2018

ANNUAL REPORT

SUPPLEMENTARY REPORT

ANZHFR

Australian & New Zealand Hip Fracture Registry

Enhancing Outcomes for Older People

ABBREVIATIONS AND DEFINITIONS

For the purposes of this report, the following interpretation of terms should be used.

ACT Australian Capital Territory

CT Computed Tomography

ED Emergency Department

Hip fracture data Data collected by hospitals that is in addition to information recorded in the patient's medical record

MOC Model of Care

MRI Magnetic Resonance Imaging

N Number of hospitals providing definitive management for hip fractures

NSW New South Wales

NT Northern Territory

OT Operating Theatre

QLD Queensland

SA South Australia

TAS Tasmania

Therapy Provision of allied health services primarily physiotherapy services

VIC Victoria

VTE Venous Thromboembolism

WA Western Australia

Additional copies of this report can be accessed at www.anzhfr.org

Report Design: patterntwo creative studio www.patterntwo.com.au

Photography: Craig Fardell, Elizabeth Armstrong, Ian Harris, Jacqueline Close

Suggested citation: ANZHFR Bi-National Annual Report of Hip Fracture Care, Supplementary Report, Australian State and Territories 2018. Australian and New Zealand Hip Fracture Registry, August 2018.

ISBN-13 978-0-7334-3829-5

NeuRA
Discover. Conquer. Cure.

NZOA
New Zealand Orthopaedic Association

UNSW SYDNEY

CONTENTS

CO-CHAIRS FOREWORD

For the first time the Australian and New Zealand (ANZ) Hip Fracture Registry is reporting patient level data on a jurisdiction basis for Australia. In this supplementary report, we provide comparisons at both the patient level and the facility-level. As always, caution is needed when interpreting patient-level data, particularly for jurisdictions with a low participation rate. At a facility level, all public hospitals in all jurisdictions have contributed data for six years and this allows for a meaningful comparison over time within and between jurisdictions.

A number of opportunities exist to improve the delivery of care and align with the Australian Commission on Safety and Quality in Health Care's Hip Fracture Care Clinical Care Standard. Cognitive assessment using a validated tool in advance of surgical intervention is undertaken in just 35% of the population and is less than 10% in some jurisdictions.

The time patients with a hip fracture spend in the Emergency Department is long. Whether that time is used constructively in relation to pain management, medical optimisation, assessment and management of pressure care, nutrition, hydration and other important aspects of care is less clear. Protocols and pathways should be in place to expedite the transition through the Emergency Department, and to ensure that care is optimised whilst in the Emergency Department setting.

Time to surgery remains a challenge with access to and availability of operating theatres a common theme amongst jurisdictions struggling to meet the target of surgery within 48 hrs. This should be interpreted in the context of ongoing international research looking at the mortality and morbidity benefit of expedited surgery.

When looking at progress over time at the facility level, it is apparent where change is happening. Some of this change may be locally driven, but in some jurisdictions the change is relatively quick and across a number of domains suggesting that a State level approach may have been the driver of that change.

Solutions can be at a number of levels, and the purpose of the State level report is to consider which aspects of care, from the structures and processes to the actual delivery of care, can be improved through a State-based approach. From forums that facilitate knowledge exchange and allow for the sharing of good practice, to the development of pathways and protocols, there is a great deal that can be achieved by hospitals working in partnership and supported in doing so by the respective governing health care organisations. Equally, where jurisdictions are doing well, others might seek to learn from practices and processes that have contributed to better performance.

We hope this jurisdiction-based report is used as an opportunity to reflect on current practice and performance and starts conversations around how to improve care. There is undoubtedly much that we can and should learn from each other. Over the coming year, the ANZ Hip Fracture Registry hopes to work with individual jurisdictions to focus on the sharing of good ideas, the celebration of great practice, and the development of partnerships to create solutions to common problems.

Professor Jacqui Close
Geriatrician

Co-Chair
Australian and New Zealand
Hip Fracture Registry

Professor Ian Harris AM
Orthopaedic Surgeon

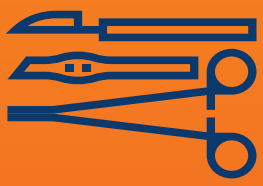
Co-Chair
Australian and New Zealand
Hip Fracture Registry

SUMMARY OF FINDINGS

The assessment of a patient's cognition preoperatively varies from **6%** of patients in Victoria to **65%** of patient's in South Australia

The provision of nerve blocks for the management of pain before the operating theatre varies from **34%** in Tasmania to **86%** in Western Australia

