



Knowledge Exchange Seminar Series (KESS)

...is a forum that encourages debate on a wide range of research findings, with the overall aim of promoting evidence-informed policy and law-making within Northern Ireland



Designing Safe and Effective Staffing: Insights from Ethnographic Observations in Healthcare Settings

Dr Mary Lavelle

School of Psychology, Queen's University Belfast

mary.lavelle@qub.ac.uk

Dr Benjamin Brew, Dr Trisha Forbes, Dr Gary McKeown
Queen's University Belfast

Prof Gabriel Reedy, Dr Natalie Sanford, King's College London
Ms Francesca Cibelli, City and St George's University of London
Ms. Olivia Lounsbury, Oxford University
Prof Janet E Anderson, Monash University, Melbourne

Designing Safe and Effective Staffing

1. What is a healthcare team?
2. How do they *really* work?
3. How can they be supported to improve care, safety and wellbeing?



**QUEEN'S
UNIVERSITY
BELFAST**

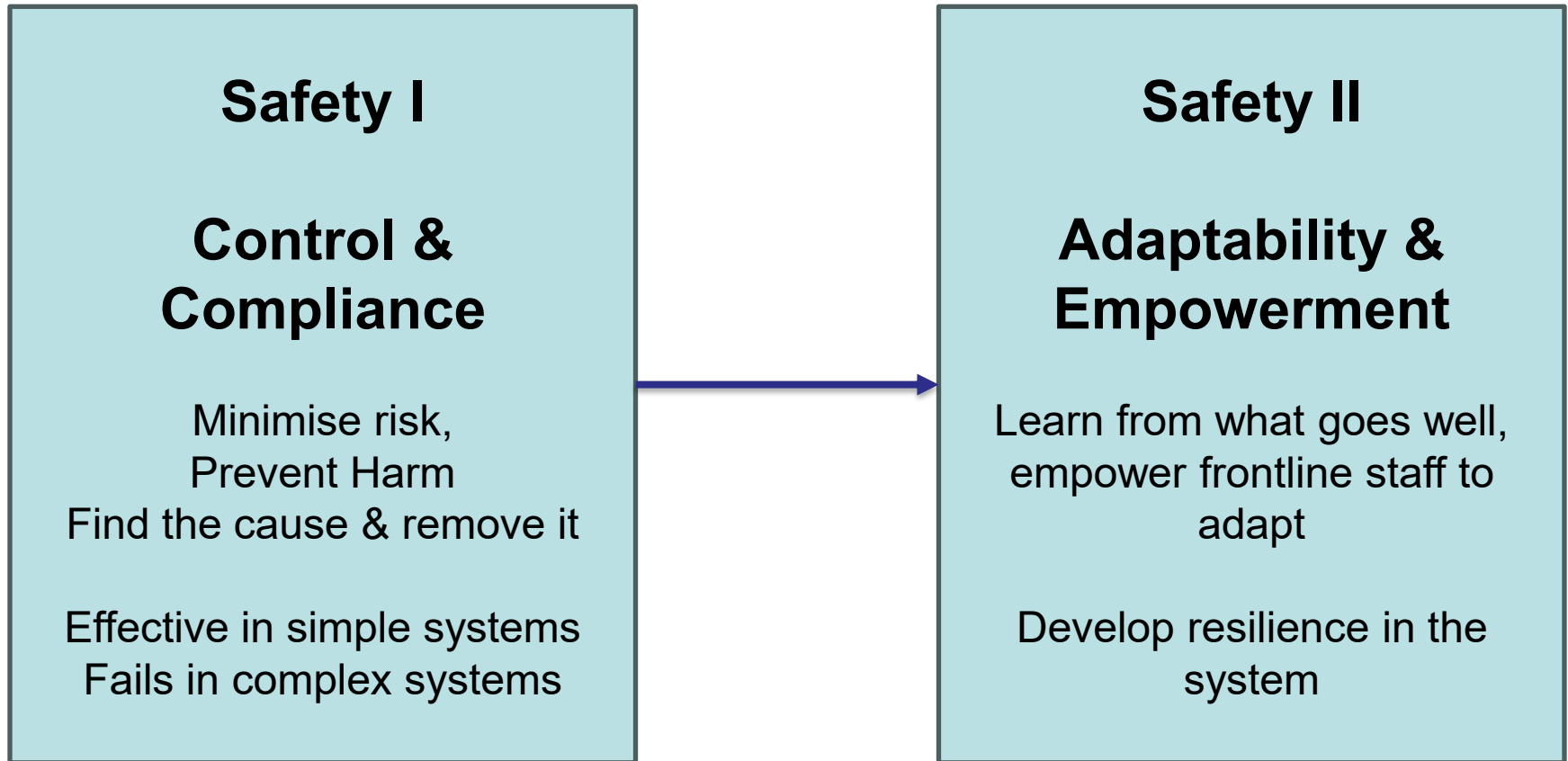


**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast

Patient Safety Theory



Organisational Resilience

*‘Ability of a system to sustain required operations under both expected and unexpected conditions by **adjusting** its functioning prior to, during, or following events (changes, disturbances, and opportunities)’*

