March 2021
MEETING

OUTLINE

1) Welcome
2) Education Session: How to Use Health Registries and How to Conduct an Internal Audit
3) SRS Education Update
4) SRS Research Update
5) Feedback and Discussion

Education Session - Prof Close

Professor Jacqueline Close
Co-Chair ANZHFR

Australian Register of Clinical Registries

The Commission has developed the Australian Register of Clinical Registries to facilitate collaboration and awareness of registry activity among key stakeholders.

The Register provides summary information on the purpose and organisation of clinical registries at all stages of development. Clinical registries will be added to this list as the content of each registered clinical registry is curated and prepared for publishing.

The search function allows you to conduct a basic search of the clinical registries for information such as clinical condition, registry name and participating sites. The 'prioritised clinical domain' field included in the list is in line with the *Prioritised list of clinical domains for clinical quality registry development: Final report*.

https://www.safetyandquality.gov.au/australian-register-clinical-registries

Some surgical registries - ACSQHC

- Trauma
- Burns injuries
- Prostate
- Joint replacement
- Clinical ophthalmology
- Cardio thoracic surgery
- Head and Neck Cancer

ACS NSQIP
- About ACS NSQIP
- Join ACS NSQIP Now
- Collaboratives
- Hospital Compare
- Quality and Safety Conference
- Participant Use Data File

ACS National Surgical Quality Improvement Program

ACS National Surgical Quality Improvement Program

The ACS National Surgical Quality Improvement Program (ACS NSQIP®) is a nationally validated, risk-adjusted, outcomes-based program to measure and improve the quality of surgical care. Built by surgeons for surgeons, ACS NSQIP provides participating hospitals with tools, analyses, and reports to make informed decisions about improving quality of care. Further, peer-reviewed studies have shown that ACS NSQIP is effective in improving the quality of surgical care while also reducing complications and costs.

- **Prevent 250–500 complications**
- **Save 12–36 lives**
- **Reduce costs by millions of dollars**

ACS NSQIP Participant Portal

ACS NSQIP Registry

SCR Training and Testing

ANZELA

Become a surgeon ⌄ Trainees ⌄ Fellows ⌄ SIMGs ⌄ Research & audit ⌄

HOME > RESEARCH & AUDIT > MORBIDITY AUDITS > MORBIDITY AUDITS MANAGED BY RACS > ANZ EMERGENCY LAPAROTOMY AUDIT – QUALITY IMPROVEMENT

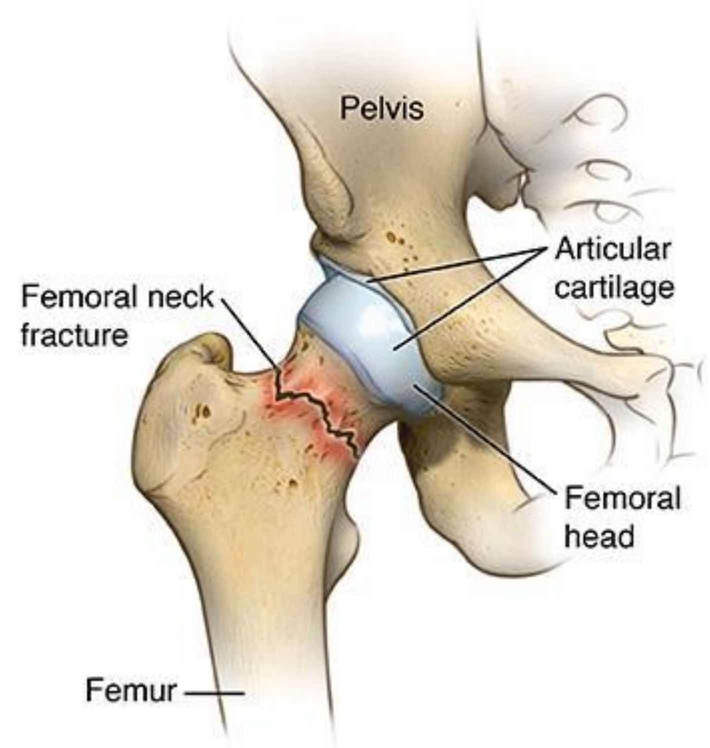
ANZ Emergency Laparotomy Audit – Quality Improvement

The Australian and New Zealand Emergency Laparotomy Audit – Quality Improvement (ANZELA-QI) has been established for the purpose of providing hospitals with contemporary data to support local initiatives to improve the quality of patient care relating to the management of the acute abdomen.

