare has been identified as a critical capability for sustaining safe, quality care amid ongoing pressures, disruptions, and change. Because elderly care involves multiple stakeholders—leaders, frontline workers, and informal caregivers—their combined efforts shape how resilience is enacted in everyday practice. Gaining insight into these diverse perspectives is therefore essential for developing a holistic understanding of what constitutes resilient performance in elderly care.
Main objective	The aim of this study is to explore the perspectives of leaders, workers, and informal caregivers in elderly care on what contributes to resilient performance.
Main text <i>Max 300 words.</i>	Methods: Semi-structured interviews were conducted with leaders (n = 95), workers (n = 122), and informal caregivers (n = 87) across six European countries (Norway, Finland, the Netherlands, Spain, Italy, Romania) and Australia. Data were first analyzed within each country and subsequently summarized in a predefined template to enable cross-country analysis. The cross-country analysis followed a deductive-inductive thematic approach consistent with Braun and Clarke. Results: Seven overarching themes of resilient performance emerged across all participant groups: adaptability, continuity of healthcare personnel, open communication, competence, relationships, requesting and receiving help, and interprofessional collaboration. While these themes were identified as important for leaders, workers, and informal caregivers alike, each group emphasized different aspects and nuances underpinning these themes. Implications for Research and Practice: Resilient performance in elderly care is shaped by the actions and interactions of multiple stakeholder groups. Incorporating the perspectives of leaders, workers, and informal caregivers is therefore essential to developing holistic strategies that strengthen resilience in everyday care practices.

Relevance to RHC	This study provides understanding of elderly care leaders, workers and informal caregivers perspectives on resilient performance.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Tuesday August 18th

SESSION VIII - Short abstract presentations
**Subtheme 4. Leadership,
management & governance**

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
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Leiden, The Netherlands

Title	Exploring Leadership to Promote Mental Wellbeing, Resilience, and Quality in Elderly Care Services: Qualitative Cross-Country Insights from Europe and Australia
Authors and affiliations	Authors: Malin Rosell Magerøy^{1*}, Viola Cassetti², Syb Kuijper³, Nicola Belle⁴, Mari Lahti⁵, Kristian Odberg⁶, Louise Ellis⁷, Olga Adriana Caliman- Sturdza⁸, Hilda Bø Lyng¹ Affiliations: ¹SHARE- Centre for Resilience in Healthcare, Faculty of Health Science, University of Stavanger. ²University Jaume I, Castellon. ³Erasmus School of Health Policy & Management, Erasmus Universiteit Rotterdam. ⁴Sant'Anna School of Advanced Studies, Institute of Management, Pisa Italy. ⁵University of Turku, Finland. ⁶Department of Health Sciences, Norwegian University of Science and Technology (NTNU), Gjøvik. ⁷Australian Institute of Health Innovation. Faculty of Medicine, Health and Human Sciences, Macquarie University. ⁸Stefan cel Mare University of Suceava. Correspondence: Malin Rosell Magerøy, malin.r.mageroy@uis.no
Background	European elderly care faces a declining workforce, shortages of qualified personnel, and rising sick leave, increasing pressure on remaining staff and reducing mental wellbeing. As services shift toward home and community care, current capacity and competence are insufficient to meet growing demands, threatening resilience and quality. Strengthening working conditions, adaptability, and employee mental wellbeing is therefore essential. Leaders play a key role in creating supportive environments and enabling resilient performance.
Main objective	This study, part of the <i>Support4Resilience</i> project, explored how leaders maintain resilience performance and quality under challenging conditions.
Main text	Methods: Qualitative semi-structured interviews were conducted with 95 frontline leaders across seven countries, following the same interview guide, previously translated into all local languages to ensure consistency. Each country conducted a framework analysis of their data, using cross-country

	analysis combining deductive coding with inductive thematic analysis guided by Braun and Clarke. Results: Leaders across countries reported high workload, staff shortages, and elevated sick leave as key pressures undermining resilience, mental wellbeing, and quality. Their workdays were dominated by operational demands and administrative tasks, leaving limited time for strategic leadership. Quality of care depended on stable teams, good communication, and opportunities for support and debriefing. Leaders adapted workflows, reorganized resources, and encouraged team autonomy to manage ongoing challenges. Their own wellbeing was affected by emotional strain, administrative burden, and blurred work-life boundaries, though strong team relations and peer support were protective. Leaders provided emotional and practical support to staff, emphasized psychological safety, and involved employees in decision-making. Informal caregivers were viewed as valuable partners when roles were clearly defined. Leaders called for stronger organizational support, improved infrastructure, and simplified administrative systems to sustain resilient performance. Conclusion and Implications: Frontline leaders carry increasing responsibility under growing pressure yet remain essential for maintaining quality, resilience, and mental wellbeing in elderly care. Strengthening leadership support, through reduced administrative burden, health-promoting work environment, stable teams, competence development, and clearer collaboration with informal caregivers, is critical for workforce sustainability. Future research should examine leadership support mechanisms that enhance resilience and identify effective models of adaptive leadership in resource-constrained settings.
Relevance to RHC	This study applies to resilience in healthcare by showing how frontline leaders uphold quality and safety under growing pressure. It demonstrates how they support staff, stabilize teams, and enable everyday adaptations despite workforce shortages and rising demands—key elements of resilient performance in elderly care.
Related subtheme	<i>4. Leadership, management & governance</i>
More information: lumc.nl/rhcs2026	

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Exploring the relationship between incident reporting policies, leadership expectations, and the nature of healthcare worker behaviours in a Mental Health program at a mid-size Canadian tertiary hospital: A qualitative study.
Authors and affiliations	Erika Petersen (Queen's University) – PhD Student Dr. Hilda Bø Lyng (University of Stavanger) Dr. Rosemary Wilson (Queen's University) Dr. Rylan Egan (Queen's University) – Supervisor
Background	Only 7-15% of all incidents are reported, indicating a gap exists between incident reporting requirements and healthcare workers' (HCW) incident reporting behaviour. ^{1,2} Efforts to improve this gap have been too linear, too reactive and often focused on fixing errors (i.e., Safety-I), and fails to account for healthcare system complexities, opposed to also understanding why things go right and the trade-off required (i.e., Safety-II). ^{2,3} While a recent study found that a Safety-II approach can benefit incident management, there is a paucity of research on incident reporting where a Safety-II approach was used. ⁴ To understand how a Safety-II approach could be integrated into incident reporting, it will be beneficial to use a resilient healthcare lens to explore the current state of incident reporting and why gaps exist. ^{2,4}
Main objective	The aim of this research is to explore the gaps and bi-directionally relationship between incident reporting requirements and behaviours.
Main text <i>Max 300 words.</i>	A qualitative study within a Mental Health program at a hospital in Ontario, Canada is being conducted, consisting of two research phases: 1) document analysis; and 2) a constructivist grounded theory (CGT) study. Phase 1 involves a document analysis to explore the written requirements (e.g., policies) on how HCWs are expected to report incidents⁵. The document analysis serves as the first step in addressing the research questions and objectives and informing Phase 2 by identifying potential participants and shaping interview questions. Phase 2 involves conducting a CGT to understand⁶: 1) the context within which Phase 1 documents were created; 2) leaders' expectations and how they compare to the written requirements; and 3) HCWs' incident reporting behaviours and how they compare to the written requirements and leaders' expectations. Once the data is analyzed using a CGT approach, the codes will be analyzed using the Concepts for Applying Resilience Engineering (CARE) model⁷. This research is progress and does not yet have results. Specifically, the data collection for the document analysis is underway, and preparations for Phase 2 have begun. Preliminary results will be achieved by the time of the conference. The findings of this research will inform a theoretical shift in how errors and incident reporting are understood and acted upon at this organization level. This shift will encourage incident reporting requirements to be informed by HCWs' incident reporting behaviour. <i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure

Relevance to RHC	A resilient healthcare lens (i.e., Safety-I, Safety-II, work-as-imagined, and work-as-done components) and framework (i.e., the CARE model) is being used to explore the current state of incident reporting and why gaps exist.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. Leadership, management & governance 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

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Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Leadership strategies and practices supporting staff mental wellbeing individual and organisational resilience in homecare
Authors and affiliations	Pegah Sedgh* 1, Kristian Ringsby Odberg2, Siri Wiig1, 3, Louise Ellis3, Hilda Bø Lyng1 1SHARE Centre for Resilience in Healthcare, Faculty of Health Sciences, University of Stavanger, Stavanger, 2Department of Health Sciences , Norwegian University of Science and Technology , Gjøvik, Norway, 3Centre for Healthcare Resilience and Implementation Science, Australian Institute of Health Innovation,
Background	Healthcare services face high variability and resource constraints, forcing teams to constantly adapt their practices to ensure quality care and staff wellbeing. The Resilience in Healthcare (RiH) provides a perspective for understanding how healthcare systems adapt to mismatches between demands and available resources, and how everyday adjustments enable services to sustain functioning under changing and challenging conditions(Glette et al., 2025; Wiig et al., 2020). Additionally, the literature highlights the crucial role of leaders in fostering resilience(Glette et al., 2025), supporting staff wellbeing (Inceoglu et al., 2021), and maintaining quality. However, there is limited understanding of how daily leadership practices facilitate these resilience processes, especially in elderly care settings.
Main objective	This study aims to explore how home care leaders contribute to resilience and mental well-being through everyday leadership practices.