Eric Hollnagel



Hollnagel et al., 2011; Sanford et al., 2024



**QUEEN'S
UNIVERSITY
BELFAST**

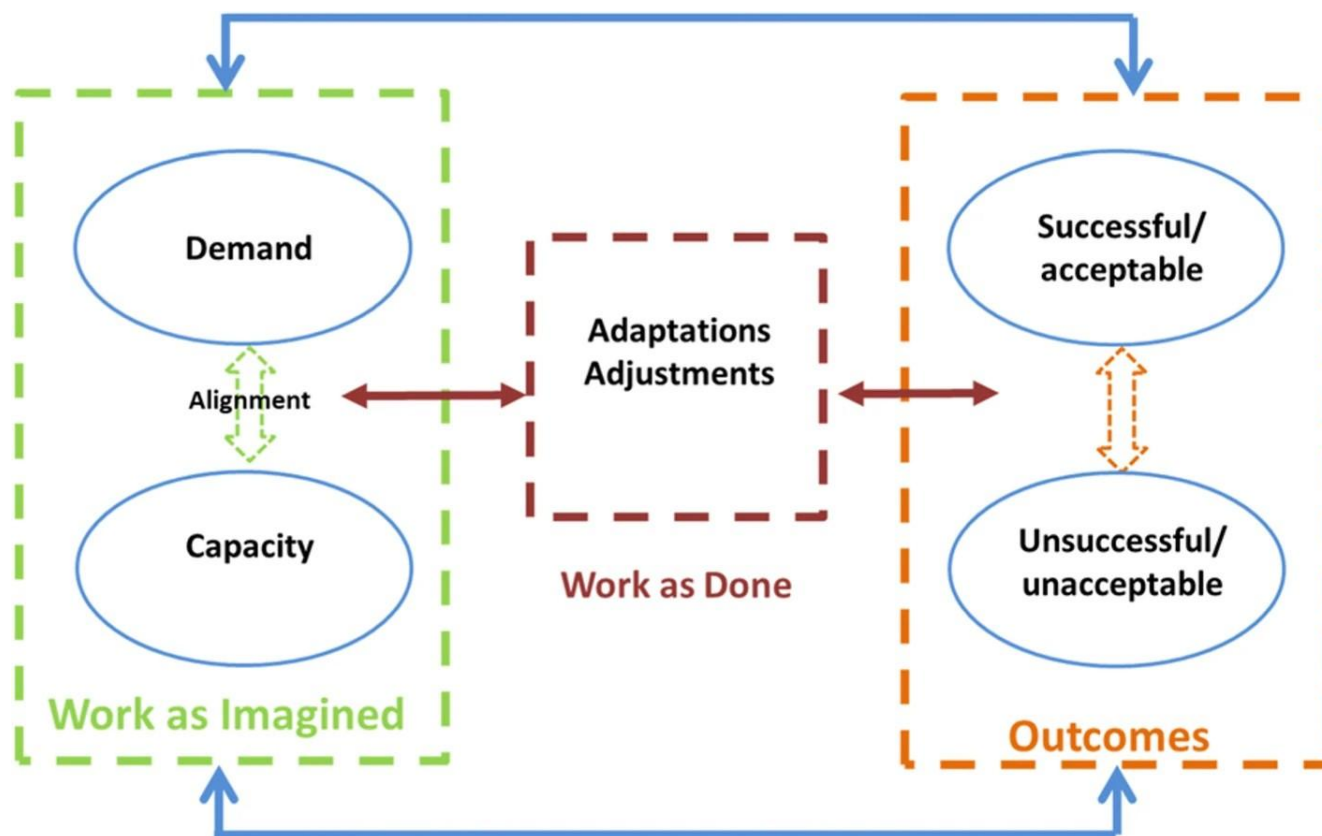


**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast

CARE Model 2.0



Sanford et al., 2022



**QUEEN'S
UNIVERSITY
BELFAST**



**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast

Ethnographic Observations – Hospital Settings