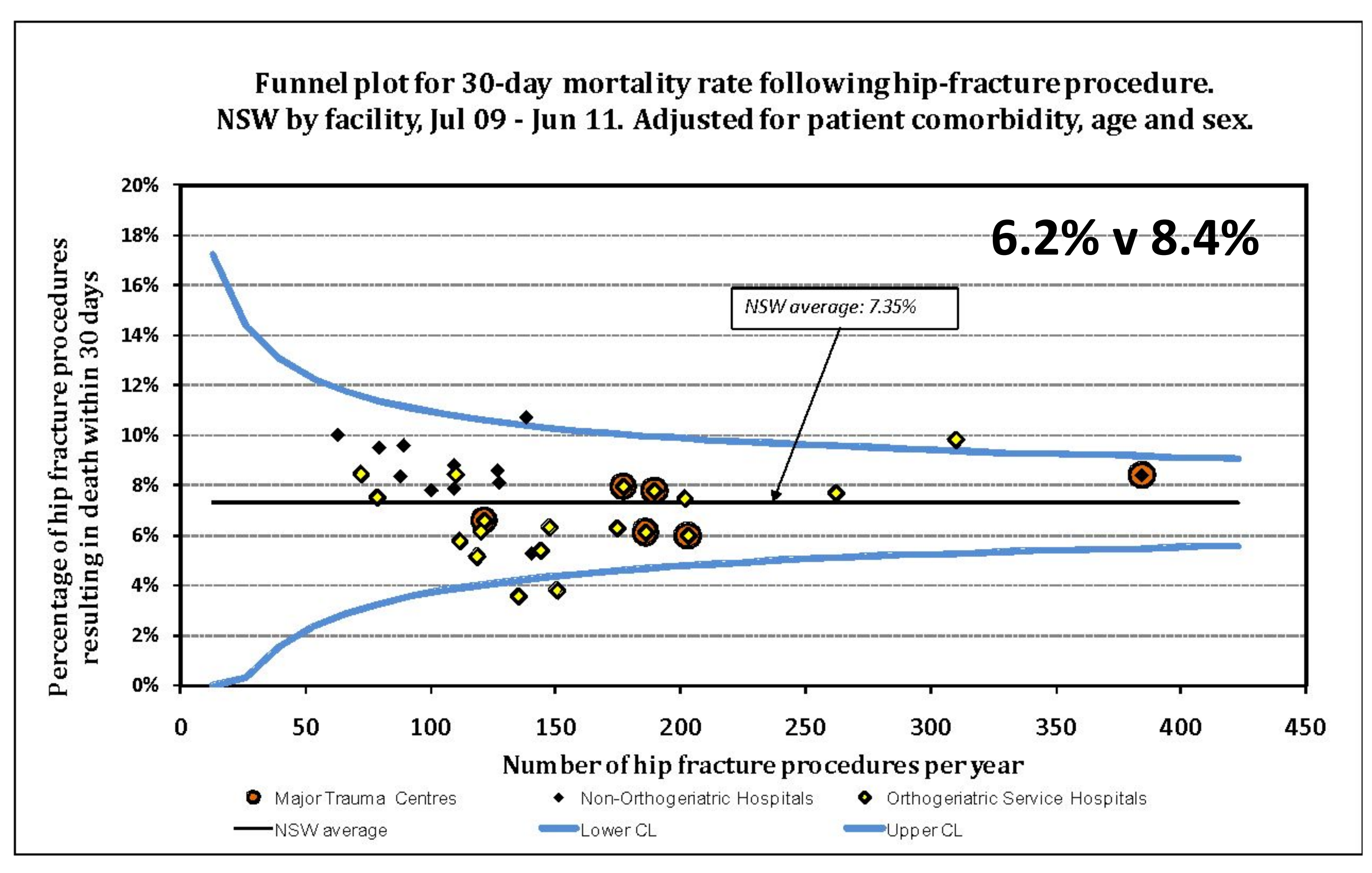
Data available around processes of care, health outcomes, PROMs, PREMs and health system costs
Data recorded by clinicians
DATA
Data transferred to registry
INFORMATION
Data compiled and analysed
Regular reports that include benchmarks and outliers
KNOWLEDGE
Regular feedback is provided back to clinicians
Improvement in clinical care
WISDOM
Clinical care