Main text <i>Max 300 words.</i>	Methods: This qualitative study is part of the larger Support4Resilience (S4R) project. It used a multiple embedded case study design, with data collected through three focus groups and three individual interviews involving home care leaders from four Norwegian municipalities. The analytical process was guided by an inductive reflexive thematic analysis, following Braun and Clark. Results: Thematic analysis revealed four key areas of leadership practice: (1) fostering supportive work environments by recognizing staff skills, ensuring psychological safety, and mitigating work stress; (2) promoting shared understanding and teamwork through reflection sessions and structured information flow; (3) balancing anticipatory planning with flexible adjustment to operational changes; and (4) managing sociotechnical factors by coordinating staffing, teams, and digital planning systems. Implications for research and practice: Integrating leadership perspectives with the resilience perspective can enhance understanding of how resilience capacities are demonstrated in practice, emphasizing the role of middle managers in translating system-level resilience principles into everyday work.
Relevance to RHC	The findings indicate that leadership practices play a central role in enabling resilience processes within home care teams. By facilitating relational support, collective sensemaking and coordination across sociotechnical elements of the work system, frontline leaders contribute to resilient performance
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. Leadership, management & governance 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i>

	8. Advancing theory & analytical tools
More information: lumc.nl/rhcs2026	

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Tuesday August 18th

SESSION X - Short abstract presentations
Subtheme 1. Clinical teams & 'teams of teams'

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
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Title	Understanding Teamwork in Mental Healthcare: A Scoping Review
Authors and affiliations	Marta Ortega Vega, Olivia Lounsbury, Prof. Gabriel Reedy, Prof. Baroness Anne Marie Rafferty, Dr. Natalie Sanford 1. Division of Methodologies, Florence Nightingale Faculty of Nursing, Midwifery, and Palliative Care, King's College London 2. Nuffield Department of Clinical Neurosciences, University of Oxford 3. Centre for Education, Faculty of Life Sciences and Medicine, King's College London
Background	Teamwork in mental health settings is complex, requiring close collaboration and coordination across various professions, care sectors, and agencies to deliver acute and chronic care to service users (Hannigan & Allen, 2016; Cortina et al., 2019). Previous reviews have emphasized the outcomes of team-based mental health interventions (Reist et al., 2022; Hernandez et al., 2024), but do not explicitly focus on the teamwork processes and factors leading to these outcomes.
Main objective	To synthesize the literature on teamwork in mental health settings to provide a comprehensive narrative of how teamwork is studied, described, and measured in this complex context.
Main text <i>Max 300 words.</i>	Methods A scoping review was selected due the exploratory nature of the research question (Peters et al., 2020; Tricco et al., 2018). A database search (Ovid MEDLINE, PsycINFO, CINAHL, and Scopus) yielded 5093 papers. Titles and abstracts were double screened for all papers, and 20% of full texts were double screened. 88 studies were included in the analysis. Results The teamwork literature in mental healthcare is heterogenous, spanning 16 countries and involving qualitative (n=34), quantitative survey (n=20), mixed methods (n=9) and other designs. It covers a breadth of exploratory (n=41), explanatory (n=23), and evaluative aims (n=17), considering individual and team level perspectives (n=44 each) on the processes and quality of teamwork. Despite this varied evidence base, the literature presents inconsistent theory engagement, with only 35 studies explicitly applying theory to their design and analysis. Moreover, team descriptions were mostly limited to the professional composition or care setting (n=53), with very few studies describing structural or work design elements of teams (n=9). Various factors influenced teamwork in this setting. The key barriers included reconciling different care models across disciplines, negotiating disciplinary cultures and hierarchies, and lack of organizational structures and resources for information sharing. The main enablers included

	understanding each other's roles, co-location or service models that enabled consistent contact, team participation and expertise sharing. Implications for research and practice Much of the literature has prioritized individual perspectives of teamwork, often not contextualizing teamwork within the organizational setting or exploring elements of work design. This limits the understanding of the characteristics of teams that thrive, or struggle, when negotiating pressured and evolving healthcare systems. Future research would benefit from adopting more consistent reporting of team features and the application of theoretical frameworks to support the development of explanatory models that capture the complexity of teamwork as it unfolds in practice. <i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	The findings of the scoping review highlight a gap in our understanding of how teams operate in mental health settings through a resilience lens. Importantly, the review raises the following opportunities to advance practice: • The study of resilience and team adaptive capacity in this area of healthcare is nascent, with none of the studies included in the review explicitly aiming to explore teamwork through this lens, and a limited number of studies discussing findings in this area implicitly. There is an opportunity to explore how adaptive capacity manifests in this context, and ways to build resilience at different levels of the mental health system. • As evidenced by many of the studies, training teams is not enough – context-based interventions to support teams to effectively respond to the diverse demands of mental healthcare are needed. Several studies surface the need for interventions at the interface of organizational culture, resources and team level outcomes, challenging previous disciplinary hierarchies to benefit from diverse team expertise. • Much of current research doesn't capture the complexity of work in practice, as it is done through the lens of individuals within teams, or observationally of teams without analysis of wider organizational and local contexts. This presents an opportunity for applying mixed methodologies and theoretical lenses to explore the nuances of the real work of teams in this setting. • Finally, working across agency boundaries adds complexity to the work of mental healthcare, with different organizational and disciplinary demands, cultures and dynamics at play. Studying teamwork in this setting provides an opportunity to explore the conditions of work that occurs at the intersection of systems.
Related subtheme <i>please select 1</i>	1. Clinical teams & 'teams of teams'

	<i>2. Patient centeredness & involvement</i> <i>3. Collective reflection, learning & education</i> <i>4. Leadership, management & governance</i> <i>5. Cultural, psychological & team dynamics</i> <i>6. Coordination of care (systems)</i> <i>7. Technical tools & infrastructure</i> <i>8. Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Team resilience in intraoperative anaesthesia care
Authors and affiliations	Karolina Olin RN, PhD, University of Turku, Finland Karl Hybinette RN, PhD, Karolinska Institutet, Sweden Kiku Pukk Härenstam MD, Associate Professor, Karolinska Institutet, Sweden
Background	Team resilience in healthcare is multifaceted, embracing both systemic and team perspectives of resilience. Team resilience is supported by active processes from both organization and team level strategies and actions. Team resilience is present as an intrinsic team capacity, but when a trigger for adaptation is identified, it changes to an active status, resulting in a possible re-organization of courses of action. Everyday complexity in intraoperative anaesthesia care consists of multiple simultaneous processes and tasks in an interprofessional team, in the complex adaptive system of an operation room, presenting a potent context for exploring team resilience.
Main objective	To explore healthcare teams' resilience in the context of intraoperative anaesthesia care
Main text <i>Max 300 words.</i>	Methods: Exploring intraoperative anaesthesia care through the conceptual model of team resilience (Olin et al 2025), using abductive literature review and content analysis. Results: Work in progress Implications for research and practice: Validation and further development of the conceptual model of team resilience, and elucidating team resilience in the clinical context of intraoperative anaesthesia care
	<i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	Healthcare teams present a platform, where systemic and team resilience are simultaneously present, impacting each others. Identifying
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i>