The average time to surgery for hip fracture patients varies from **25 hours** in South Australia to **39 hours** in both Queensland and NSW



Surgery within 48 hours occurs **70%** of the time in Queensland to **88%** of the time in Western Australia

In NSW, **81%** of patients are given the opportunity to mobilise on the day of surgery or the day after surgery, ranging to **95%** in Western Australia

7% of hip fracture patients in Victoria ranging to **60%** in South Australia are discharged on active treatment for osteoporosis

SECTION 1: PATIENT LEVEL AUDIT
AUSTRALIAN STATES

FIGURE S1 PATIENT COUNT AND PROPORTION BY STATE 2018

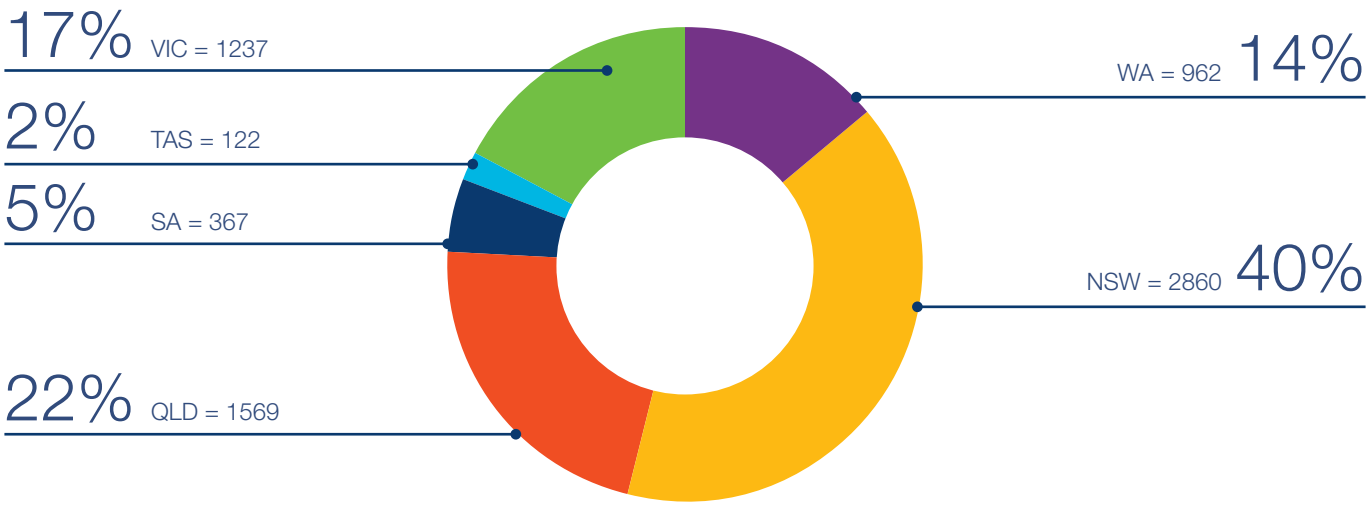


FIGURE S2 SEX BY STATE

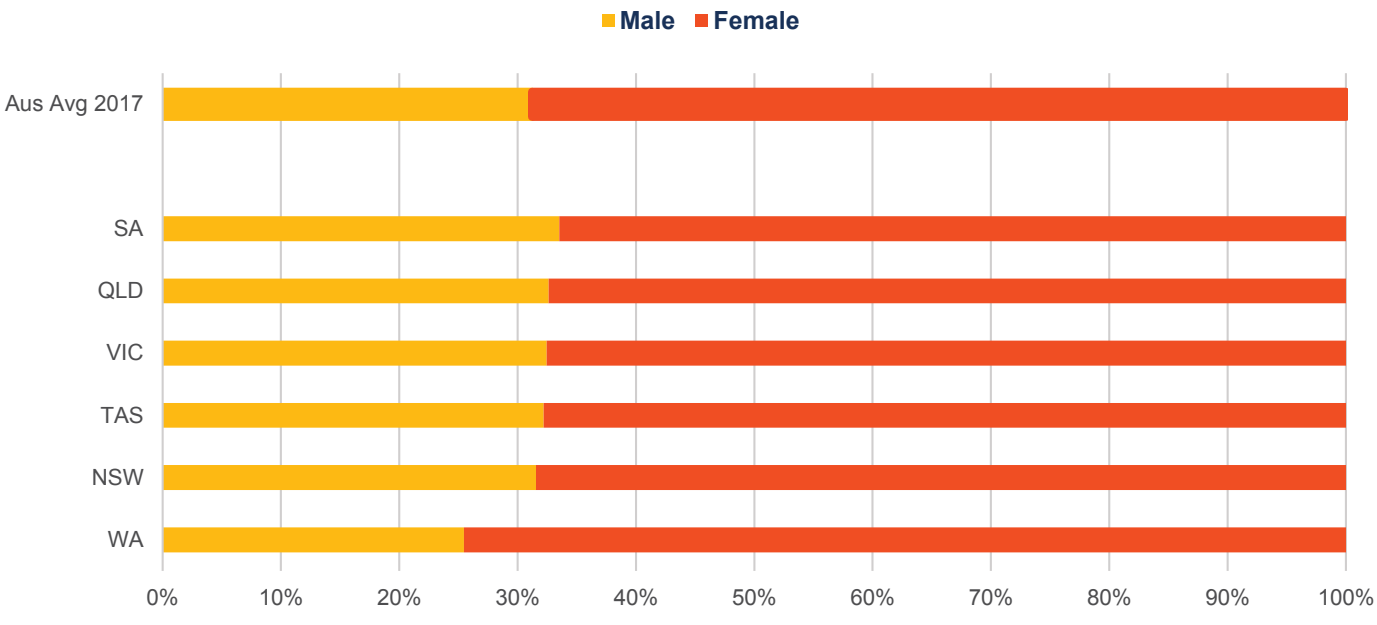


FIGURE S3 USUAL PLACE OF RESIDENCE BY STATE