Sanford et al., 2022



**QUEEN'S
UNIVERSITY
BELFAST**

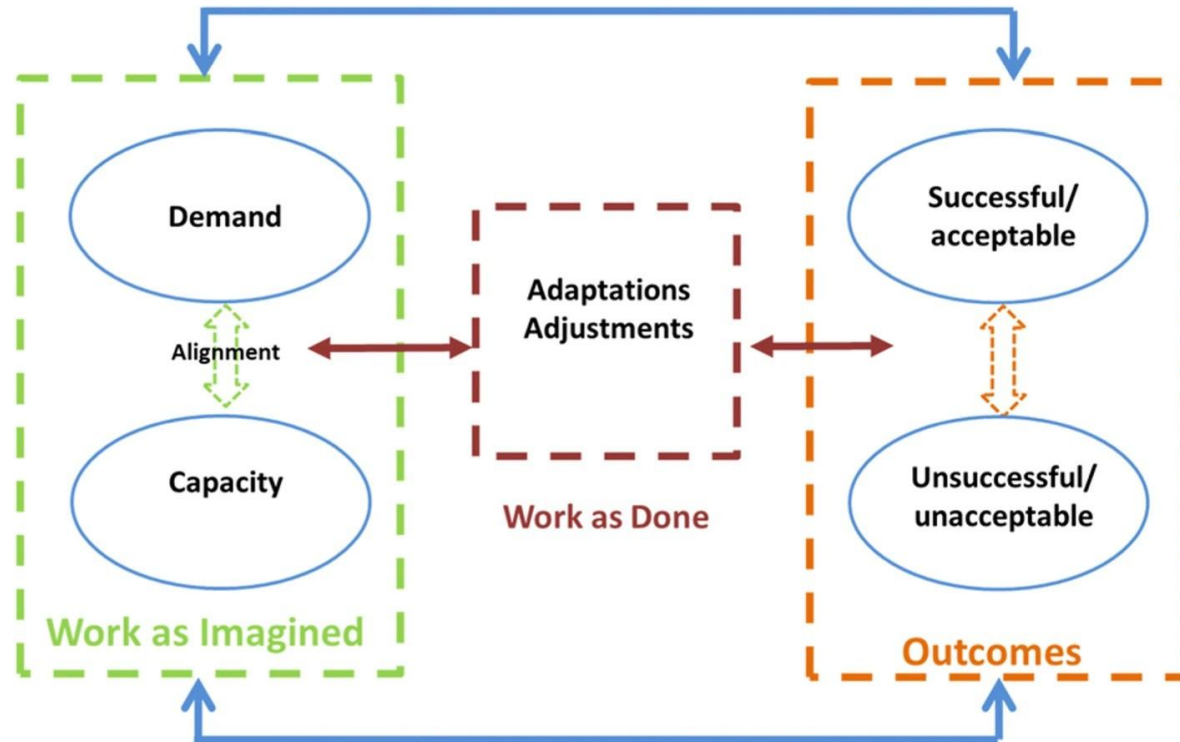


**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast

Staffing
Equipment
Process
Space
Comm.
Workflow



Adapt the Process: How, When, Who, Where, What
Redistribute resources (staff/equipment)
Extra Role Performance – beyond your role