	<i>6. Coordination of care (systems)</i> <i>7. Technical tools & infrastructure</i> <i>8. Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Abstract format



RHCS 2026

Resilient Health Care Society
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Title	Applying the DAMIL approach - a resilience-driven work system improvement method to shorten the ultra-long-term hospitalization in hospital medicine ward
Authors and affiliations	Kuan-Yuan Chen ¹, Sheuwen Chuang ², Yuarn-Jang Lee ^{3,4}, Hsin-Yi Chiu⁵ 1 Shuang Ho Hospital, Taipei Medical University/Division of Pulmonary Medicine, Department of Internal Medicine, Taiwan 2 Graduate Institute of Data Science, College of Management, Taipei Medical University, Taiwan 3 Shuang Ho Hospital, Taipei Medical University/Division of Infectious Diseases, Department of Internal Medicine, Taiwan 4 Division of Infectious Diseases, Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University, Taiwan 5.Thoracic division, Surgery department, Taipei Medical University, Taiwan
Background	The shortage of acute hospital beds caused by insufficient nursing manpower is currently a major problem and impact resilience of Taiwan's medical care. Therefore, how to shorten the burden of ultra-long-term hospitalization and improve the utilization efficiency of acute hospital beds needs to be solved urgently. Resilient medicine can be demonstrated in solving this urgent problem, but there is currently no specific implementation method. So, actionable methods in clinical scenario based on the theory of resilience engineering are currently an unmet need.
Main objective	We propose a actionable DAMIL approach- a resilience-driven work system improvement method to demonstrate and test whether this method achieve main goals of improving ultra-long-term hospitalization while enhancing the resilience of team in hospital medicine ward.
Main text <i>Max 300 words.</i>	Methods The DAMIL approach has five specific implementation steps: In the first step(define), we defined the problem to be improved as ultra-long-term hospitalization. In the second step(analyze), we analyzed the proximate causes of this problem, in the third step(measure), we use tailored resilience analysis grid (RAG) questionnaire to measure the team members who related to discharge work in the hospital medicine ward. The fourth step(identify) clarifies the changes encountered and corresponding responses during the actual implementation of the workflows related to the proximate causes analyzed in the second step by applying the concepts of work-as-imagined (WAI)/work-as-done (WAD). This allows us to understand which key resources and information of these underlying causes are linked to. Finally, based on the actual responses to insufficient key resources and information related to ultra-long-term hospitalization, improvement plans and facilitating learning are proposed in the fifth step(learn). Results Using the DAMIL approach, a total of 38 WAI/WAD items were associated with ultra-long-term hospitalization. Among them, 5 key pieces of information consisting of a clear discharge date, information for family members regarding discharge, information on discharge

preparation items, family members' discharge wishes, and the patient's condition at the time of discharge initiation. The other two key resources are the off-site placement of beds and equipment for off-site discharge preparation. We then propose improvement strategies and facilitating learning based on these key pieces of information and resources. The main activity and output were summarized in Table 1

Implications for research and practice

The DAMIL method proposed in this study is the first clinically feasible approach that combines improving the quality of healthcare with enhancing the resilience of healthcare teams and their members.

Table 1 Summary of the main activities and results of each step in the DAMIL approach

	Main activity	Output
Define	The hospital medicine ward team members reached a consensus on the most pressing issues that need improvement.	The pressing issue is ultra-long-term hospitalization in the hospital medicine ward
Analyze	1. A systematic review of the current discharge-related personnel in the hospital medicine ward and their operational processes. 2. Using root cause analysis to explore the factors of ultra-term hospitalization	1. Establish a workflow system in the hospital medicine ward related to patient discharge. 2. Factors of ultra-term hospitalization including disease severity or natural course factors, insufficient understanding of the disease affecting discharge intentions, family care factors, and discharge care facility admission factors
Measure	Measure resilient capacity of the members of workflow system in the hospital medicine ward related to patient discharge through tailored resilience assessment grid (RAG) survey questionnaire	Results of RAG survey questionnaire of team members in the hospital medicine ward before and after implementation of learning and improvement
Identify	To address the factors influencing long-term hospitalization, this paper clarifies the differences between the standard specifications or norms in the work system and the actual work by work as imagine (WAI)/work as done (WAD) analysis.	1. WAI/WAD analysis data in Computer 2. A total of 38 WAI/WAD items related to long-term hospitalization 3. The critical processes based on 38 WAI/WAD items need to strengthen both resilience and operational performance including 5 key pieces of information consisting of a clear discharge date, information for family members regarding discharge, information on discharge preparation items, family members' discharge

			wishes, and the patient's condition at the time of discharge initiation. The other two key resources are off-site bed placement and off-site discharge preparation equipment.
	Learn & Improvement	Propose improvement strategies and continuous learning for five key pieces of information and two key resources that affect ultra-long-term hospitalizations.	1. Establish an electronic system for timely confirmation of discharge dates. 2. Optimize family meeting processes to clearly communicate discharge dates. 3. Continuously learn better communication techniques and methods for discharging patients with family members
Relevance to RHC	The core concept of resilient medicine is the ability of a healthcare system to adapt to problems. While resilient medicine has a theoretical basis, there are no concrete methods for its practical clinical implementation. The DAMIL approach proposed in this study provides a clear and feasible method to achieve two objectives. Firstly, this framework enables the development of solutions to quality-related healthcare issues. Secondly, and more importantly, it allows for the simultaneous assessment of the resilience of system members during the problem-solving process, enhancing their resilience through continuous improvement and learning.		
Related subtheme	Clinical teams & ‘teams of teams’		
More information: lumc.nl/rhcs2026			

Tuesday August 18th

SESSION XI - Abstract presentations
Subtheme 2. Patient centeredness & involvement

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
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Title	Crises in the hospital Emergency Department: ideas from patients on how to improve system resilience and deliver quality care
Authors and affiliations	Clay-Williams R, Cheek C, Austin E, Francis-Auton E, Goirand M, Ransolin N, Zeng L, Richardson L, Grigg S, Dominello A.
Background	Across Australia, and internationally, demand for hospital emergency care is increasing without commensurate resourcing, and EDs are struggling to provide the level of care that patients need. As the recipients of care, patients have ideas on how to fix this.
Main objective	To present perspectives from a diverse group of patients on how to support system resilience through improving how ED care is delivered.
Main text <i>Max 300 words.</i>	Methods We used an Experience-Based Co-Design (EBCD) approach to understand the needs and preferences for ED care from ED clinicians and healthcare users representing five patient cohorts: older adults, people from culturally and linguistically diverse backgrounds (ethnic minorities), people presenting with mental illness, people living with disability, and Indigenous Australians. Through a series of interviews and focus groups, followed by co-design workshops or yarning circles, we sought to elicit patient perspectives, needs and ideas for improving delivery and quality of their ED care. Results A total of 170 healthcare users over the five patient cohorts participated in interviews, yarning circles or codesign workshops. Across the groups, common themes involved improving communication, minimising wait times while providing additional supports in the waiting room, addressing environmental and other issues that contribute to anxiety, and providing responsive person-centred care that is respectful of culture and adapted to meet individual needs. In the presentation, we will discuss one key idea from each of the five cohorts and show how implementing each idea could contribute to improving system resilience and delivering better quality care. Implications for research and practice Our findings illustrate the value of listening to patients, and of working with healthcare users and clinical providers together to develop improvement interventions that meet the needs of both.
Relevance to RHC	Resilience is about a healthcare system's ability to adapt to challenges and changes to enable continuous provision of high quality care. In many healthcare systems, our hospital EDs are on the brink of collapse. Patients are an untapped resource for supporting system resilience, and their knowledge and perspective have potential to make a positive difference when other approaches are failing.
Related subtheme <i>please select 1</i>	<i>2. Patient centeredness & involvement</i>