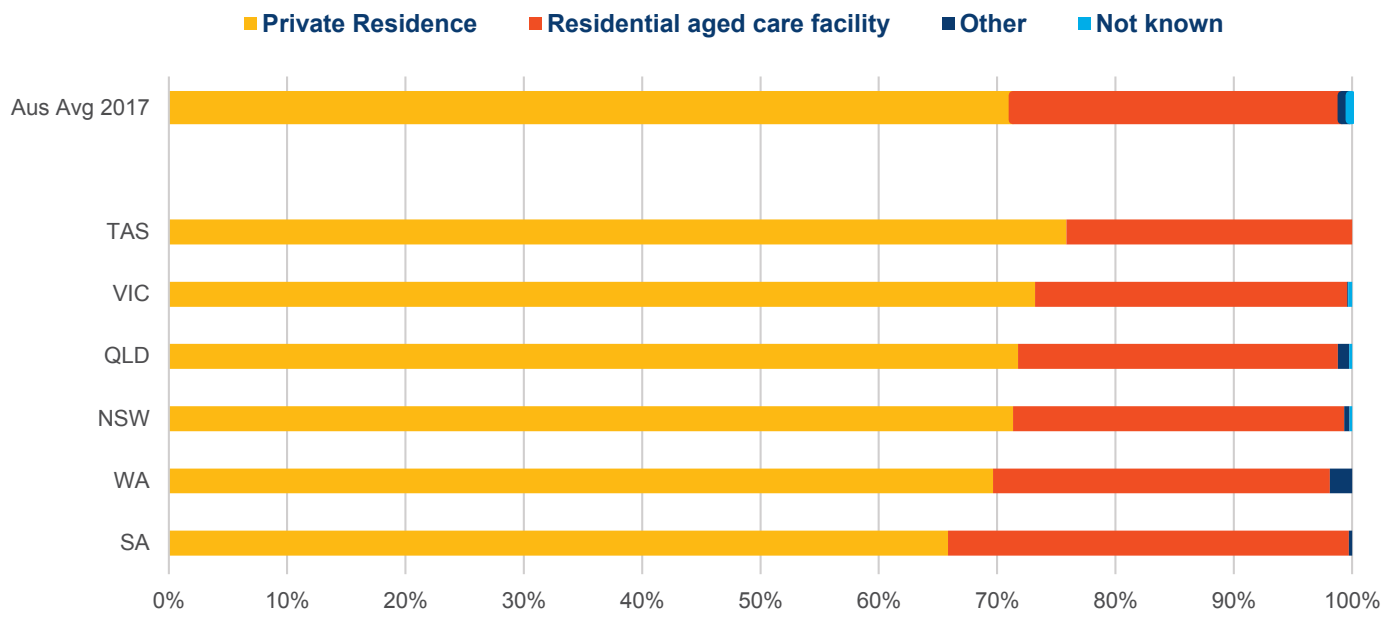


FIGURE S4 PRE-ADMISSION COGNITION BY STATE

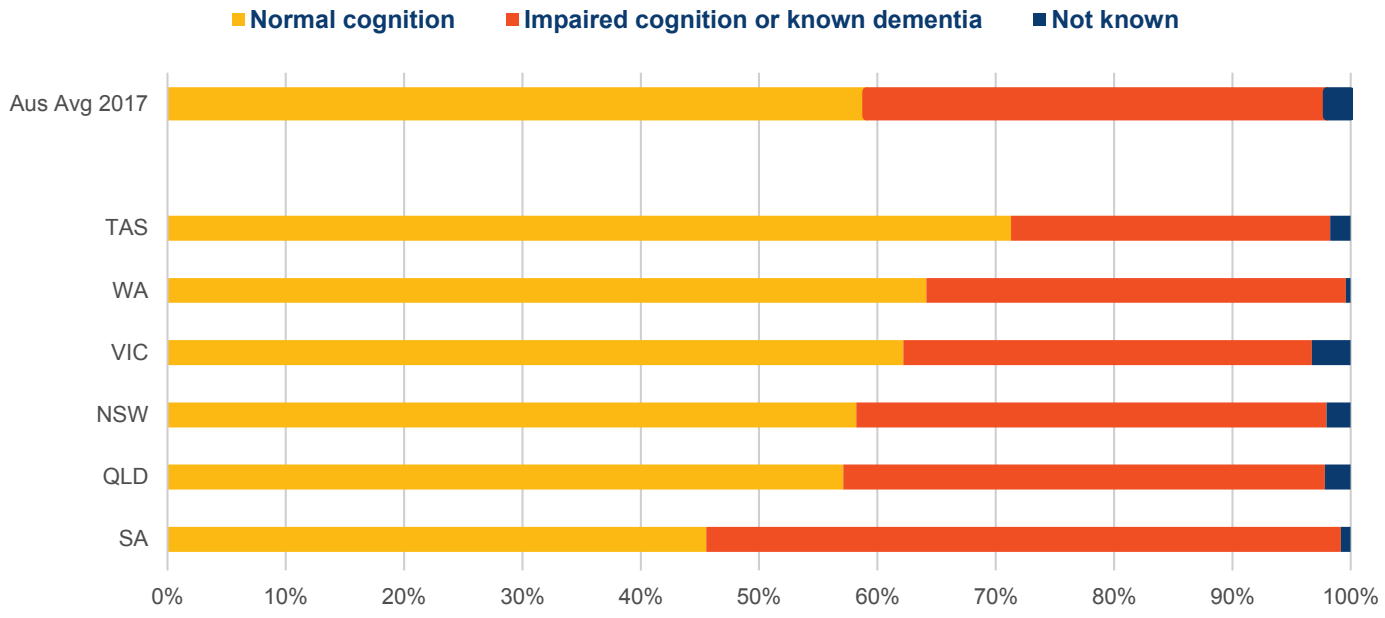


FIGURE S5 PRE-ADMISSION WALKING ABILITY BY STATE

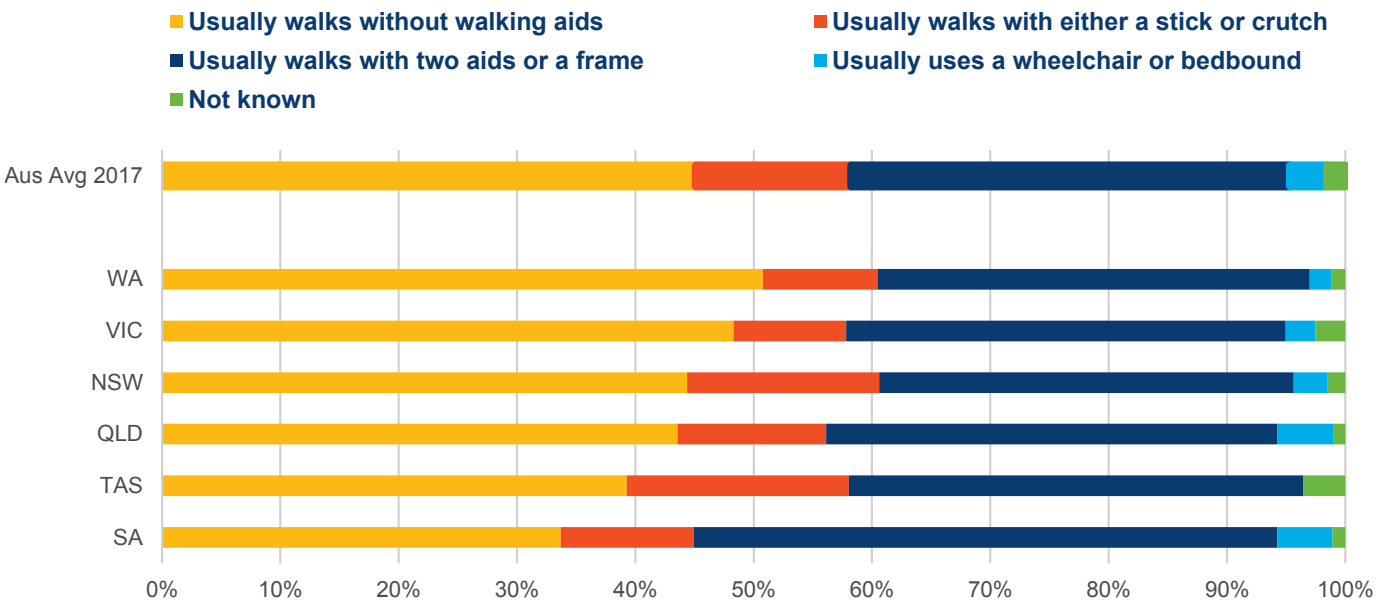


FIGURE S6 PRE-OPERATIVE COGNITIVE ASSESSMENT BY STATE