Sanford et al., 2022



QUEEN'S
UNIVERSITY
BELFAST



St Mary's
University College
A College of Queen's University Belfast

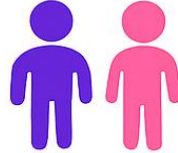


STRANMILLIS
UNIVERSITY COLLEGE
A College of Queen's University Belfast

Team Types



Structural



Hybrid



Satellite



Responsive



Coordinating

Membership	Stable	Mixed	Stable	Unstable	Mixed
Location	Fixed	Fixed	Mobile	Mobile	Fixed
Function	Routine Clinical	Routine Clinical (Time limited)	Routine Clinical	Urgent Response	Non-Clinical

Sanford et al., 2024



**QUEEN'S
UNIVERSITY
BELFAST**

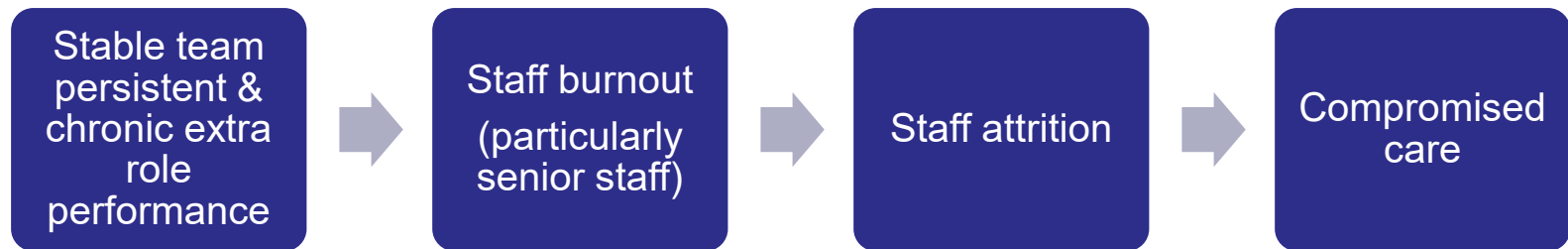
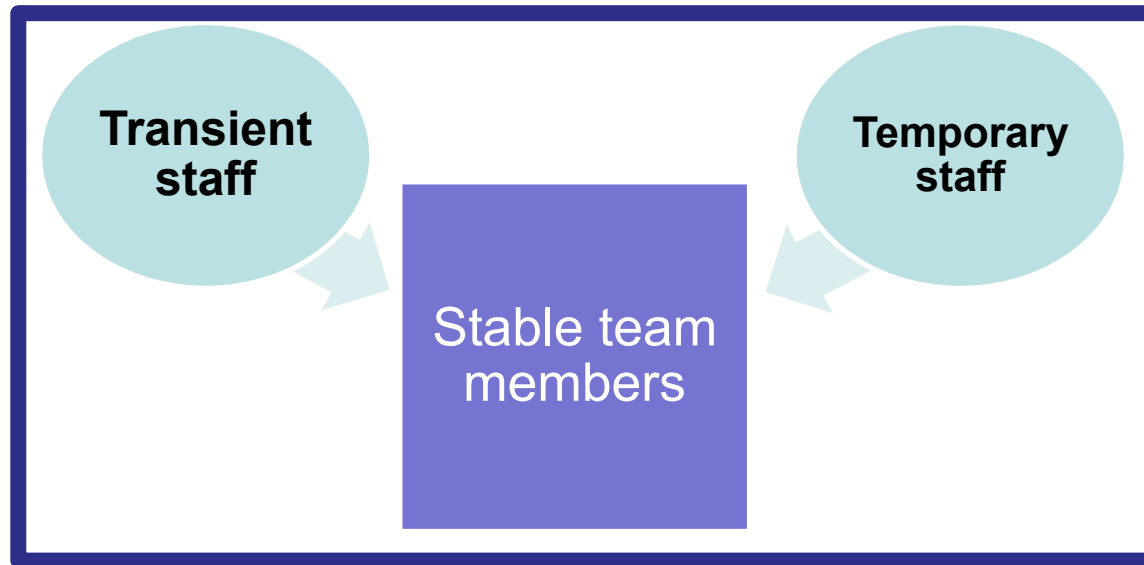