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Informal caregivers' contributions to resilient healthcare: A cross-country study from elderly care services in Europe and Australia
Authors and affiliations	Veslemøy Guise (SHARE – Center for Resilience in Healthcare, University of Stavanger, Norway), Louise Ellis (Australian Institute of Health Innovation, Macquarie University, Australia), Syb Kuijper (Erasmus School of Health Policy & Management, Erasmus University Rotterdam, the Netherlands), Florin Tibu (Faculty of Medicine and Biological Sciences, Ștefan cel Mare University of Suceava, Romania), Mari Lahti (Turku University of Applied Sciences, Finland), Jasna Pocek (Institute of Management, Scuola Superiore Sant'Anna, Italy), Viola Cassetti (Predepartmental Unit of Medicine, Universitat Jaume I, Spain), Kristian R. Odberg (SHARE – Center for Resilience in Healthcare, NTNU Gjøvik) & Hilda Bø Lyng (SHARE – Center for Resilience in Healthcare, University of Stavanger)
Background	Healthcare services for the elderly are under pressure globally due to a growing mismatch between capacity and demand. This misalignment is caused by an aging population with rising levels of chronic disease, combined with significant labour shortages and a lack of qualified healthcare workers. Increasingly too, healthcare policy in many countries is to prioritize the provision of care services in people's homes. Informal caregivers such as family members therefore have a fundamental role in the care of elderly patients, often providing considerable long-term care alongside formal healthcare professionals. More knowledge is needed on informal caregivers' contributions to resilience in elderly care services to better facilitate and support their crucial care work in a system under strain.
Main objective	The objective of this study was to explore informal caregivers' contributions to resilience in healthcare services for the elderly across Europe and Australia.
Main text <i>Max 300 words.</i>	Methods: Semi-structured interviews were conducted with 87 informal caregivers to the elderly in Australia (n = 18) and six European countries which included the Netherlands (n = 11), Romania (n = 14), Finland (n = 9), Italy (n = 10), Spain (n = 12) and Norway (n = 13). Participants were recruited via elderly care services, caregiver organizations, and social media platforms. Data were analysed using a thematic analysis approach. Results: Informal caregivers contribute to resilience in the elderly care system in a number of significant ways, across national settings and contexts. This includes engaging in complex hands-on care tasks, acting as first responders for patients, coordinating care across multiple

	services, engaging in flexible problem-solving and shared decision-making, ensuring communication and collaboration with healthcare professionals, and advocating on behalf of patients. Findings also show that the clear allocation of responsibilities and tasks between formal and informal carers, as well as having confidence and trust in formal care providers, facilitates informal caregivers' contributions to resilience, quality and safety of elderly care services. Implications for research and practice: These findings highlight the need for increased recognition of the key role of informal caregivers in the resilient performance of elderly care services across healthcare systems. Tailormade interventions are needed to support informal caregivers' capacity, motivation, and competence to continue caring for their loved ones, in close collaboration with formal care providers.
	<i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	Discusses informal carers contributions to resilient systems
Related subtheme <i>please select 1</i>	2. <i>Patient centeredness & involvement</i>
More information: lumc.nl/rhcs2026	

Tuesday August 18th

SESSION XII - Abstract presentations
Subtheme 5. Cultural, psychological &
team dynamics

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Exploring the complexity of responding to suspected intrapartum fetal deterioration
Authors and affiliations	Professor Jane O'Hara* The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK. Dr Alessandra Giusti The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK. Dr Alison Powell The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK Kiri Dargaville The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK. Dr Andrew Demetri PROMPT Maternity Foundation, UK. Dr Kat Lattey PROMPT Maternity Foundation, UK. Dr Rachna Bahl Royal College of Obstetricians and Gynaecologists, London, UK Cathy Winter PROMPT Maternity Foundation, UK. Sian Harrington PROMPT Maternity Foundation, UK Dr Dileep Wijeratne Leeds Teaching Hospitals NHS Trust, UK Professor Tim Draycott Royal College of Obstetricians and Gynaecologists, London, UK; PROMPT Maternity Foundation, UK Professor Mary Dixon-Woods The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK.

	Dr Jan van der Scheer The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK. <i>*Presenting author</i>
Background	Avoidable perinatal brain injury remains a major global challenge for maternity care. Failure to consistently detect and respond to deterioration of a baby during labour is a persistent problem in the UK and in health systems worldwide. Track-and-trigger systems, which “track” predefined clinical risk factors over time and “trigger” action when thresholds are crossed, have been proposed to strengthen recognition and response to suspected intrapartum fetal deterioration. Although substantial effort has focused on improving detection, far less empirical work has examined what enables – or inhibits – clinicians and teams in escalating concerns and responding effectively when deterioration is suspected. We undertook a two-phase project that first modelled ‘work-as-done’ when teams respond to suspected fetal deterioration during intrapartum care (Phase 1 – described in this abstract), and then co-designed a prototype of a reflective, team-based programme to help teams to identify their local risk profile and develop adaptive strategies (Phase 2 – see abstract van der Scheer et al).
Main objective	We sought to explore how teams respond to suspected fetal deterioration during intrapartum care in England by: 1) identifying the activities they undertake and their interdependencies; 2) assessing the variability in these activities; and 3) examining the possible impacts of variability.
Main text <i>Max 300 words.</i>	Methods This study (September 2024-March 2025) employed the Functional Resonance Analysis Method (FRAM) as an overarching methodology, integrating data from multiple sources: (i) four workshops with a clinical team (obstetricians and midwives) to create an initial FRAM model of how teams respond to suspected intrapartum fetal deterioration; ii) interviews with system stakeholders (n=9); iii) ethnographic observations in three maternity units; and (iv) an online survey of UK maternity professionals (n=126). Model development was iterative, with regular input from a Patient and Public Involvement Panel and Professional Advisory Group. Findings We found that responding to suspected intrapartum fetal deterioration is a complex sociotechnical process involving multiple actors, where variability is an inherent feature rather than an exception. We identified three groupings of functions through which the process of recognising and responding to suspected fetal deterioration moves from an individual to a distributed cognitive activity across the multi-disciplinary team. Accordingly, escalating suspected fetal deterioration can be understood as a form of ‘collective sensemaking’ rather than a simple transfer of information or responsibility from one professional to another. Further, our analysis found significant variability within both foreground functions (e.g. escalating concerns from the midwifery team to an obstetrician) and background functions (e.g. ward acuity, staffing levels). Workarounds

	appear to be ubiquitous, but often necessary expressions of ‘short-term’ resilience. However, they are often opaque (e.g. not known or communicated to all team members) and may inadvertently amplify variability in other functions, creating emergent safety risks. Implications Instead of a ‘one-size-fits-all’ tool or guideline, improving the escalation of suspected fetal deterioration will likely need a team-based approach to explore and identify what ‘appropriate local adaptability’ might look like. Our findings are highly relevant to current global efforts to improve maternity safety and inform wider discussions about the role of resilience engineering approaches in supporting clinical escalation.
Relevance to RHC	This study supports the further development of resilient healthcare practice through: i) illustrating a method innovation in FRAM development, with the use of online surveys to support function identification and model description; and ii) building the evidence base for the use of FRAM in intervention and service development.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & ‘teams of teams’</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Co-designing a team-based reflexive programme to support safer response to suspected intrapartum fetal deterioration
Authors and affiliations	Dr Jan van der Scheer* The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK. Dr Alessandra Giusti The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK. Dr Alison Powell The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK Kiri Dargaville The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK. Dr Andrew Demetri PROMPT Maternity Foundation, UK. Dr Kat Lattey PROMPT Maternity Foundation, UK. Dr Rachna Bahl Royal College of Obstetricians and Gynaecologists, London, UK Cathy Winter PROMPT Maternity Foundation, UK. Sian Harrington PROMPT Maternity Foundation, UK Dr Dileep Wijeratne Leeds Teaching Hospitals NHS Trust, UK Professor Tim Draycott Royal College of Obstetricians and Gynaecologists, London, UK; PROMPT Maternity Foundation, UK Professor Mary Dixon-Woods The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK.