Hip Fracture Registry

- High Volume
- High Cost
- Evidence based guidelines to direct care
- Evidence that better care delivers better outcomes
- Better care costs less



Evidence of variation in care and outcomes



Zeltzer et al 2014

BMJ 2015;351:h3854 doi: 10.1136/bmj.h3854 (Published 16 July 2015)

Hip fracture audit may have saved 1000 lives since 2007

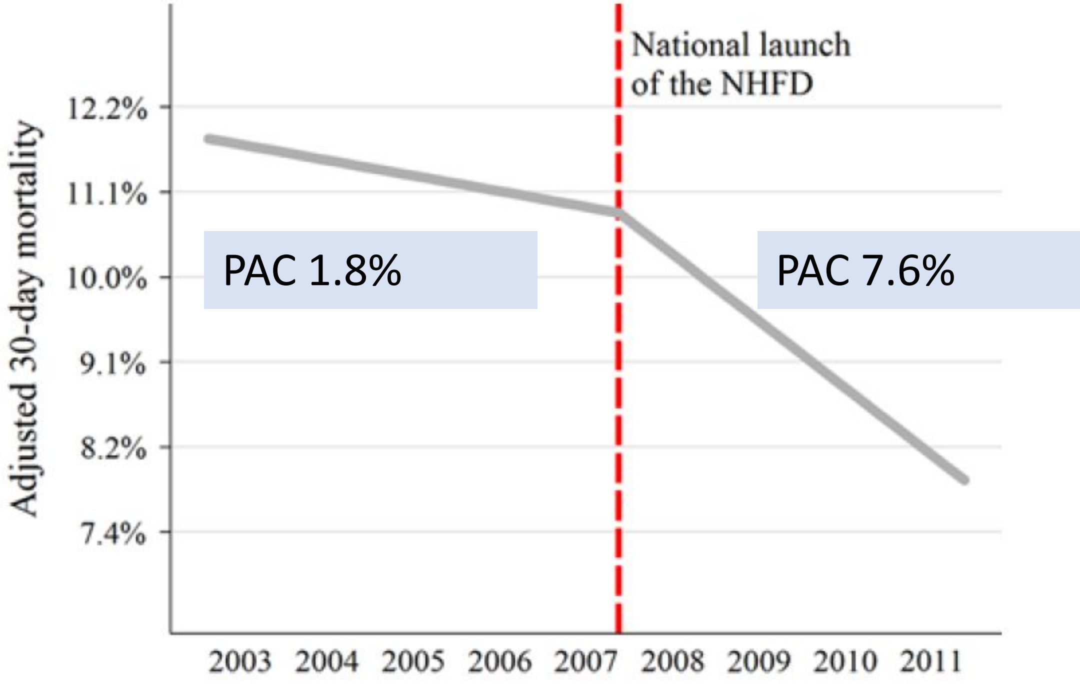
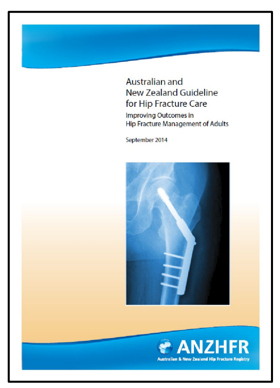
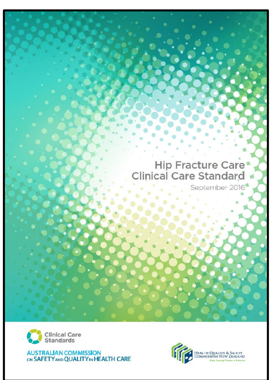


FIGURE 1. Time trends in 30-day mortality in the periods 2003–2007 and 2007–2011. Y axis is on log scale, with labels on natural scale. Time is measured in 3-month intervals.

