

Embedding Quality Improvement in Critical Care

**A Service-Based Approach to Cultural
Change and Collaborative Leadership**

Martin Calise, Deputy Lead for Nursing, Midwifery and AHP Research
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QI

QUALITY IMPROVEMENT

WHAT IS QI

and why is it so important?

- ❑ Systematic approach to **continuous improvement**
- ❑ Valuable opportunity for staff to be involved in leading and delivering change

THE PROBLEM

- 1. Clinical acuity**
- 2. Time pressure**
- 3. Workforce fatigue**

QI is often perceived as an adjunct activity, driven by a few individuals and lacking the infrastructure necessary for long-term impact.





Aim and Methods

Main Aim

To evaluate the implementation of QI as a service within an adult critical care unit during its first 12 months (September 2024 to August 2025)



Aim and Methods

Methods used:

- 1. Single-site case study**
- 2. Service design process**
- 3. Service evaluation**



**SERVICE
DESIGN**

Service Design

Approach to understanding and redesigning the service from planning to implementation with a strong focus on user experience

- Strength: **Human Factors**
- Framework for implementation: **NHS IMPACT**



Overview

One-Year Roadmap for QI in Critical Care

Phase 1 (Months 1-3)

Baseline assessment, goal setting and stakeholder engagement

Phase 2 (Months 4-6)

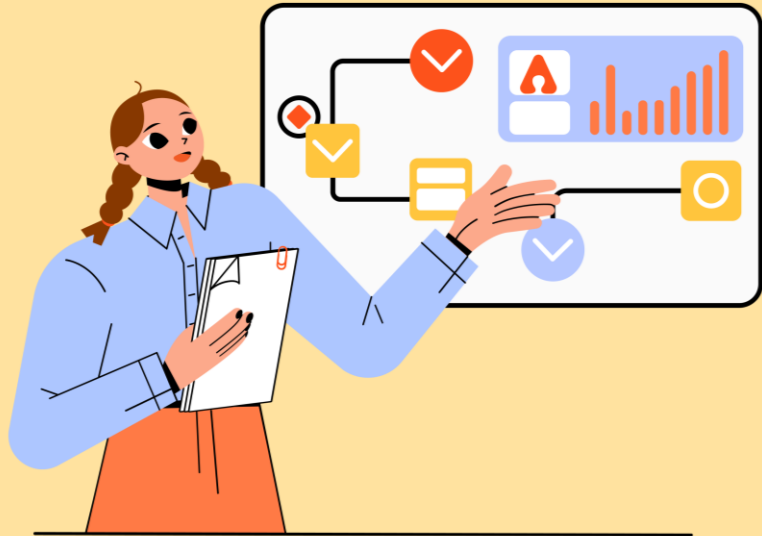
Pilot QI initiatives, collect data, and refine strategies

Phase 3 (Months 7-9)

Scale successful initiatives, continuous monitoring, adjustments

Phase 4 (Months 10-12)

Evaluate outcomes, consolidate gains, plan for sustainability



Time constraints consistently cited as #1 top barrier

Local pre-intervention survey in 2024 (n=47)

1

Protected Time

Total of 144 link role hours in each month

2

Champions Network

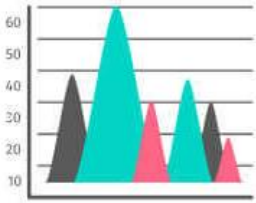
18 champion or link teams across critical care

3

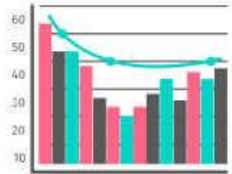
Appointed QI Lead

To oversee QI change process for 12 months

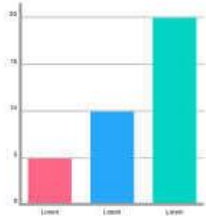
SERVICE EVALUATION



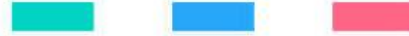
Area Chart



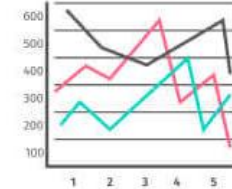
Combo Chart



Bar Chart



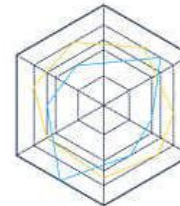
Quantitative + Qualitative



Line Chart



Doughnut Chart



Radar Chart

Data Collection

- ❑ Cross-sectional survey design
- ❑ Likert scale, 15-item questionnaire
- ❑ 2 open-ended qualitative questions
- ❑ Census sampling approach
- ❑ Total respondents of 49