	Professor Jane O'Hara The Healthcare Improvement Studies (THIS) Institute, University of Cambridge, UK. <i>*Presenting author</i>
Background	Avoidable perinatal brain injury remains a major global challenge for maternity care. Failure to consistently detect and respond to deterioration of a baby during labour is a persistent problem in the UK and in health systems worldwide. Track-and-trigger systems, which “track” predefined clinical risk factors over time and “trigger” action when thresholds are crossed, have been proposed to strengthen recognition and response to suspected intrapartum fetal deterioration. Although substantial effort has focused on improving detection, far less empirical work has examined what enables – or inhibits – clinicians and teams in escalating concerns and responding effectively when deterioration is suspected. We undertook a two-phase project that first modelled ‘work-as-done’ when teams respond to suspected fetal deterioration during intrapartum care (Phase 1 – see abstract O’Hara et al), and then co-designed a prototype of a reflective, team-based programme to help teams to identify their local risk profile and develop adaptive strategies (Phase 2 – described in this abstract).
Main objective	We sought to co-design a prototype of a reflective team-based programme to help English maternity teams use a model of ‘work-as-done’ to: (i) identify their local risk profile; and (ii) develop adaptive strategies to support safer response to suspected intrapartum fetal deterioration.
Main text <i>Max 300 words.</i>	Methods This study (October 2024-October 2025) used a participatory co-design approach to develop and evaluate a prototype programme. We convened a co-design group (n=19) of maternity professionals, policymakers, and family representatives, who met regularly to guide the development of the programme. The prototype was pilot-tested with 14 participants across two English maternity units between September and October 2025. Evaluation data included: i) semi-structured observer fieldnotes at the pilot sessions; ii) audio-recorded briefing with team immediately after the sessions; and iii) interviews with participants (n=3). Findings The co-design group developed a prototype programme in which maternity teams met across two half-day table-top sessions to: (i) explore escalation using the model; (ii) identify variability and risks in their local escalation processes; and (iii) agree adaptive strategies to address risks in the short or longer-term. Pilot testing showed that the programme was feasible and acceptable, and helped teams to identify risks and begin to shape potential adaptive strategies. Participants initially resisted the idea that local challenges could be managed differently; active facilitation and use of the model’s visual helped them recognise that familiar variabilities may still constitute safety risks. Agreeing adaptive strategies also required skilled facilitation to help teams move beyond assumptions that variability is unchangeable or the responsibility of a single individual (e.g. the midwifery coordinator).

	Implications A scalable team-based reflexive programme would require integration in existing multi-professional training, skilled facilitation by maternity professionals, and translation of the programme's ethos and practice into local processes. Further co-design is needed to refine the programme before wider application, potentially including: (i) training sessions for maternity professionals to become facilitators; (ii) facilitator-led pilots of the table-top sessions within local units; (ii) evaluation of feedback from facilitators and participants; (iv) iterative refinement of the programme; and (v) collaborative specification of the final programme.
Relevance to RHC	This study supports the further development of resilient healthcare practice through: i) describing the process of intervention and service development based on a resilience engineering approach; and ii) building the evidence base on how such approaches are experienced by healthcare professionals.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>
More information: {HYPERLINK "https://www.lumc.nl/rhcs2026"}	

Abstract format

Title	“We’re all invested in the team and our work”: A qualitative analysis of social capital as a source of resilience in hospital teams
Authors and affiliations	Kate CHURRUCA ¹ , Janet C LONG ¹ , Yvonne ZURYNSKI ¹ , Maree SABA ¹ , Samantha SPANOS ¹ , Sagda OSMAN ¹ , John SHEPHARD ² , William De MONTEMAS ^{1,2} , Jeffrey BRAITHWAITE ¹ , Louise A ELLIS ¹ ¹ Australian Institute of Health Innovation, Macquarie University, Macquarie Park, Australia ² Clinical Governance and Medical Services, South Eastern Sydney Local Health District,
Background	The long-term impacts of COVID-19 have intensified many of the existing pressures on healthcare systems including rising demand for services, ageing populations, and workforce shortages. Resilient healthcare focuses on how hospital teams maintain performance in the face of these challenges and little consideration has been given to the quality of interpersonal interactions and structures that make this possible.
Main objective	To examine how hospital teams foster and draw upon social capital to sustain care delivery in the context of largescale health system challenges related to the mismatch between demand and capacity.
Main text <i>Max 300 words.</i>	Methods: This study presents a secondary analysis of data investigating adaptive capacity in hospital-based teams. Data were collected through 39 hours of observations and 21 semi-structured interviews with staff from four teams—Aged Care, Emergency Department (ED), Intensive Care Unit (ICU), Bed Management—of a large metropolitan Australian hospital. Through thematic analysis, we examined the interpersonal structures and dynamics within teams (bonding social capital) that supported service delivery. Results: Participants were on the frontlines of health system sustainability challenges and described a “new normal” post COVID-19 marked by workforce shortages, increased patient acuity, and staff burnout. Teams demonstrated social cohesion, fostered by humour, shared experience of challenges, and both formal and informal support mechanisms. Familiarity within teams enabled trust and coordinated action. Bounded solidarity led individuals to go beyond their formal roles to support team members and maintain service continuity. Implications for research and practice: This study provides new insight into how social capital supports resilience in hospital teams. Findings nevertheless suggest a fragility to this state-of-affairs; we saw signs of social capital’s erosion through increased workforce turnover. While strategies to foster social capital might have benefits

	in supporting teams to deliver care, this should not be pursued to the exclusion of larger scale interventions to address systemic challenges. <i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	This study was originally conducted using a resilient healthcare lens, including a focus on adaptive capacity, work-as-imagined and work-as-done, and the use of the CARE frameworks. Strikingly, in our analysis of hospital teams' adaptive capacity, we identified a range of interpersonal strategies and resources these groups used to support each other in their workday. This led us to social capital theory, which assisted us in interpreting the nature of bonding and how the supportive structure of being part of a team was used by frontline staff.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> <u>5. Cultural, psychological & team dynamics</u> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Culture exploration in a newborn delivery room team
Authors and affiliations	Anne Ades^{1,2}, Carolina Rodriguez Paras¹, Jennifer Whittaker¹, Diya Nag¹, Heidi Herrick^{1,2}, ¹The Children's Hospital of Philadelphia, ²University of Pennsylvania Perelman School of Medicine
Background	Optimizing newborn delivery room (DR) care requires cognitive, psychomotor, and teamwork skills. A culture that promotes learning is fundamental to optimize team performance. A survey evaluating learning readiness uncovered areas for improvement specifically in areas of psychological safety, culture and open-mindedness.
Main objective	To understand DR team culture of learning and improvement
Main text <i>Max 300 words.</i>	<i>Methods:</i> One-on-one semi-structured interviews with DR providers. Transcripts analyzed in NVivo and coded by two qualitative analysts. <i>Results:</i> 34 interviews were conducted. Overarching themes included psychological safety (PS), relationships, education, workload and leadership. PS interacted significantly with the other overarching themes; thus, a sub-analysis was performed. Themes under PS were team communication and interactions, leadership, and reflection. PS differed by profession and seniority. Attendings expressed the lowest PS. PS facilitators were relationships, huddles, and debriefing. PS challenges included “rigid” protocols and leadership style hindering communication. <i>Conclusions:</i> Understanding culture in the DR enables development of interventions to strengthen facilitators of and decrease challenges to PS. Interventions thus far have included development of our values that are reinforced in our meetings and huddles and statements that encourage speaking up. <i>Implications for practice/research:</i> Studying the learning readiness of our team uncovered areas not otherwise evident. We developed a conceptual framework, Figure 1, integrating aspects of this work within broader psychological constructs that we believe will enhance our team's performance. This framework will inform continued work within our environment We are now working on improving debriefings using positive psychology concepts to promote team dynamics and resilience.

