



# Deepening our Understanding of Quality in Australia

#### INTRODUCTION

Australian Institute of Health Innovation | September 2019

A GROUND-BREAKING STUDY TO INFORM DECISION-MAKING ON THE IMPLEMENTATION OF QUALITY AND SAFETY SYSTEMS AND PROCESSES IN HOSPITALS IN AUSTRALIA AND INTERNATIONALLY







#### A GROUND-BREAKING STUDY







NHMRC AIHI

Australia-wide

32 Hospitals

Based on the European study, Deepening our Understanding of Quality Improvement in Europe

Funded by the National Health and Medical Research Council Program Grant APP1054146 CI: Braithwaite Led by the Australian Institute of Health Innovation, Macquarie University



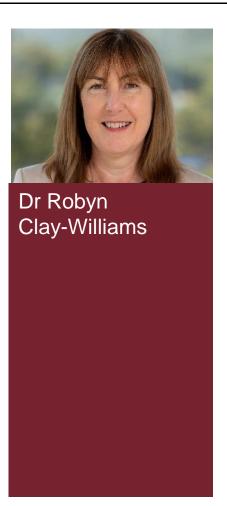




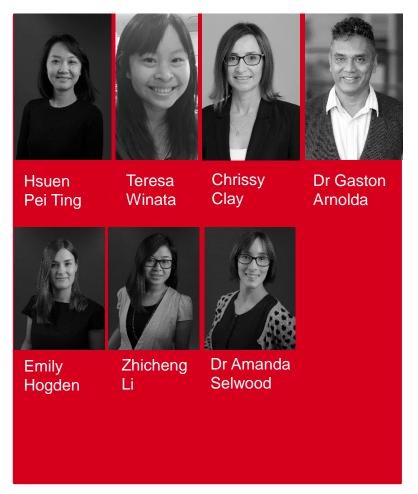
### **RESEARCH LEADS & TEAM**



Braithwaite

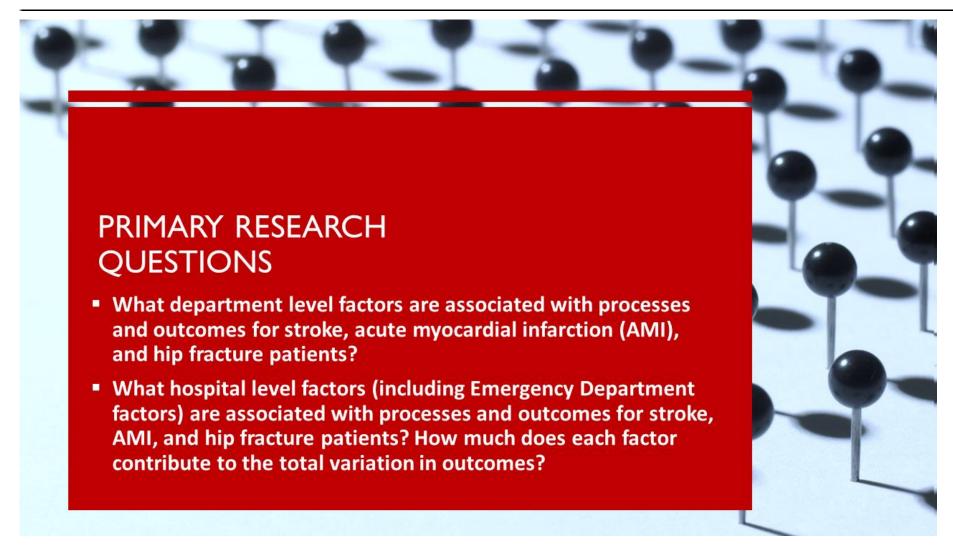






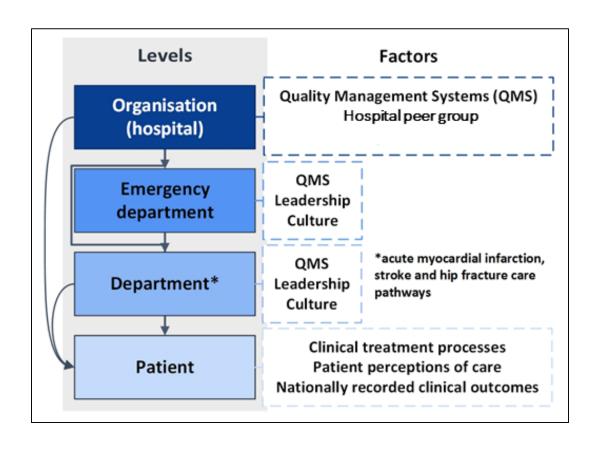


#### TWO PRIMARY RESEARCH QUESTIONS



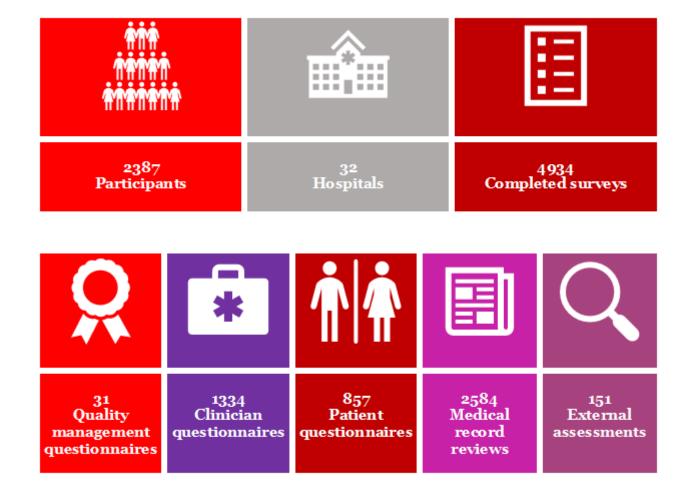


### **CONCEPTUAL MODEL**



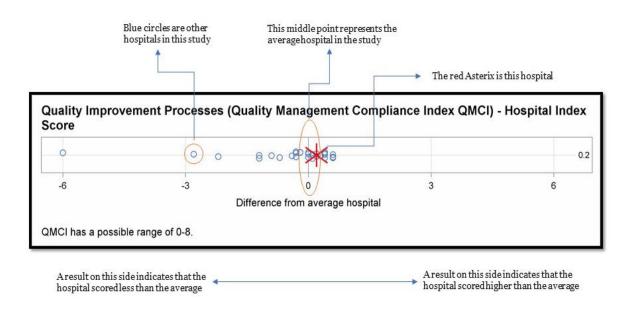


### **GROUND-BREAKING**



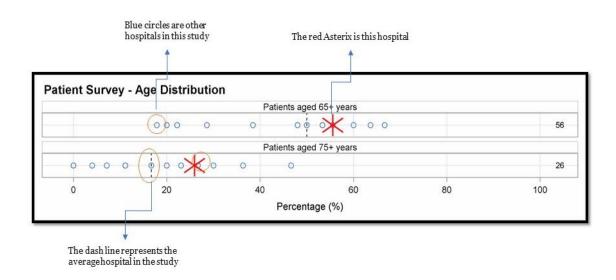


### HOW TO INTERPRET GRAPHS IN THE REPORT





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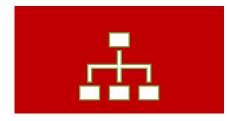
### ORGANISATIONAL LEVEL

To determine how quality management systems impact patient outcomes, the DUQuA study looked at quality measures on the organisational level





#### ORGANISATIONAL LEVEL QUALITY PROCESSES







#### QUALITY MANAGEMENT STRUCTURES

This refers to the quality management structures in place at the hospital including policy, governance board, resources, performance monitoring and internal quality methods.

This was measured by a self-reporting questionnaire using the **Quality Management Systems Index (QMSI).** 