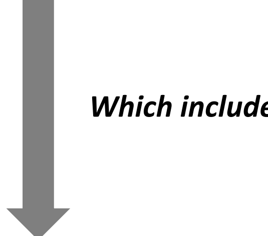
Neuberger, Med Care 2015



Clinical Guidelines
Statements that include recommendations, intended to optimise patient care, that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options - *Institute of Medicine*



Clinical Standards
A Clinical Care Standard is a small number of <u>quality statements</u> that describe the clinical care that a patient should be offered for a specific clinical condition - *Australian Commission on Safety and Quality in Health Care*



Quality Indicators
Quality indicators can be used by health services to monitor the implementation of the quality statements, and to identify and address areas that require improvement e.g. *Proportion of patients with a hip fracture receiving bone protection medicine prior to separation from the hospital at which they underwent hip fracture surgery - Australian Commission on Safety and Quality in Health Care*

Which are reported by:

Hip Fracture Registries
Clinician driven audit of hip fracture care which includes annual facilities level audit and continuous patient level audit from admission to 120 days after discharge – *Australian and New Zealand Hip Fracture Registry*

Hip Fracture Care Clinical Care Standard

1 A patient presenting to hospital with a suspected hip fracture receives care guided by timely assessment and management of medical conditions, including diagnostic imaging, pain assessment and cognitive assessment.

2 A patient with a hip fracture is assessed for pain at the time of presentation and regularly throughout their hospital stay, and receives pain management including the use of multimodal analgesia, if clinically appropriate.

3 A patient with a hip fracture is offered treatment based on an orthogeriatric model of care as defined in the *Australian and New Zealand Guideline for Hip Fracture Care.*[1]

4 A patient presenting to hospital with a hip fracture, or sustaining a hip fracture while in hospital, receives surgery within 48 hours, if no clinical contraindication exists and the patient prefers surgery.

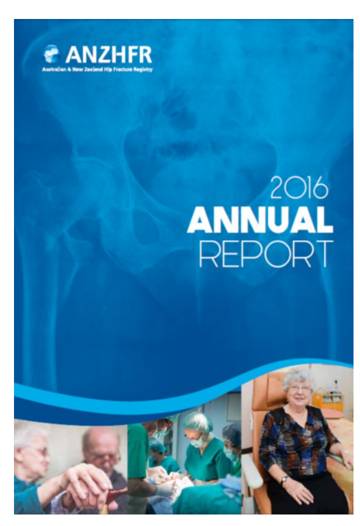
5 A patient with a hip fracture is offered mobilisation without restrictions on weight-bearing the day after surgery and at least once a day thereafter, depending on the patient's clinical condition and agreed goals of care.

6 Before a patient with a hip fracture leaves hospital, they are offered a falls and bone health assessment, and a management plan based on this assessment, to reduce the risk of another fracture.

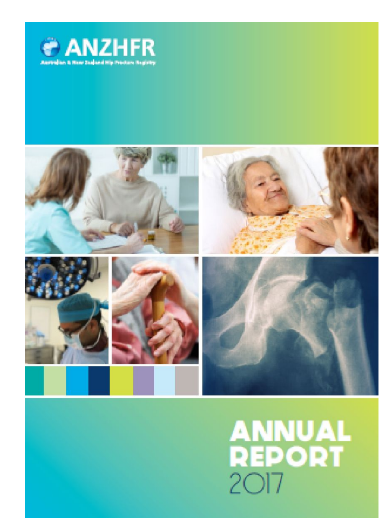
7 Before a patient leaves hospital, the patient and their carer are involved in the development of an individualised care plan that describes the patient's ongoing care and goals of care after they leave hospital. The plan is developed collaboratively with the patient's general practitioner. The plan identifies any changes in medicines, any new medicines, and equipment and contact details for rehabilitation services they may require. It also describes mobilisation activities, wound care and function post-injury. This plan is provided to the patient before discharge and to their general practitioner and other ongoing clinical providers within 48 hours of discharge.