**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast

Hybrid Team – Most Vulnerable



Sanford et al., 2025; Sanford et al., 2023

Mental Health Wards – An Acute Example

Challenging context

- High bed occupancy (>90%)
- High staff vacancies (>20%)

People in acute distress

- Conflict, behaviours that challenge
- Restrictive Practice: Physical Restraint (~ 6/hour), seclusion and forced tranquilisation

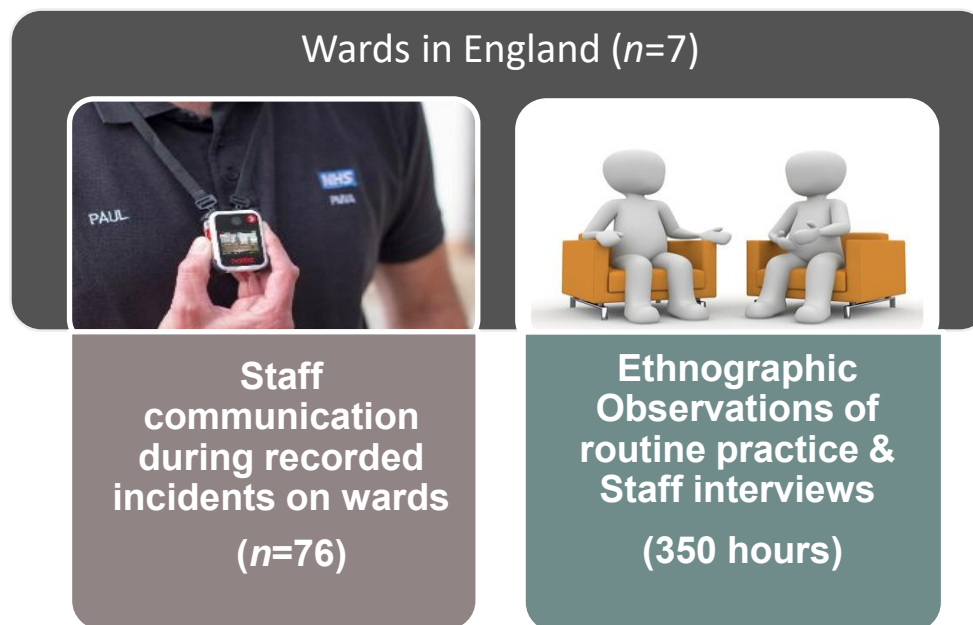
Harm to all

- Poorer patient prognosis, longer admissions
- Key contributor to staff sickness, burnout, and poorer retention



Communication & Restraint Reduction (CaRR) Study

What staff and team approaches are effective in preventing, and responding to, incidents on wards, reducing the reliance on restrictive practice?



