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# Adaptive capacity in hospital teams: – a cross-country comparative study



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# What is it that generates resilience in teams?


- Aim
  - Investigate how adaptive capacity in hospital teams is influenced by team, organizational, and healthcare system factors
- Methods
  - Ethnographic observations
  - Semi-structured interviews

(Anderson et al.2020)

Open access

Protocol

## BMJ Open Multilevel influences on resilient healthcare in six countries: an international comparative study protocol

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### ABSTRACT

**Introduction** Resilient healthcare (RHC) is an emerging area of theory and applied research to understand how healthcare organisations cope with the dynamic, variable and demanding environments in which they operate, based on insights from complexity and systems theory. Understanding adaptive capacity has been a focus of RHC studies. Previous studies clearly show why adaptations are necessary and document the successful adaptive actions taken by clinicians. To our knowledge, however, no studies have thus far compared RHC across different teams and countries. There are gaps in the research knowledge related to the multilevel nature of resilience across healthcare systems and the team-based nature of adaptive capacity.

This cross-country comparative study therefore aims to add knowledge of how resilience is enabled in diverse healthcare systems by examining adaptive capacity in hospital teams in six countries. The study will identify how team, organisational and national healthcare system factors support or hinder the ability of teams to adapt to variability and change. Findings from this study are anticipated to provide insights to inform the design of RHC systems by considering how macro-level and meso-level structures support adaptive capacity at the micro-level, and to develop guidance for organisations and policymakers.

**Methods and analysis** The study will employ a multiple comparative case study design of teams nested within hospitals, in turn embedded within six countries: Australia, Japan, the Netherlands, Norway, Switzerland and the UK. The design will be based on the Adaptive Teams Framework placing adaptive teams at the centre of the healthcare system with layers of environmental, organisational and system level factors shaping adaptive capacity. In each of the six countries, a focused mapping of the macro-level features of the healthcare system will be undertaken by using documentary sources and interviews with key informants operating at the macro-level. A sampling framework will be developed to select two hospitals in each country to ensure variability based on site location and teaching status. Four teams will be

### Strengths and limitations of this study

- First international cross-country, multilevel comparative study of resilience in healthcare.
- An in-depth exploration of adaptive capacity in 48 hospital teams in six countries.
- Development of team adaptive capacity theory grounded in rich data.
- Limited number of hospitals included in each country could reduce generalisability.
- Language differences and health system variations may challenge cross-country comparison.

interviews and document analysis. Within-case analysis will be conducted according to a standardised template using a combination of deductive and inductive qualitative coding, and cross-case analysis will be conducted drawing on the Qualitative Comparative Analysis framework.

**Ethics and dissemination** The overall Resilience in Healthcare research programme of which this study is a part has been granted ethical approval by the Norwegian Centre for Research Data (Ref. No. 8643334 and Ref. No. 478838). Ethical approval will also be sought in each country involved in the study according to their respective regulatory procedures. Country-specific reports of study outcomes will be produced for dissemination online. A collection of case study summaries will be made freely available, translated into multiple languages. Brief policy communications will be produced to inform policymakers and regulators about the study results and to facilitate translation into practice. Academic dissemination will occur through publication in journals specialising in health services research. Findings will be presented at academic, policy and practitioner conferences, including the annual RHC Network meeting and other healthcare quality and safety conferences. Presentations at practitioner and academic conferences will include workshops to translate the findings into practice and influence quality and safety programmes internationally.

# ADAPTIVE CAPACITY

*“adaptive capacity can be defined as the ability to adapt to external and internal demands by reframing, aligning, coping and innovating”*

(Lyng et al., 2022).





Factors that differentiate teams based on our previous research


Membership: Stable, unstable, or mixed

Teamworking style: Sustained or episodic

Location: Fixed or mobile, co-location

Function: What they do together

(Lavelle et al., 2020)  
(Sanford et al., 2024)