- **Time in ED**
- **Use of nerve blocks**
- **Orthogeriatric model of care**
- **Time to surgery**
- **Weight bearing / early mobilisation**
- **Secondary fracture prevention**
- **Transitions in care**

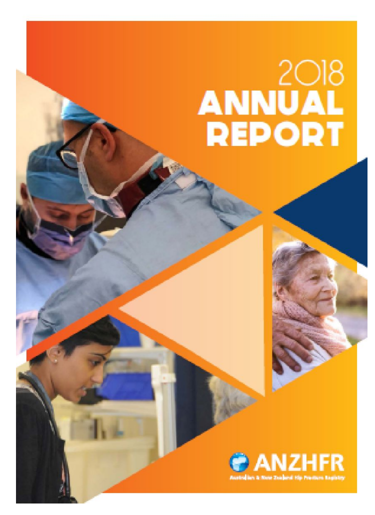
Annual reports highlight performance against indicators



25 hospitals
3519 patients



34 hospitals
5178 patients

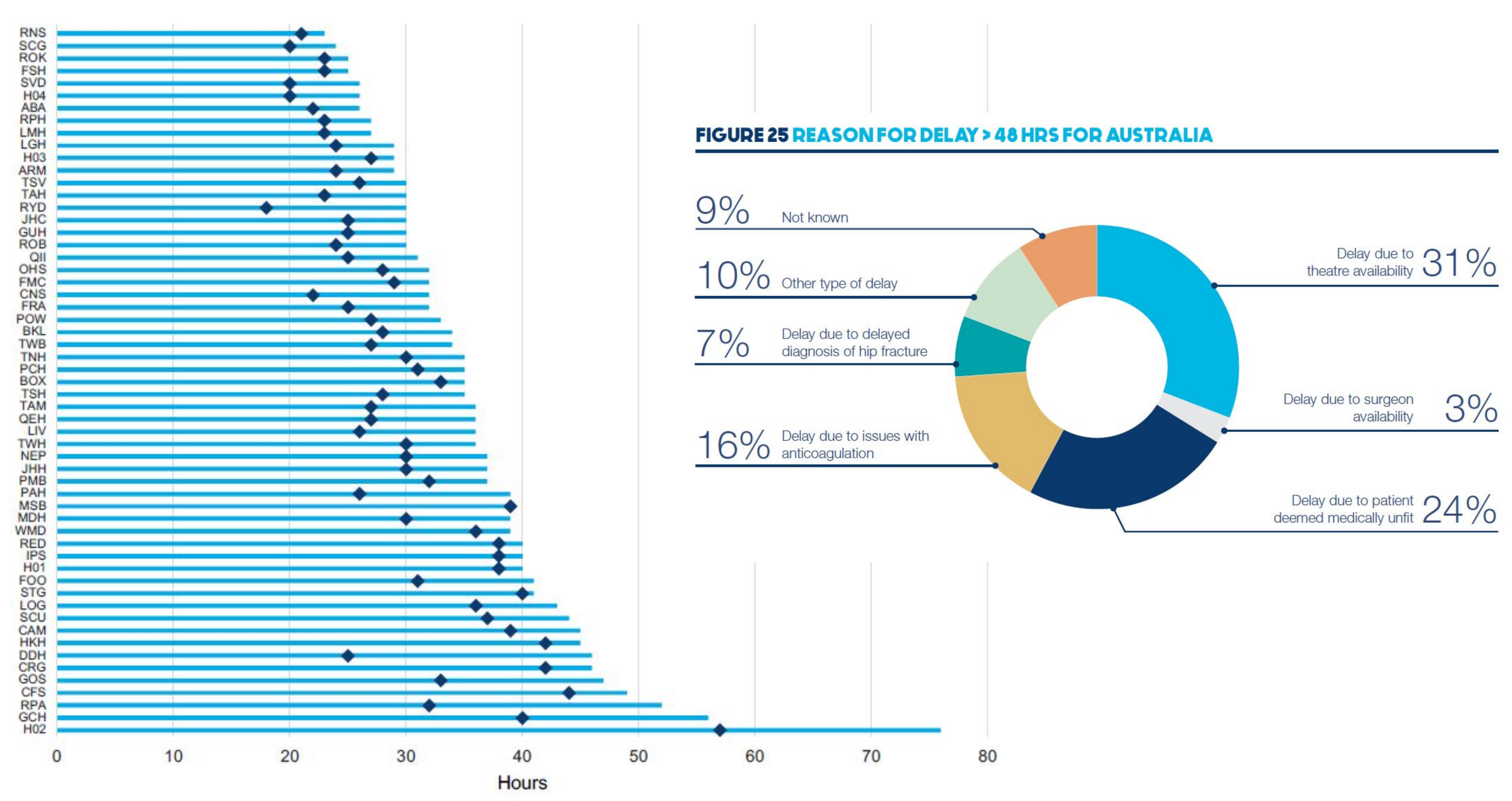


57 hospitals
9408 patients

67 hospitals
11995 patients

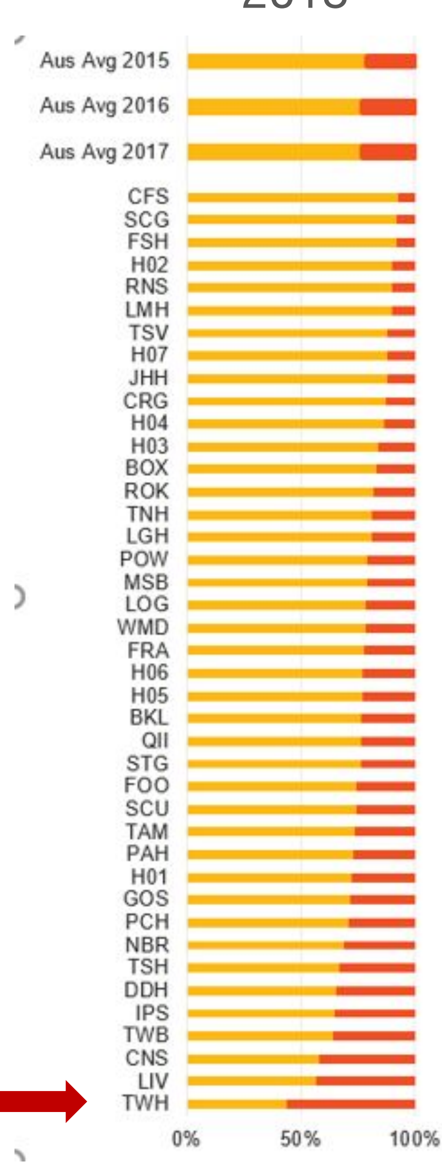
77 hospitals
13504 patients

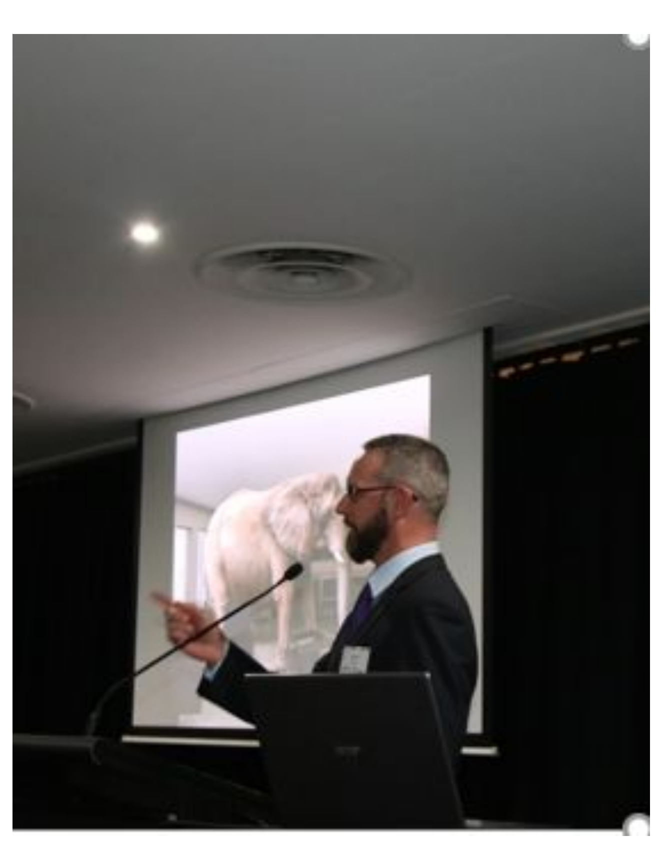
TIME TO SURGERY IN AUSTRALIA

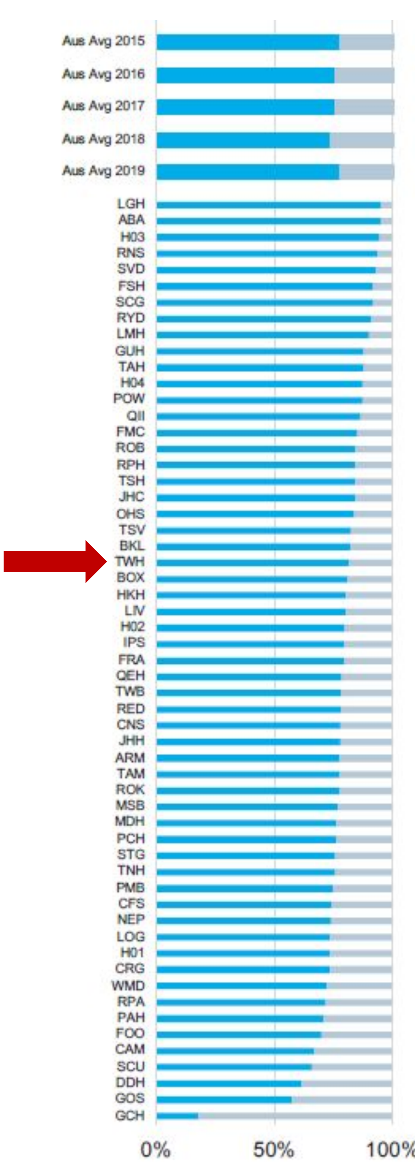


Using your data to drive change

2018

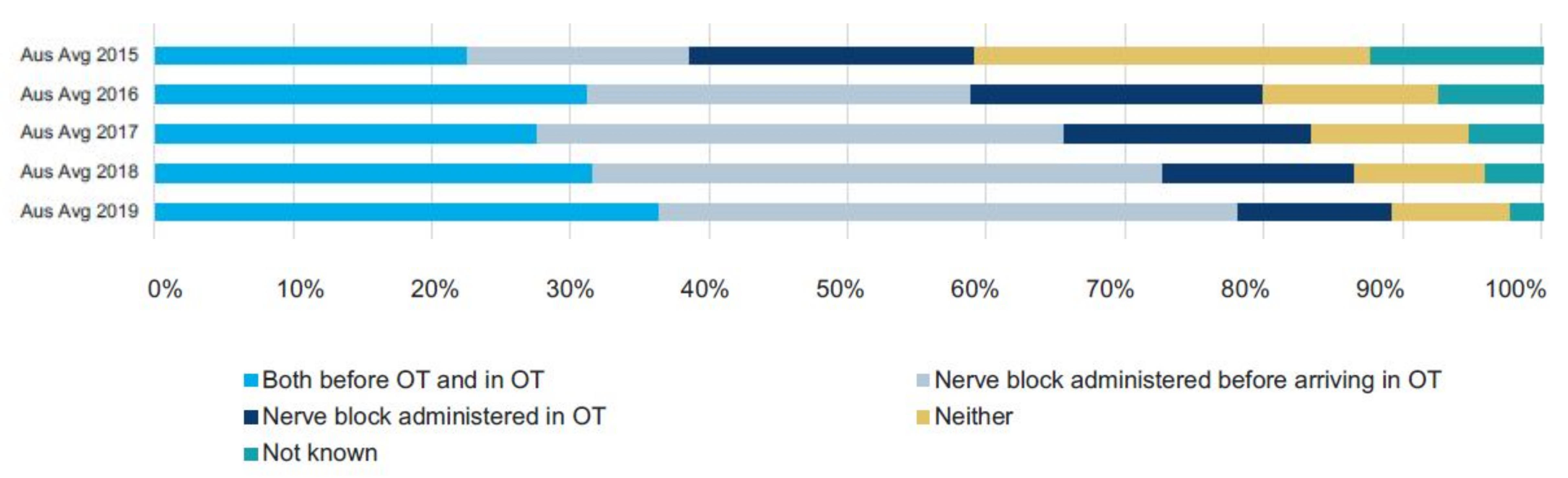






Tracking change over time
Use of nerve blocks