HSC Public Health Agency
Research and Development

FUNDED BY
NIHR | National Institute for Health and Care Research

Cibelli et al. 2025



**QUEEN'S
UNIVERSITY
BELFAST**



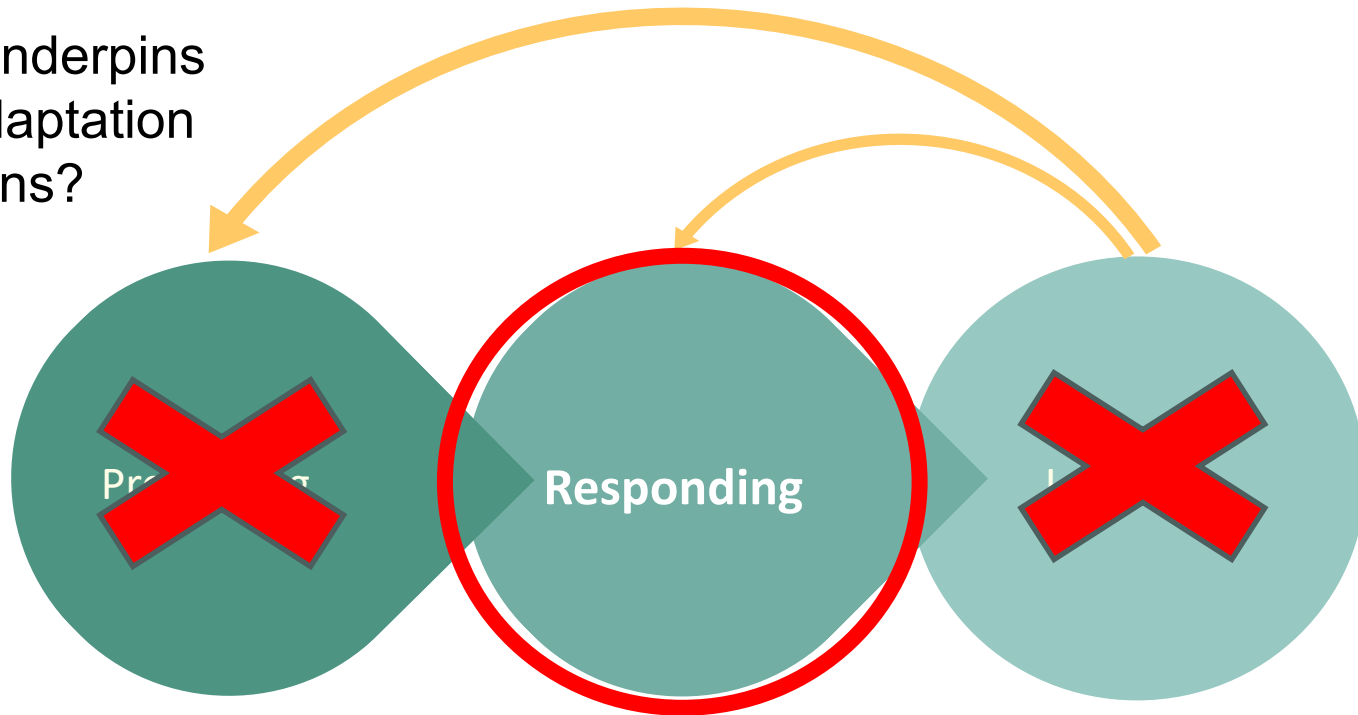
**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast

Ward Activities Observed

What underpins
staff adaptation
decisions?