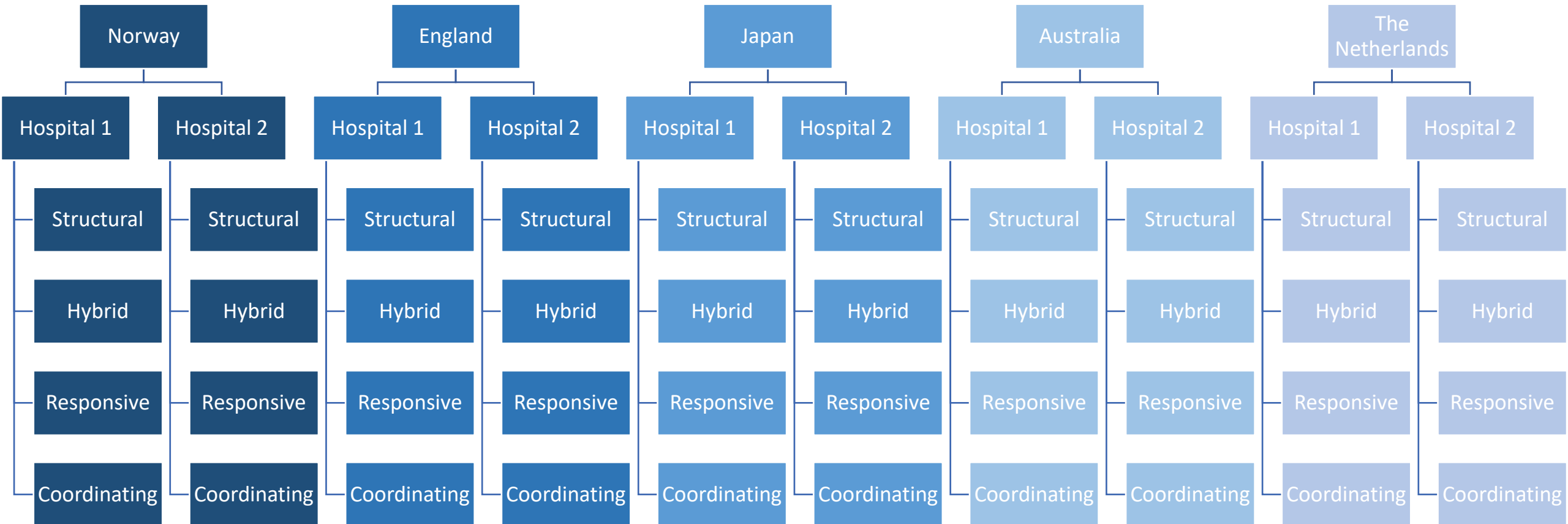


# Four types of healthcare teams

<b>Team Type</b>	<b>Teamworking Style</b>	<b>Location</b>	<b>Membership</b>
<b>Structural</b>	Sustained	Fixed	Stable membership
<b>Hybrid</b>	Sustained	Fixed	Some stable members and some unstable members
<b>Responsive</b>	Episodic	Mobile	Unstable membership
<b>Coordinating</b>	Sustained	Fixed	Some stable members and some unstable members

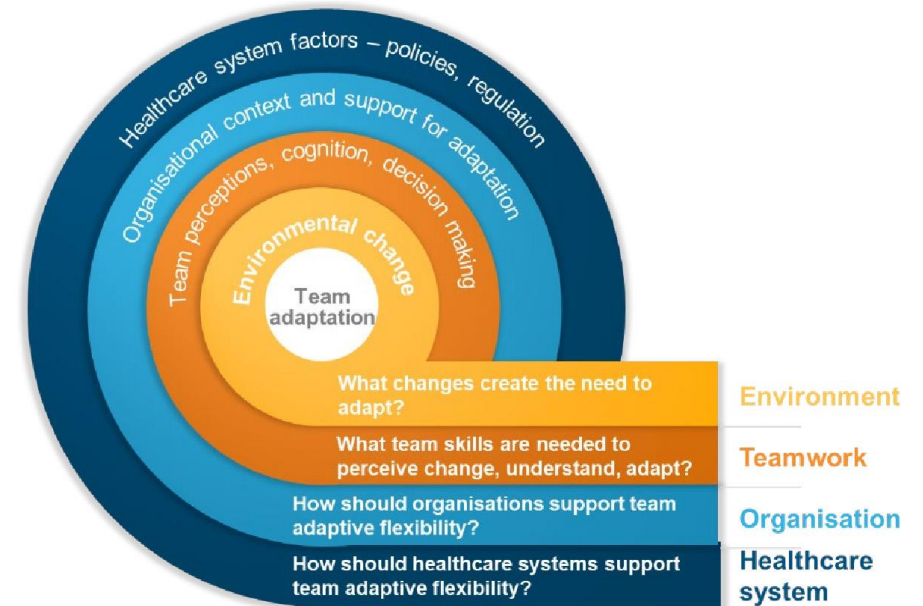
# The cases: Five countries, two hospitals, four team types

*(aka, a LOT of data 😊)*



# Methods

- **Phase 1:** Mapping of country characteristics and sampling
- **Phase 2:** Within-country case studies
  - Documentary analysis
  - Observations of adaptive teamwork
  - Interviews
- **Phase 3:** Cross-country comparative analysis
  - Country reports (template)