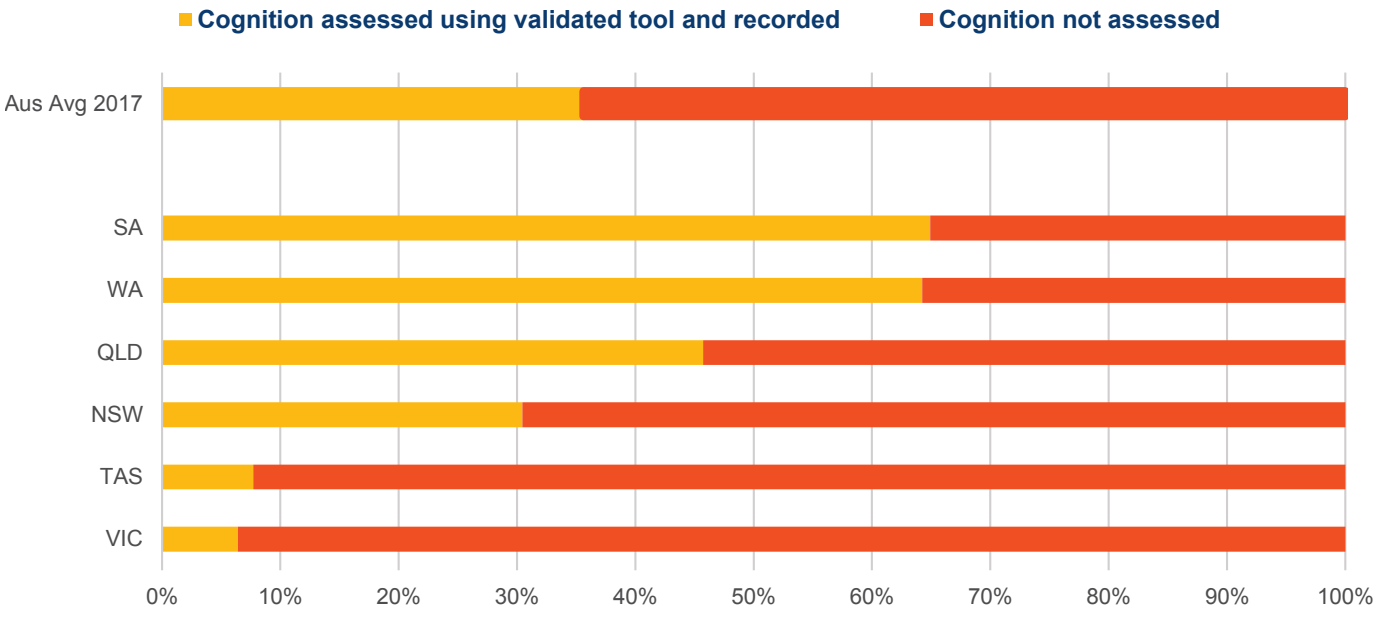


FIGURE S7 NERVE BLOCKS BY STATE

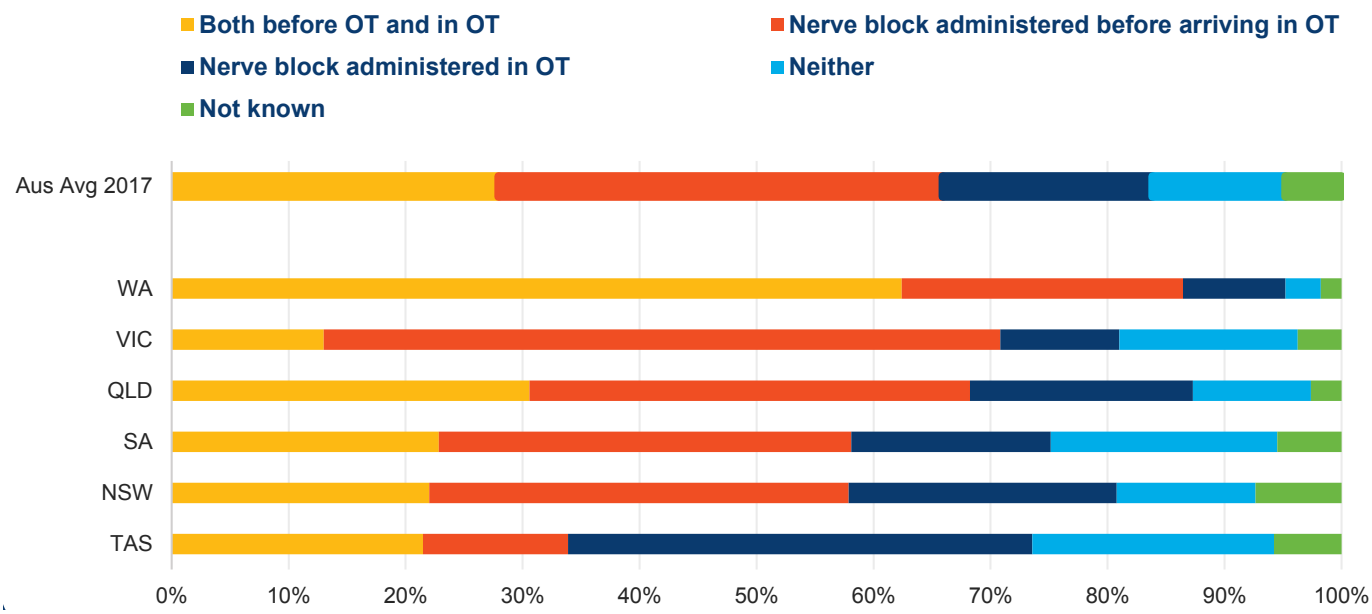


FIGURE S8 TIME IN THE EMERGENCY DEPARTMENT (ED) BY STATE

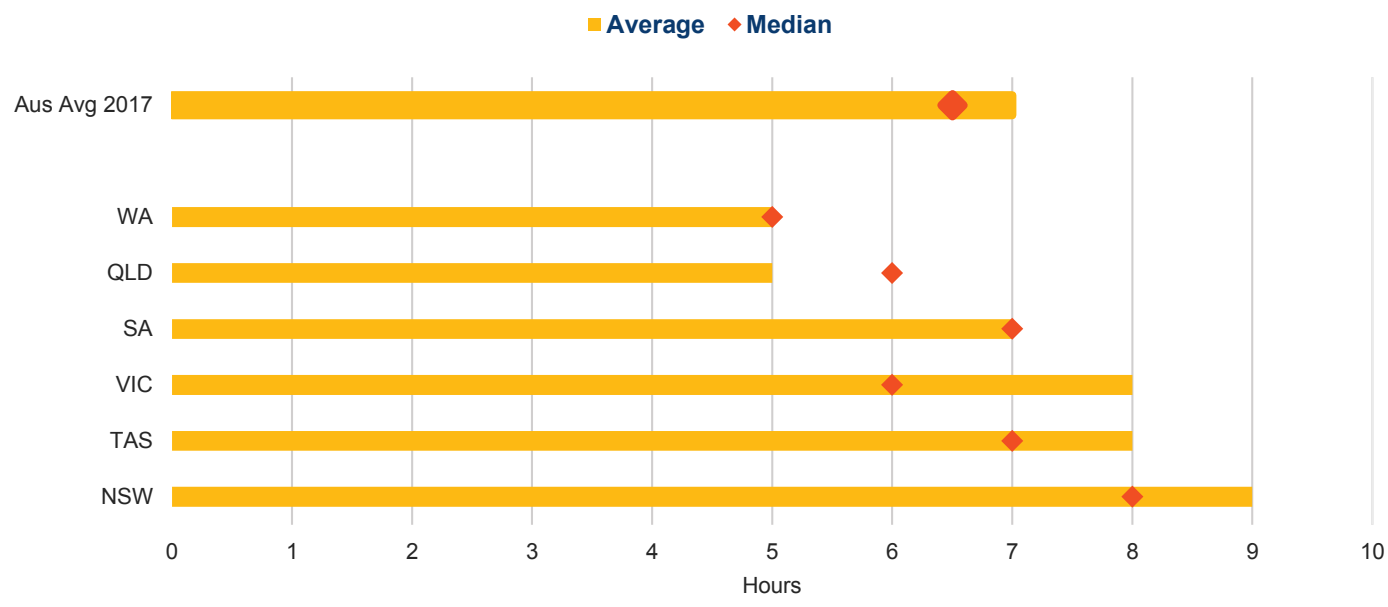


FIGURE S9 TIME TO SURGERY BY STATE (excludes transferred patients)

