Resilient Health Care Society

RHCS Webinar Series

Adaptive capacity and future directions

Tuesday 10th February 2026, 8.30am CET / 6.30pm AEDT

Speakers:

Nathan Farrow PhD scholar, Department of Anaesthesiology and Perioperative Medicine, School of Translational Medicine, Monash University, Australia. nathan.farrow1@monash.edu

Mariam Safi PhD. Research Unit of Internal Medicine, University Hospital of Southern Denmark, University of Southern Denmark. Mariam.Safi2@rsyd.dk

Abstract:

We are delighted to have Nathan Farrow and Mariam Safi join us for our first RHCS Webinar of 2026. During this webinar, Nathan and Mariam will present their research about new opportunities for exploring adaptive capacity within healthcare organisations. We will then have an extended discussion about future directions in this area. Abstracts and speaker biographies are copied below.

Measuring adaptive capacity – opportunities, challenges and future directions (Nathan Farrow)

Broader recognition of healthcare as a complex adaptive system (Braithwaite et al., 2013) and theory development in Resilience Engineering have shone a light on the importance of adaptive capacity in shaping resilient performance (Anderson et al., 2020; Lyng et al., 2022). This presentation will briefly overview how adaptive capacity has been conceptualised in the literature and explore why adaptive capacity is important in health care, particularly in the Emergency Department context. Early attempts at measuring resilience and adaptive capacity will also be explored and an overview of a program of research aimed at addressing some of the research and practice gaps will be provided.

Supporting adaptive capacity through intelligent video monitoring system (Mariam Safi)

Faced with shortages of healthcare personnel, especially nursing staff, healthcare organisations are increasingly turning to technological interventions, including AI, to support clinical work and reduce workload pressure. However, the impact of such systems on staff behavior, adaptive capacity, and overall resilience in everyday clinical practice remains underexplored.

This presentation will examine how the implementation of an intelligent video monitoring system supports adaptive capacity and self-organisation among healthcare personnel in a Danish hospital department for geriatric medicine. These technologies also involve substantial financial investment, raising the question of whether resources might generate greater benefit if directed toward hiring additional personnel.

Speaker biographies:

Nathan Farrow is a PhD scholar and consultant human factors specialist with more than 30 years of experience working in human factors, quality, safety, risk management and clinical practice in healthcare. He is now also applying this experience through his work in rail, military and other high-

risk industries. He has post-graduate qualifications in human factors engineering, safety science, adult education and critical care nursing. Nathan has developed statewide initiatives in healthcare quality and safety through leadership roles in the Victorian Government's lead agency for quality and safety in healthcare, and has overseen the risk management and quality improvement frameworks for one of Victoria's largest health services. He has managed more than $5 million in safety related projects, led the development of a collaborative network amongst 26 major teaching hospitals across Australia and established a large program of trauma systems research between Australia and India. As a lifelong learner, he remains persistently curious and started his PhD in 2025.

Mariam Safi, Ph.D., is a consultant and researcher at the University Hospital of Southern Denmark. Her work focuses on complex systems, resilience engineering, and organisational resilience. Mariam manages healthcare projects across sectors, applying a systems perspective to improve cross-sector collaboration and patient care. She helps bridge the work of leaders and frontline staff, helping organisations build health systems that function with available resources.