#### QUALITY IMPROVEMENT PROCESSES

This refers to the quality improvement processes existing within the hospital environment such as learning from feedback including staff questionnaires; patient feedback; and incident reporting.

This was measured by external assessors using the **Quality Management Compliance Index (QMCI).** 

#### CLINICAL PROCESS IMPROVEMENTS

This refers to the innovations and processes that are implemented to improve safety and adherence to clinical quality activities. For example, preventing and controlling healthcare associated infection, medication safety, ways to prevent falls and pressure injuries, safe surgical processes and responses to clinical quality deterioration

This was measured by external assessors using the Clinical Quality Implementation Index (CQII).



#### CARE PATHWAYS LEVEL

To determine how quality management processes impact patient outcomes, the DUQuA study looked at quality measures on the clinician level and the patient level and reviewed randomly selected medical records for patients on the AMI, Stroke, Hip Fracture and Emergency Department wards







	What we looked at	How we measured it
	The patient journey from admission to acute care management and discharge.	The Evidence-Based Organisation of Pathways (EBOP) measurement looks at clinical processes.
	What level of care on the ward was in accordance with clinical practice guidelines.	Patient Safety Strategies (PSS) measure the use of clinical practice guidelines.
	The assignment of clinical responsibilities for conditions and care.	Specialised Expertise and Responsibility (SER) measures clinical responsibilities.
nn	The audit and management of quality processes.	Clinical Review (CR) measures the Quality management processes.



"When quality improvement is persistently tackled and seen as a long-term endeavour, benefits flow to the organisation, clinicians and patients."