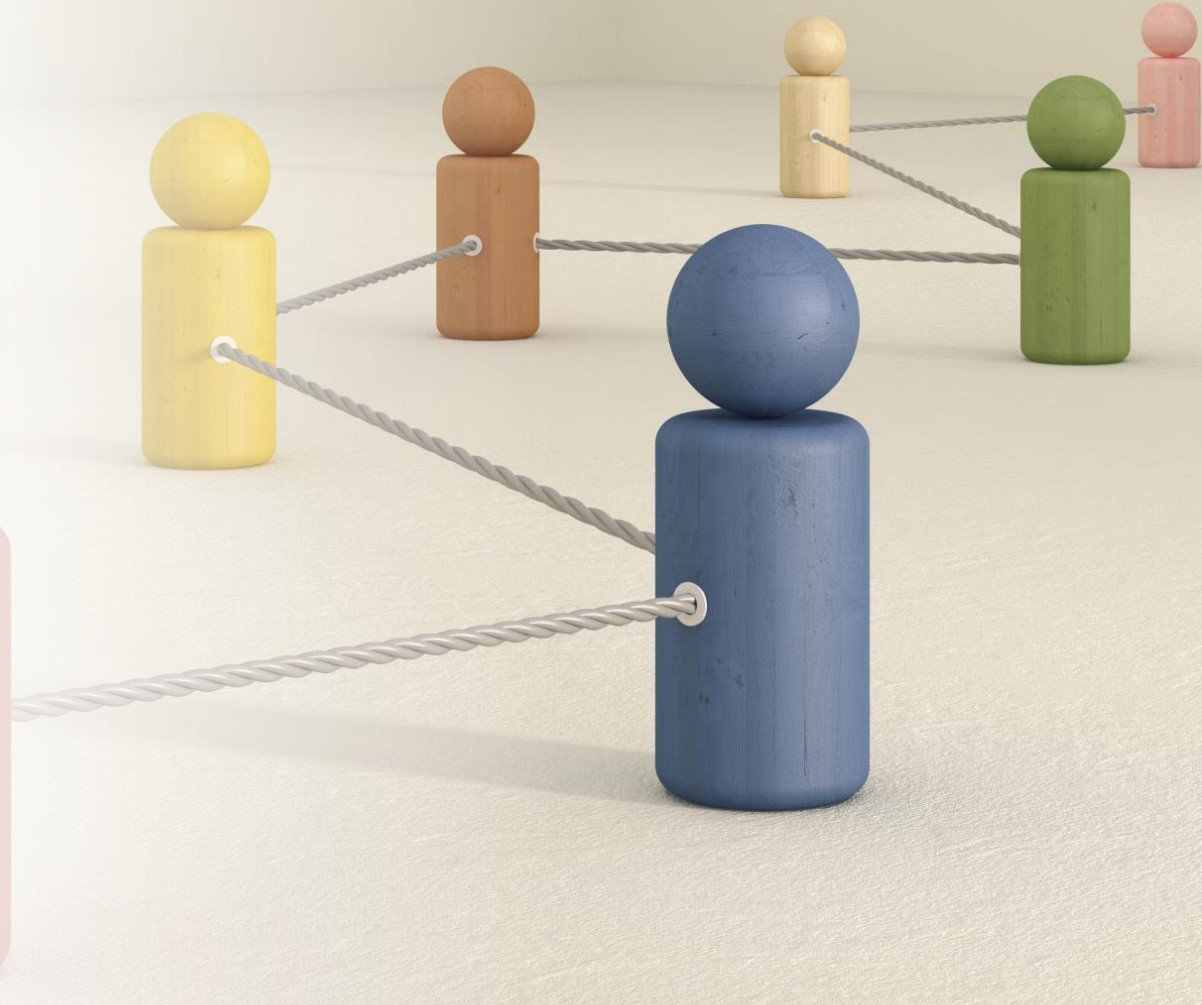
# What influence resilience in teams? Some preliminary findings...






# Team factors that enable and hinder adaptive capacity

- Function
- Structure (membership, nature of teamworking)
  - Roles
  - Procedures
- Team stability
  - Experience
  - Competence
- Leadership
- Shared goals
- Communication tools
- Relationships
  - Experience working together as a team
  - Culture





## Organisational factors that enable and hinder adaptive capacity

- Hospital features
  - Size
  - Layout of hospital
  - Meeting room locations
  - Service capacity
  - Organisational transparency and goaling
  - Culture
- Fostering Leadership
- Resourcing
  - IT platforms
  - Access to policy documents
  - Wifi and network stability
  - Equipment
  - Staff turnover
- Organisational flow
  - Cooperation

# Similarities in factors influencing adaptive capacity in team types across countries



## **Structural**

Social approach  
relationships  
re-prioritizing and re-allocating



## **Hybrid**

Remote communication  
platforms, relationship  
between stable and  
unstable members



## **Responsive**

Function, skill,  
procedures, impact on  
'remaining' team  
members



## **Coordinating**

Function, leadership and  
experience, aerial view,  
problems are 'for us, not  
to us,' gathering and  
sharing information



## Preliminary conclusion/implication

- More focus on the importance of relationships in healthcare organisation between all levels
- The different types of teams needs different types of support





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