Significant improvement in use of nerve blocks prior to surgery: 30% in 2015 to 77% in 2019



Live dashboards to support quality improvement

Welcome to the Australian Hip Fracture Registry for Prince of Wales hospital

? Hover over ℹ for help

Hospital Snapshot

Active Patients	Last Modified
62	23 Mar 2021
2021 Records	**All Records**
18	1068

Patient Type: ☑ Admitted Via ED ☑ Transferred In ☑ Inpatient Fall ☑ Other/Unknown

Period: This Year

From: 01/01/2021 To: 24/03/2021

18 records	Time in ED (hrs) [15]	Time to Surgery (hrs) [18]	Acute Length of Stay (days) [16]	Hospital Length of Stay (days) [14]
Average	7.75	21.89	10.95	16.06
Median	5.92	22.27	11.08	13.36
Shortest	3.83	3.35	3.34	5.57
Longest	20.08	39.08	20.53	31.64

QS1 Care at Presentation	QS2 Pain Management	QS3 Orthogeriatric Model of Care	QS4 Timing of Surgery	QS5 Mobilisation & Weight Bearing	QS6 Minimising Risk of Another Fracture	QS7 Transition from Hospital Care
Cognitive Assessment prior to surgery (18) 94%	Pain Assessment within 30 minutes (17) 70%	Assessed by geriatric medicine (18) 100%	Surgery Within 48 hours (18) 100%	Day 1 Mobilisation Opportunity (18) 100%	Bone Medication on Discharge (18) 88%	Patients returning to Private Residence @ 120 Days (0) -
	Nerve Block before or at surgery (18) 94%			Unrestricted Weight Bearing (18) 100%	Specialist Falls Assessment (18) 94%	
				New Pressure Injuries (18) 5%		

Tracking Change Over Time

Healthy Competition

Median time to surgery

Hours

60
50
40
30
20
10
0

Jan-19, February, March, April, May, June, July, August, September, October, November, December, Jan-20, February, March, April, May, June, July, August, September

Prince of Wales — Liverpool — St George — The Sutherland — Linear (Prince of Wales)

Data access procedures

- Most registries will have a data access procedure / policy
- Need a research question
- Write a study protocol
- Likely to need ethics approval
- Look at variables available and the associated data dictionary

- Registries will have protocols for reviewing applications

Big Data

- SCOPE
  - 10 yrs of NSW APDC / NDI data
  - All people 50 years and older admitted under a surgical speciality
    - Early v delayed cholecystectomy for gallstone pancreatitis
    - Management of appendicitis in older people
- Hip fracture
  - Mortality following IM nail and SHS following hip fracture

SRS Education Update

SRS Research Update

Feedback and Discussion

Current Project Updates

SVH Updates

GOOD LUCK IN 2021!