Lack of adaptive capacity in the system

Lavelle et al., 2025

Frontline Decision Compass



Lavelle et al., 2025



**QUEEN'S
UNIVERSITY
BELFAST**

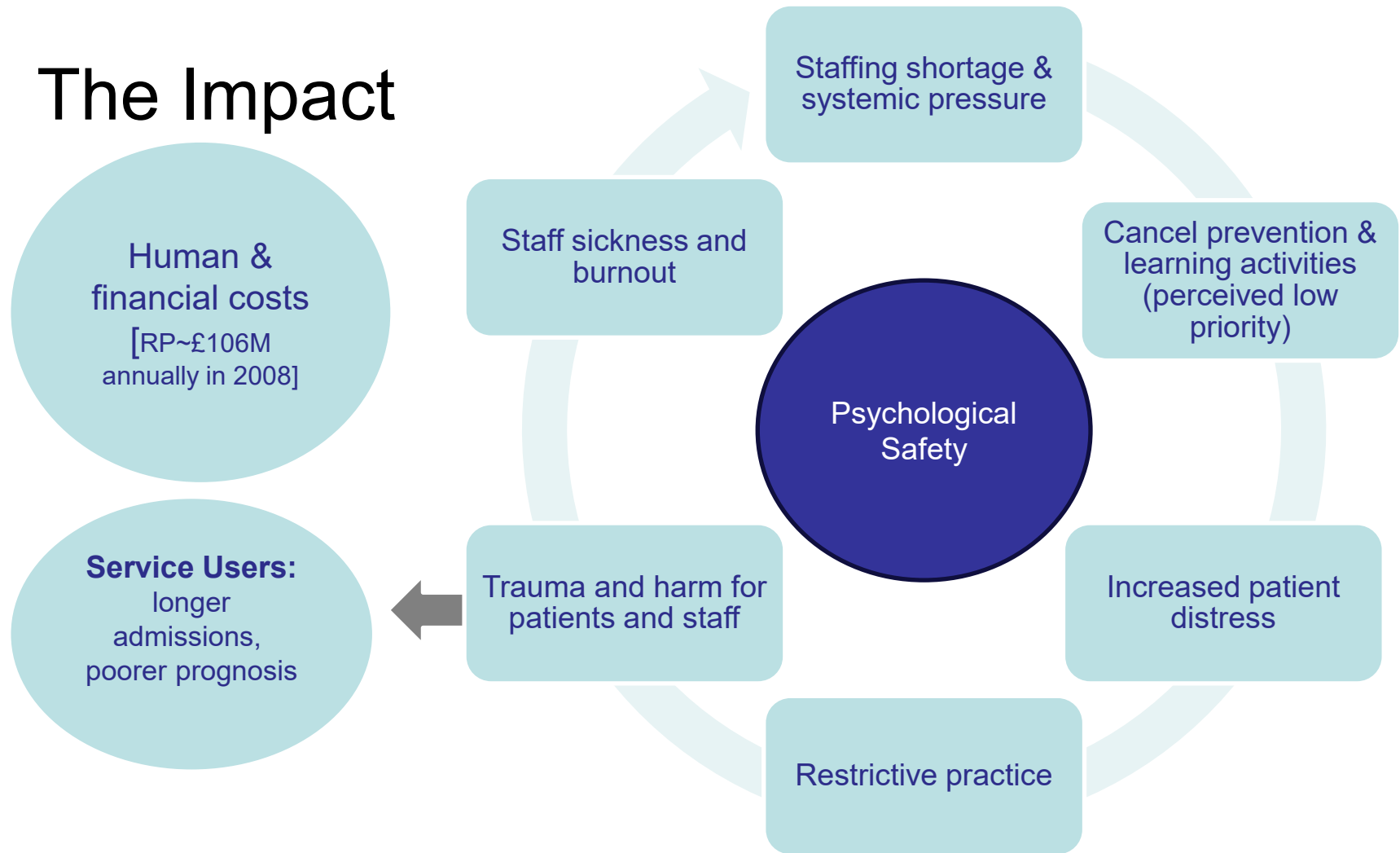


**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast

The Impact



Lavelle et al., 2025



**QUEEN'S
UNIVERSITY
BELFAST**



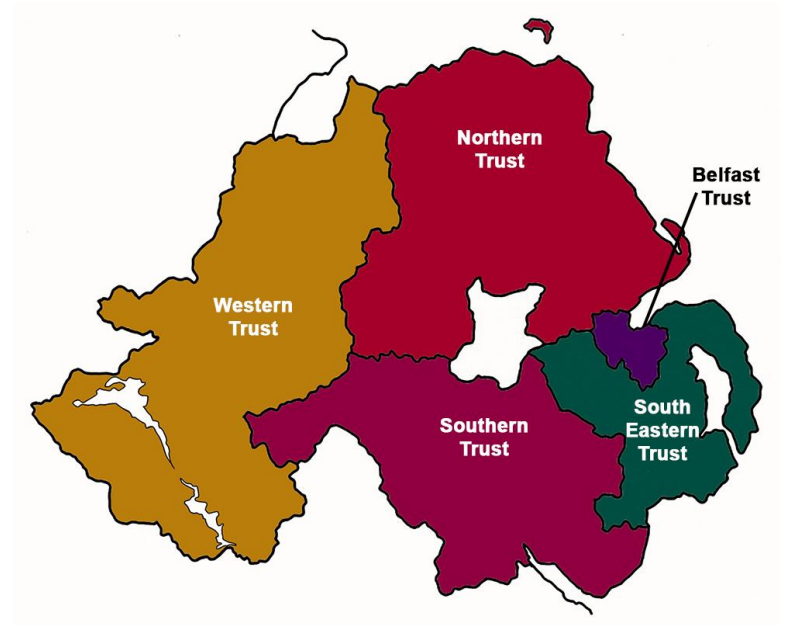
**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast