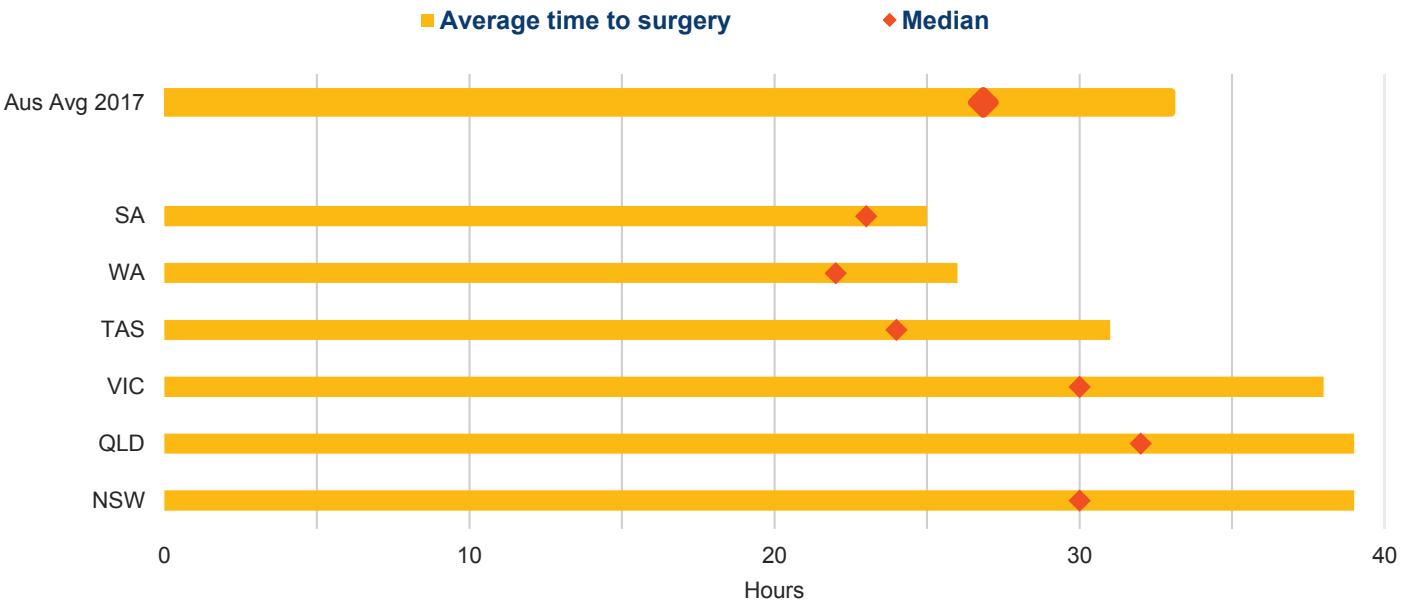


FIGURE S10 SURGERY WITHIN 48 HOURS BY STATE

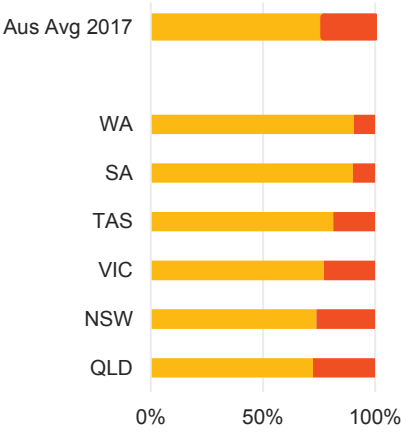
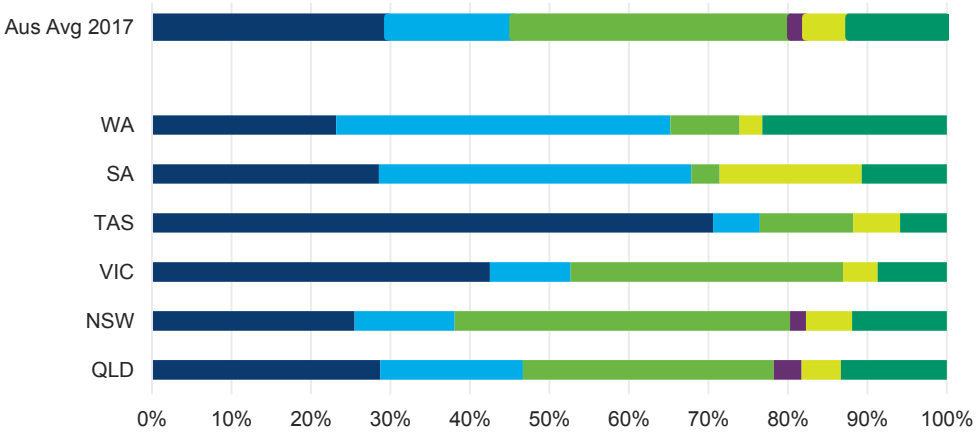