	Conceptual Framework: Optimizing performance during newborn resuscitation Figure 1.
Relevance to RHC	Culture and PS are precepts that lead to resilience at the individual, team and system level. This work identified several contributors to team functioning that contribute to enhancing culture, PS and thus resilience. We also believe that performing this study reflected investment in our team and showed that their voice matters. We think this has led to increased engagement of team members in on-going projects.
Related subtheme <i>please select 1</i>	<i>Cultural, psychological & team dynamics</i>
More information: lumc.nl/rhcs2026	

Wednesday August 19th

SESSION XIII - Abstract presentations
Subtheme 1. Clinical teams & 'teams of teams'

Abstract



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	From silos to shared space: how workspace design improved resilience in an acute hospital response team
Authors and affiliations	Flavio Sanson Fogliatto, Universidade Federal do Rio Grande do Sul (UFRGS), Brazil Tarcisio Abreu Saurin (UFRGS) – corresponding author. E-mail: saurin@ufrgs.br Leandro Miletto Tonetto, Georgia Institute of Technology, United States Jose Miguel Silva Dora, Hospital de Clínicas de Porto Alegre, Brazil
Background	In a large University hospital in Brazil, three acute response teams that assisted the same patients (rapid response team - RRT, medical on-call team - MOC, and nursing supervision - NS) were located in separate floors. Such workspace in silos hindered the four resilience potentials – e.g., information related to patient monitoring was not promptly shared. In July 2023, a social network analysis (SNA) survey ¹ mapped advice-seeking relationships within and across teams, considering four types of relationships related to the resilience potentials. The SNA results revealed significant information flows between the three teams and guided the design of a new shared workspace implemented in December 2023.
Main objective	To assess the impacts of the workspace intervention, emphasizing implications for team resilience.
Main text	Methods: in July 2024, there was a second round of the SNA survey. All network metrics (e.g., in-degree, and reciprocity) were interpreted from the resilience viewpoint, and the 30 respondents in each round were the same. Also, 8 clinical quality indicators were analysed before and after the intervention and mapped to the resilience potentials – e.g., monitoring was linked to the rate of unrecognized clinical deterioration before RRT attendance. There were no confounding factors affecting the results (e.g., no policy changes). Results: 5 of the 8 quality metrics showed statistically significant improvements ($p < 0.05$), with network metrics also demonstrating significant changes (all $p < 0.01$). For example, reciprocity between teams increased substantially: $RRT \leftrightarrow MOC$ increased from 57.5% to 80.0%, and $RRT \leftrightarrow NS$ increased from 62.6% to 81.0%. Altogether, quality and network metrics indicated improvements in all four resilience potentials. Implications for research: the assessment method, based on network and clinical quality indicators' association with resilience potentials, seems to be applicable to other types of resilient health care (RHC) interventions. Further, this paper adds to the incipient body of evidence-based RHC interventions. Implications for practice: this paper exemplifies a real-world intervention guided by RHC principles from conception to evaluation, and it can inspire practitioners struggling to translate theory into practice.
Relevance to RHC/Related subtheme	1. Clinical teams & 'teams of teams'

¹ The process of designing the new shared workspace is detailed by Fogliatto, F. S., Saurin, T. A., Tortorella, G. L., Dora, J. M., & Tonetto, L. M. (2024). Workspace Layout for Resilient Performance using Social Network Analysis: A Case Study. *HERD: Health Environments Research & Design Journal*, 17(4), 294-314.

Abstract format

Title	Social processes as adaptations in and across hospital teams.
Authors and affiliations	Janet C Long, Kate Churruca, Maree Saba, Samantha Spanos, Siri Wiig, Jeffrey Braithwaite, Louise Ellis. Australian Institute of Health Innovation, Macquarie University, Sydney, Australia.
Background	This study (part of an international comparison study) sought to identify practices that enabled resilient performance within hospital teams.
Main objective	The aim of this paper is to examine how formal and informal social processes help teams to deliver resilient healthcare.
Main text <i>Max 300 words.</i>	Methods We conducted an in-depth qualitative study of staff at two Australian metropolitan hospitals (observations - 75 hours, 46 interviewees). Teams from four different team types: Structural (e.g., aged care ward); Hybrid (e.g., emergency department); Responsive (e.g., intensive care); and Coordinating (e.g., bed management) participated. Data was collected between March-November 2023. Thematic analysis of transcripts involved inductive and deductive coding, using the Concepts for Applying Resilience Engineering (CARE) model 2.0. Results Social process themes linked to adaptations were: (1) exchange of information, (2) checking-in, (3) negotiation, (4) role modelling, (5) knowledge brokerage. Exchange of information, planning and assigning responsibilities happened during handovers, huddles and formal meetings. These were mostly formal and semi-structured. Checking -in, especially by senior staff was seen as positive and supportive. When absent, leaders were seen as “hiding in their offices” and unsupportive. Negotiation, often on the fly, allowed coordinated and judicious use of workarounds or non-standard practice to meet needs. Senior staff often modelled expected (tacit) behaviours and professional skills to more junior or new staff. Holders of specific knowledge or experience were approached informally if they were seen as approachable and were accessible. Benefits of social processes were in coordinating effort, influencing organisational culture, setting norms of behaviours, increasing psychological safety, supporting wellbeing of staff, and providing specialised knowledge. Implications for clinical practice: The role of informal processes of checking-in, negotiation, modeling behaviour and brokering knowledge should be recognized and supported.

Relevance to RHC	Social processes play a key role in supporting adaptive capacity in hospital teams. This study help us understand what these social processes are and how they contribute to resilient teams.
Related subtheme <i>please select 1</i>	1. Clinical teams & 'teams of teams' 2. Patient centeredness & involvement 3. Collective reflection, learning & education 4. Leadership, management & governance 5. Cultural, psychological & team dynamics 6. Coordination of care (systems) 7. Technical tools & infrastructure 8. Advancing theory & analytical tools
More information: lumc.nl/rhcs2026	

Authors:

Kristian Ringsby Odberg - Department of Health Sciences Gjøvik, Norwegian University of Science and Technology, Gjøvik, Norway. Kristian.Odberg@ntnu.no.

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Navigating medication administration in ambulance teams: a sociotechnical perspective on adaptive work in prehospital care

Background

Medication administration in ambulance services occurs in dynamic and uncertain environments where healthcare professionals must coordinate care under time pressure, limited diagnostic resources, and variable physical conditions. While safe medication administration is often framed through standardized principles such as the “five rights,” the actual work involves continuous adjustments shaped by interactions between team members, technologies, organizational structures, and environmental constraints. Understanding how ambulance teams coordinate medication administration within this sociotechnical context is important for advancing resilient healthcare.

Objective

This study explores how medication administration unfolds within ambulance teams and how interactions between social and technical elements shape medication safety in the prehospital setting.

Methods

A qualitative mixed-methods study was conducted in a Norwegian ambulance service as part of the TEAM-AMB research project. Data consisted of 11 semi-structured interviews with ambulance professionals (paramedics, emergency medical technicians, and physicians) and 114 hours of field observations across rural and urban ambulance stations. Data were analysed using deductive–inductive content analysis guided by the **SEIPS work system model**, examining how persons, tasks, tools and technologies, organization, and physical environment interact in medication administration.

Results

Medication administration emerged as a collaborative process unfolding across three overlapping stages: preparation, administration, and patient transfer. Eight interrelated categories across the SEIPS work system influenced this process. Teams dynamically distributed tasks based on competence and experience while adapting protocols to situational conditions such as environmental constraints, technological limitations, and patient acuity. Informal coordination, shared experience, and trust between

partners enabled rapid decision-making, particularly in uncertain situations where strict adherence to procedures was difficult. Workarounds related to technology and environmental constraints were common and often necessary to maintain safe care delivery.

Implications for research and practice

Medication administration in ambulance services cannot be understood solely through procedural compliance. Instead, it reflects a sociotechnical system in which team interactions enable adaptation to complex operational environments. Strengthening training, technological usability, and collaborative practices may support resilient team performance in prehospital medication safety.

Relevance to RHC

The study contributes empirical insight into how **clinical teams navigate sociotechnical complexity and adapt work-as-done**, supporting resilience in everyday healthcare operations.