Professor Jeffrey Braithwaite



# **Further reading**

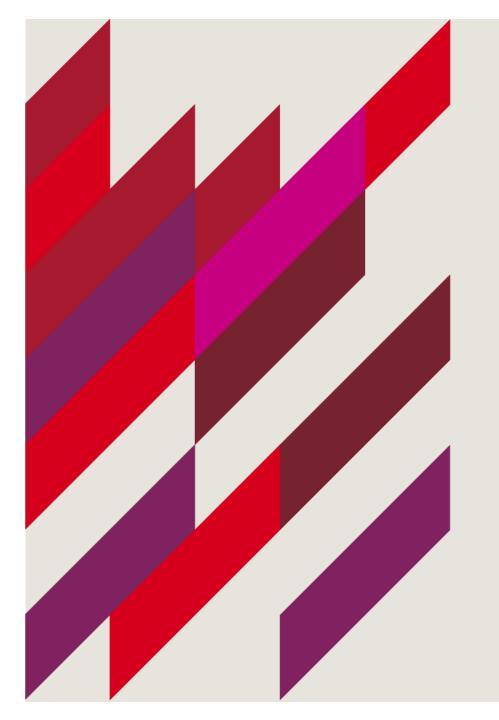


- Braithwaite J, Clay-Williams R, Taylor N, Ting H P, Winata T, Arnolda G, Suñol R, Gröne O, Wagner C, Klazinga N S, Donaldson L, Dowton S B. Bending the quality curve. International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).
- Braithwaite J, Clay-Williams R, Taylor N, Ting H P, Winata T, Hogden E, Li Z, Selwood A, Warwick M, Hibbert P, Arnolda G. DUQuA: an overview of a nation-wide multi-level analysis of relationships between quality management systems and patient factors in 32 hospitals. International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).
- Clay-Williams R, Taylor N, Winata T, Ting H P, Arnolda G, Braithwaite J. Organisation quality systems and department-level strategies: refinement of the DUQuA organisation and department-level scales. International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).
- Taylor N, Clay-Williams R, Ting H P, Arnolda G, Winata T, Hogden E, Braithwaite J. Do organisation-level quality management systems influence department-level quality? A cross-sectional study across 32 large hospitals in Australia. International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).
- Clay-Williams R, Taylor N, Ting H P, Winata T, Arnolda G, Austin E, Braithwaite J. The relationships between quality management systems safety culture and leadership and patient outcomes in Australian Emergency Departments. International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).
- Clay-Williams R, Taylor N, Ting H P, Winata T, Arnolda G, Braithwaite J. The clinician safety culture and leadership questionnaire: refinement and validation in Australian public hospitals. International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).
- Clay-Williams R, Taylor N, Ting H.P. Arnolda G. Winata T, Braithwaite J. Do quality management systems influence clinical safety culture and leadership? A study in 32 Australian hospitals. International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).

# **Further reading**



- Taylor N, Clay-Williams R, Ting H P, Winata T, Arnolda G, Hogden E, Lawton R, Braithwaite J. Validation of the Patient Measure of Safety (PMOS) questionnaire in Australian public hospitals. International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).
- Arnolda G, Winata T, Ting H P, Clay-Williams R, Taylor N, Tran Y, Braithwaite J. Implementation and data-related challenges in the DUQuA study: implications for large-scale cross-sectional research. International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).
- Hibbert P, Saeed F, Taylor N, Clay-Williams R, Winata T, Clay C, Hussein W, Braithwaite J. Can benchmarking Australian hospitals for quality identify and improve high and low performers? Disseminating research findings to hospitals.
  International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).
- Winata T, Clay-Williams R, Taylor N, Hogden E, Hibbert P, Austin E, Braithwaite J. Using accreditation surveyors to conduct health services research: a qualitative comparative study in Australia. International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement. (Accepted September 7).
- Braithwaite J, Taylor N, Clay-Williams R, Ting H P, Arnolda G. Conclusion: the road ahead where should we go now to improve healthcare quality in acute settings? International Journal for Quality in Health Care, 2019. Deepening our Understanding of Quality in Australia (DUQuA) Supplement (Accepted September 7).
- Taylor N, Clay-Williams R, Hogden E, Pye V, Li Z, Groene O, Suñol R, Braithwaite J. Deepening our Understanding of Quality in Australia (DUQuA): a study protocol for a nationwide, multilevel analysis of relationships between hospital quality management systems and patient factors. BMJ Open 2015;5:e010349. doi:10.1136/bmjopen-2015-010349.
- Taylor N, Clay-Williams R, Hogden E, Li Z, Lawton R, Braithwaite J. The older, vulnerable patient view: a pilot and feasibility study of the Patient Measure of Safety (PMOS) with patients in Australia. BMJ Open 6:e011069. doi: 10.1136/bmjopen-2016-011069.







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