Improvement Cultures in Health and Adult Social Care settings

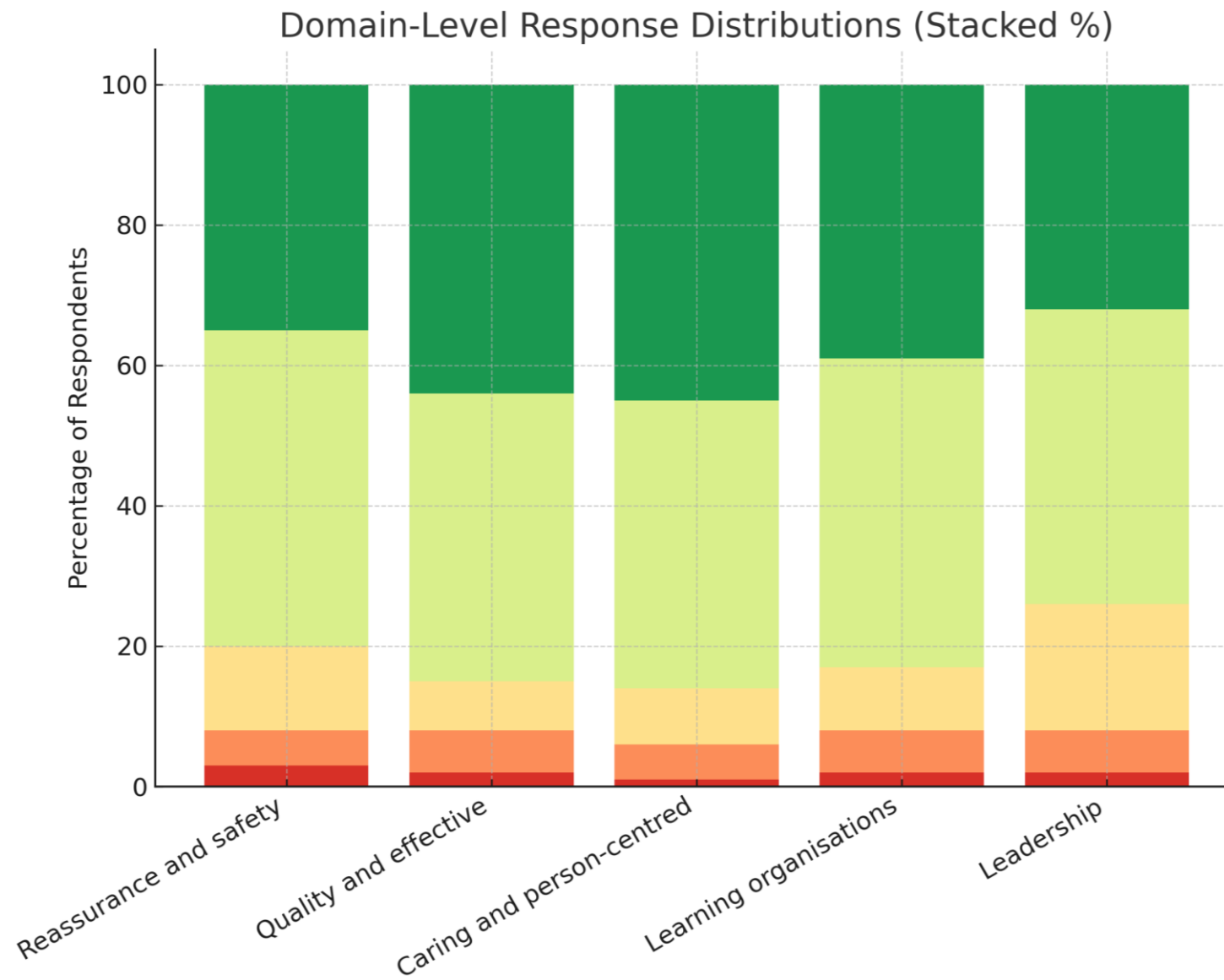
A Rapid Literature Review for the Care Quality
Commission



SQW

CQC has produced a literature review on what improvement culture is and what the indicators are

The questions for this service evaluation have also been strongly linked to the 5 themes derived from this review



BARRIERS

THEMATIC ANALYSIS

- 1 Time and Workload Pressures**
- 2 Resistance to Change**
- 3 Gaps in Communication**
- 4 Access to Support**

“I experienced resistance from other MDT members particularly ones with strong characters,

...the difficulty to be heard especially when you’re in a room full of senior members that refuse to hear out your proposal.

Not a nice feeling especially when you’re quite junior.”



FACILITATORS

THEMATIC ANALYSIS

- 1 Leadership as a Driver for Improvement
- 2 Building a Culture of Change
- 3 Investing in Capacity and Capability



CULTURE

Recommendations

- ☐ **QI requires careful planning**
- ☐ **Think about human factors in QI**
- ☐ **Consider distributive leadership model**
- ☐ **Changing culture takes time**

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REFERENCES

- **Care Quality Commission**. (2023). *Improvement Cultures in Health and Adult Social Care Settings: Rapid Literature Review*. SQW & Kings Fund Library Service.
- **The Health Foundation**. (2019). *The improvement journey: A practical guide to developing an organisation-wide approach to improvement*. The Health Foundation.
- NHS England. (2023). **NHS IMPACT: A single improvement approach**. <https://www.england.nhs.uk/publication/nhs-impact/>
- Salinas, L., Grimaldi, S., Lujan Escalante, M. A., Ali, H., Lagedamont, M., & Prendiville, A. (2023). **Teaching Service Design: pedagogical reflections**. Service Design Network, **University of the Arts London** Research Online.
- Shah, A. (2021). *Building a culture of improvement at scale: The role of executive leaders*. BMJ Leader, 5(3), 199–203. <https://doi.org/10.1136/leader-2020-000368>
- West, M., Eckert, R., Collins, B., & Chowla, R. (2017). *Caring to change: How compassionate leadership can stimulate innovation in health care*. **The King's Fund**.

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