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Redesigning information dynamics for sustainable medical team Resilience: The Synergy of Digital Integration and the Art of "粋 Iki"
Authors and affiliations	Hitoshi Sato, Kyota Nakamura, Takeru Abe, Kazue Nakajima
Background	Effective communication is a cornerstone of success for medical teams navigating complex clinical workflows. This study aimed to enhance the adaptive capacity of an anesthesiology team by redesigning communication pathways through the integration of multiple IT solutions.
Main objective	Redesigning Information Flows for Sustainable and Adaptive Medical Teams
Main text <i>Max 300 words.</i>	For a medical team to successfully carry out its daily clinical works, good communication among staff members is one of the keys to success. We attempted to enhance the adaptive capacity of the anesthesiology team by redesigning their communication using several IT tools. (Methods) 1. Pre-briefing Using electronic medical records to share patient information in advance 2. Realtime visual data Synchronizing situational awareness through live operating room footage, digital anesthesia records, and electronic whiteboards. 3. Intercom Facilitating instantaneous, bidirectional information exchange. Unlike traditional top-down communication, intercoms use a broadcasting approach that enables autonomous, decentralized teamwork. (Results) By integrating proactive pre-briefings, real-time visual data, and intercom communication, we can design a self-distributed, bottom-up resilient team. Pre-briefings lead team members to share a common mental model. Real-time video information and intercom communication enable members to understand what is happening elsewhere and their own position, allowing for autonomous action. (Implications for research and practice) Redesigning the flow of information transformed the team into a self-managing, decentralized, resilient team. Ultimately, what we finally realized was the ultimate catalyst that completes this system is "Iki"—the art of graceful, understated mutual support. (187 words) <i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure

Relevance to RHC	In autonomous, decentralized teams, the exchange of adaptive capacity occurs more naturally and actively between members and across teams than in top-down structures. This represents a graceful extensibility of adaptive capacity, which serves as the key to resilient performance.
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. <i>Collective reflection, learning & education</i> 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Wednesday August 19th

SESSION XIV - Abstract presentations
Subtheme 8. Advancing theory & analytical tools

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	Resilience Through Connection: Advancing Collaboration Across Systems and Societies
Authors and affiliations	Inger Johanne Bergerød SHARE - Centre for Resilience in Healthcare, Faculty of Health Sciences, University of Stavanger, Kjell Arholms gate 41, 4021 Stavanger, Norway Stavanger University Hospital, Gerd-Ragna Bloch, Thorsens gate 8, 4019 Stavanger, Norway. E-mail: inger.j.bergerod@uis.no Birte Fagerdal, Centre for Resilience in Healthcare, Faculty of Health Sciences, University of Stavanger, Norway Kazue Nakajima Department of Clinical Quality Management, The University of Osaka Hospital, Japan Siri Wiig SHARE - Centre for Resilience in Healthcare, Faculty of Health Sciences, University of Stavanger, Norway Carl Horsley Te Tāhū Hauora, Health Quality Safety Commission, New Zealand Mary Patterson Dept of Emergency Medicine, University of Florida, USA Takeru Abe Center for Integrated Sciences and Humanities, Fukushima Medical University, Japan Axel Ros Jönköping Academy of Health and Welfare, Jönköping, University, Sweden Tarcisio Abreu Saurin Federal University of Rio Grande do Sul, Brazil
Background	This study builds on findings from a workshop held at the 11th Biennial Symposium of the Resilience Engineering Association and the 14th Annual Resilient Health Care Society meeting in Canela Brazil 2025. Participants with diverse professional backgrounds and national contexts from the Resilient Health Care Society (RHCS) and the Resilient Engineering Association (REA) was set up to explore how organisational resilience can be strengthened by linking perspectives across purposes, diverse sectors, contexts, disciplines, and countries.
Main objective	Drawing on real-world challenges and emerging research, the focus was on how cross-sector learning, coordination and collaboration can foster more proactive, adaptive, flexible, responsive, sustainable systems and inclusive societies.
Main text <i>Max 300 words.</i>	Methods: Participants were mixed into groups and challenged to co-create a resilience three symbolising predefined themes aimed at identifying shared challenges, conflicting goals, exchanging ideas and strategies, and laying the groundwork for future research and innovative partnerships. Through collaborative dialogue and participatory activities, the participants - reflected on how resilience is conceptualized and operationalized in different sectors, societies, and disciplines showcasing examples from different industries and countries. - explored and compare theoretical and practical aspects of resilience, similarities and differences - described experiences and strategies for improving resilience across sectors, settings, and countries. - identified opportunities for joint research, innovation, partnership and policy recommendations.

	Results: The analysis of workshop data resulted in five latent themes relevant for a broader discussion on implications relevant for the Resilient healthcare society and the way forward in terms of joint research: 1) “Our roots are based on problematic grounds” 2) “Machines versus man” 3) “Humans - it’s all about the humans” 4) “We can translate a shared passion” 5) Key area for joint future research between REA and RHCS In addition, the results reflected global challenges for interdisciplinary research seen as authoritarianism, climate change and artificial intelligence (AI). Implications for research and practise: This presentation will further extend the ongoing discussion by taking a closer look at the findings, examining their broader significance, and exploring what they mean for the continued development of the Resilient Healthcare Society and cooperation with Resilience Engineering Association. Through this, we aim to shed light on how these insights can inform future initiatives, strengthen collaborative efforts, and support resilience across different levels of the healthcare system.
	<i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	This study is highly relevant for RHC and focuses on the way forward in terms of joint research efforts through international and interdisciplinary research collaborations, with the potential to inform future funding applications, joint publications, and long-term partnerships.
Related subtheme <i>please select 1</i>	<i>3. Collective reflection, learning & education</i>
More information: lumc.nl/rhcs2026	

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
August 17-19, 2026
Leiden, The Netherlands

Title	<i>Translating Resilience into Practice: What Matters, What's Hard, and What Works'</i>
Authors and affiliations	Cecilie Haraldseid-Driftland (University of Stavanger, SHARE Centre for Resilience in Healthcare, Norway), Birte Fagerdal (University of Stavanger, SHARE Centre for Resilience in Healthcare, Norway) Evangelia Venezi (University of Cyprus) Anna Tolosa, Universitat Jaume I De Castellon, Spain
Background	Translating resilience research into practical tools and approaches that support everyday work in healthcare remains a significant challenge. While research offers valuable insights into resilient performance and staff wellbeing, transforming this knowledge into solutions that are usable and meaningful in practice is often complex.
Main objective	To contribute to a better understanding of how resilience research can be translated into practical tools and approaches that support improvement efforts in healthcare organizations.
Main text <i>Max 300 words.</i>	Translating resilience research into practical tools that support everyday work in healthcare remains a significant challenge. While research provides valuable insights into resilient performance and staff wellbeing, transforming this knowledge into solutions that are meaningful and usable in practice often requires complex processes of collaboration, adaptation, and development. This paper describes the development process of the Support4Resilience (S4R) Toolbox, a research-based digital toolbox designed to support healthcare leaders and healthcare workers in strengthening resilient performance and mental wellbeing. The paper focuses on how the toolbox was conceptualized and developed with particular attention to how different stakeholders—including researchers, designers, developers, and end users—contributed to shaping the tool. Drawing on experiences from the S4R project, the paper examines key challenges and enabling factors involved in translating research-based knowledge into practical digital solutions within complex healthcare settings. By outlining the collaborative development process and presenting concrete examples from the project, the paper highlights lessons learned about co-creation, innovation processes, and implementation.
	<i>For research projects please include following sections:</i> - Methods - Results - Implications for research and practice - Optional: 1 table or figure

Relevance to RHC	
Related subtheme <i>please select 1</i>	1. <i>Clinical teams & 'teams of teams'</i> 2. <i>Patient centeredness & involvement</i> 3. Collective reflection, learning & education 4. <i>Leadership, management & governance</i> 5. <i>Cultural, psychological & team dynamics</i> 6. <i>Coordination of care (systems)</i> 7. <i>Technical tools & infrastructure</i> 8. <i>Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