HSC Northern Ireland Context

- Data collected in England
- Despite funding and engagement with HSC Trusts, specific challenges and barriers to collecting ethnographic data in clinical settings in Northern Ireland
- CaRR Study - currently trying to collect a proxy for this information through interviews and focus groups with frontline staff
- Risk minimisation at the expense of care advancement



**QUEEN'S
UNIVERSITY
BELFAST**



**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast

Designing Safer Staffing

- **Understand ‘Work as Done’:** Hidden pressures and trade-offs staff make are not captured by staffing metrics but impact safety, care quality, staff wellbeing and staff retention
- **Safety II Approach:** Resilient teams have empowered frontline staff with the capacity flexibly adapt when required.
- **Teams are not all the same:** Team characteristics create strengths and vulnerabilities
- **Safety but not at the expense of care quality:** Developing robust local evidence to improve care in NI is understandably challenging in some healthcare contexts. Decisions about risk need to be balanced with care quality and advancement



**QUEEN'S
UNIVERSITY
BELFAST**



**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast

REFERENCES

- Cibelli, F., Forbes, T., McCabe, R., Anderson, J. E., Hoe, J., Tahir, S., McKeown, G., Brew, B., Deamer, F. & Lavelle, M. (2025). Examining the role of staff and team communication in reducing seclusion, restraint and forced tranquilisation in acute inpatient mental health settings: protocol for the Communication and Restraint Reduction (CaRR) study. *BMJ Open*, 15(11), e102989.
- Hollnagel, E., Paries, J., Woods, D. D., & Wreathall, J. (2011). *Resilience Engineering in Practice: A Guidebook*. Ashgate.
- Lavelle, M., Cibelli, F., Forbes, T., Sanford, N., Lounsbury, O., & Anderson, J. E. (2025, June 18–20) Safety at the expense of quality? An ethnographic examination of aggression prevention and management practices in mental health. *Healthcare Systems Ergonomics and Patient Safety (HEPS) Conference*, Dublin, Ireland.
- Sanford, N., Lavelle, M., Markiewicz, O., Reedy, G., Rafferty, A. M., Darzi, A., & Anderson, J. E. (2022). Understanding complex work using an extension of the resilience CARE model: an ethnographic study. *BMC Health Services Research*, 22(1), 1126.
- Sanford, N., Lavelle, M., Markiewicz, O., Reedy, G., Rafferty, A. M., Darzi, A., & Anderson, J. E. (2024). Decoding healthcare teamwork: a typology of hospital teams. *Journal of Interprofessional Care*, 38(4), 602–611.
- Sanford, N., Lavelle, M., Markiewicz, O., Reedy, G., Rafferty, A. M., Darzi, A., & Anderson, J. E. (2025). Contextual influences on adaptation in four types of hospital teams: an ethnographic study. *Applied Ergonomics*, 128, 104529.



**QUEEN'S
UNIVERSITY
BELFAST**



**St Mary's
University College**
A College of Queen's University Belfast



**STRANMILLIS
UNIVERSITY COLLEGE**
A College of Queen's University Belfast



Knowledge Exchange Seminar Series (KESS)

...is a forum that encourages debate on a wide range of research findings, with the overall aim of promoting evidence-informed policy and law-making within Northern Ireland