Abstract format

Title	Team resilience of preclinical and clinical teams: Exploratory field studies based on indicators of non-technical skills from CRM
Authors and affiliations	Thomas Mühlbradt, Andreas Glatz FOM University of Applied Sciences, Germany
Background	The conceptualization and assessment of resilience are currently key topics in research on safety-critical systems. While Resilience Engineering emphasizes adaptive capacities such as anticipating, monitoring, responding, and learning, there is still a lack of validated and practically applicable instruments for measuring resilience, particularly at the team level. This study addresses this gap by exploring CRM-based behavioral markers as a potential approach to operationalizing and assessing team resilience in healthcare
Main objective	The main objective of this study is twofold: first, to foster the practical application of Resilience Engineering in healthcare by providing an empirically grounded approach to assessing team resilience; and second, to open up new conceptual and methodological options by linking Crew Resource Management (CRM) with Resilience Engineering (RE).
Main text <i>Max 300 words.</i>	Methods This study is an exploratory field investigation examining whether behavioral markers derived from Crew Resource Management (CRM) can be used to operationalize team resilience. CRM markers capture non-technical skills (NTS) such as communication, team leadership, situational awareness, and decision-making, and are well established in clinical contexts. Surveys have been conducted with teams in departments of three hospitals and a regional emergency medical service (wave 1), and are currently being extended to two to four additional hospitals (wave 2). The study conceptually links CRM-based indicators with the framework of Resilience Engineering (RE) to explore their suitability for assessing resilient team behavior in safety-critical healthcare settings. Results The exploratory analysis shows that NTS-based indicators differentiate between organizations and teams, indicating variability in team resilience across settings. At the same time, the results point to a general factor of resilient performance underlying the observed behaviors. Furthermore, meaningful connections between CRM-based indicators and the resilience potentials of RE (anticipating, monitoring, responding, learning) can be established, suggesting conceptual compatibility between both approaches. Implications for research and practice From a theoretical perspective, the findings support an integrated view of team and process resilience in terms of a Joint Cognitive System, where

	human, organizational, and technical elements jointly shape adaptive performance. For research, this opens avenues for further development and validation of CRM-based measurement approaches to team resilience. For practice, the results suggest a feasible and scalable approach to assessing and promoting resilient teamwork in acute care settings and beyond.
Relevance to RHC	The study contributes to Resilient Health Care (RHC) by operationalizing key resilience concepts at the team level and linking them to observable non-technical skills. By connecting CRM-based behavioral markers with the principles of RHC, it supports the translation of resilience from a theoretical construct into assessable and actionable practices in everyday healthcare work.
Related subtheme <i>please select 1</i>	<i>8. Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	

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Birthe Fagerdal - SHARE Centre for Resilience in Healthcare, Health Faculty, University of Stavanger, Stavanger, Norway

Inger Johanne Bergerød - SHARE Centre for Resilience in Healthcare, Health Faculty, University of Stavanger, Stavanger, Norway

Complexity in Resilient Healthcare Navigating Team Performance Across Ordered and Unordered Domain**Background**

Healthcare teams do not operate in stable systems; they operate in systems that continuously drift between ordered and unordered conditions. In ordered domains, cause–effect relationships are often considered predictable, and safety is primarily achieved through procedural control, standardisation, and compliance (Safety-I). In unordered domains, uncertainty, time pressure, and interdependencies dominate, and safety often rely on adaptability, sensemaking, and performance adjustments (Safety-II). Resilience research lack knowledge on how healthcare teams navigate across shifting domains in real time.

Main Objective

To explore complexity in resilient healthcare through healthcare teams' navigation and de-escalation, shaped by social capital and socio-technical infrastructures.

Conceptual contribution

Drawing on the SafeT framework, we argue that resilient performance at the team level consists not merely of adaptation, but of preventing or reversing transitions into destabilised, unordered conditions. As destabilising factors accumulate—workload surges, coordination strain, incomplete information, teams approach escalation thresholds. When these thresholds are crossed, routine mechanisms become insufficient, and more adaptive behaviours are required.

We propose that team dynamics such as trust, cohesion, shared mental models, and psychological safety may determine how early such transitions are recognised and how effectively teams recalibrate between ordered and unordered domains. Collective reflection practices (e.g., huddles, debriefings) could function as socio-technical coupling mechanisms, enabling teams to understand complexity and its potential consequences through detecting weak signals, redistribute roles, and restore manageable order before chaos emerges.

Rather than framing Safety-I and Safety-II as competing paradigms, we position them as domain-specific logics that teams must continuously balance. Resilience thus becomes the capacity to dynamically calibrate control and adaptation across shifting contextual demands orders.

Relevance to RHC / Subthemes

Addresses: Clinical teams & teams of teams; Collective reflection & learning; Leadership & governance; Cultural & psychological dynamics; Coordination of care; Advancing theory & analytical tools.

Implications for Research & Practice

This perspective shifts attention from static notions of complexity to the temporal and relational mechanisms through which healthcare teams stabilise resilient healthcare under conditions of persistent complexity.

Wednesday August 19th

SESSION XV - Short abstract presentations
Subtheme 8. Advancing theory & analytical tools

Abstract format



RHCS 2026

Resilient Health Care Society
15th Annual Meeting
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Title	Defining and conceptualising adaptive capacity in health care – a scoping review
Authors and affiliations	Nathan Farrow¹ Robyn Clay-Williams² Deena Soma³ Janet Anderson⁴ 1. PhD Scholar, Department of Anaesthesiology and Perioperative Medicine, School of Translational Medicine, Faculty of Medicine, Nursing and Health Science, Monash University, Melbourne, VIC 3004, Australia. 2. Professor, Centre for Healthcare Resilience and Implementation Science, Australian Institute of Health Innovation, Faculty of Medicine and Health Sciences, Macquarie University, Sydney, NSW 2109, Australia. 3. Research Fellow, Department of Anaesthesiology and Perioperative Medicine, School of Translational Medicine, Faculty of Medicine, Nursing and Health Science, Monash University, Melbourne, VIC 3004, Australia. 4. Professor of Human Factors, Department of Anaesthesiology and Perioperative Medicine, School of Translational Medicine, Faculty of Medicine, Nursing and Health Science, Monash University, Melbourne, VIC 3004, Australia.
Background	Resilient Health Care (RHC) is an approach to health care design and delivery that addresses its increasingly complex and dynamic nature, and the need for adaptation in response to variability (Son et al., 2019, Ellis et al., 2019, Verhagen et al., 2022). Although supporting adaptive capacity is crucial to providing RHC (Fagerdal et al., 2024, Lyng et al., 2022a), adaptive capacity is often referred to without clear definition in the health care literature and has been conceptualised variably (Lyng et al., 2022a, Pillay and Morel, 2020). Research focused on understanding the everyday practical delivery of health care relies on well-defined constructs to help the researcher focus on what is important amongst a range of competing stimuli and to test relationships between phenomena (Anderson et al., 2020d), As such, a more coherent, evidence-based framework for defining and conceptualising adaptive capacity is needed to support RHC research and practice (Lyng et al., 2022b, Anderson et al., 2020e).
Main objective	This scoping review aims to map and synthesise the definitions, models, frameworks and theoretical constructs of adaptive capacity in health care.

Main text <i>Max 300 words.</i>	Method: This scoping review used Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) extension for Scoping Reviews (Tricco et al, 2018) and was registered on Open Science Framework. It considered all types of quantitative and qualitative study designs, theoretical work and other texts that describe how adaptive capacity is conceptualised, defined or measured in health care. Literature focusing on adaptive capacity in non-human or non-health care domains, or on singular aspects of adaptive capacity, such as psychological adaptation, were excluded. Medline, Embase, Scopus, and Web of Science were searched for citations published on or after 1 January 2000 in English. Resulting citations were uploaded into Covidence (Innovation, 2025) and de-duplicated. A two-stage screening process was conducted by two reviewers and disagreement resolved through discussion or an additional reviewer. This identified full-text articles for retrieval and data extraction using a structured tool. Data extraction and thematic grouping will be conducted by a single reviewer and data extracted from 10% of included documents will be quality checked by a second reviewer*. Results – A PRISMA diagram of the documentation selection process, summary statistics, trend graphs and characteristics of extracted data, along with a narrative summary of results will be provided. Implications for research and practice We will explore how a clear definition of adaptive capacity can inform ongoing theory development and provide a basis for designing framework for conceptualising adaptive capacity. Avenues for leveraging opportunities and addressing challenges such as measuring adaptative capacity will be proposed as part of a broader PhD research project. Healthcare organisations are unsure how they can apply the concepts. Further theoretical and practical development will help to change and improve the management and measurement of quality and safety. <i>*The scoping review is in progress at the time of writing and is scheduled for completion by July 2026.</i> For research projects please include following sections: - Methods - Results - Implications for research and practice - Optional: 1 table or figure
Relevance to RHC	To advance the theory of RHC and contribute to better management of adaptive capacity in health services, identifying how adaptive capacity is defined and conceptualised in health care is vital.
Related subtheme <i>please select 1</i>	<i>8. Advancing theory & analytical tools</i>
More information: lumc.nl/rhcs2026	