FIGURE S11 REASON FOR SURGICAL DELAY BY STATE



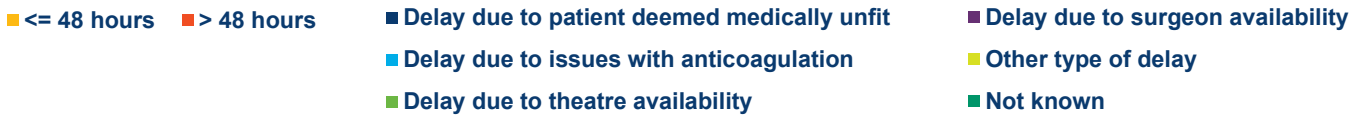


FIGURE S12 MOBILISATION BY STATE

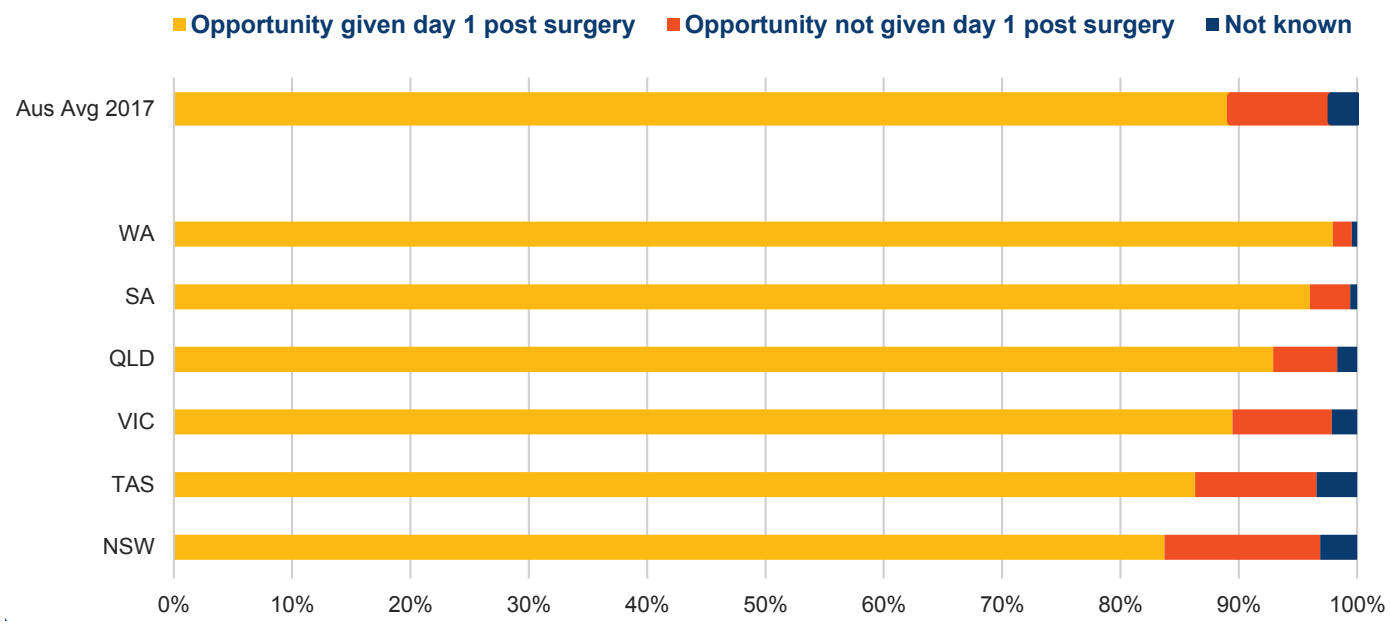


FIGURE S13 BONE MEDICATION ON DISCHARGE BY STATE

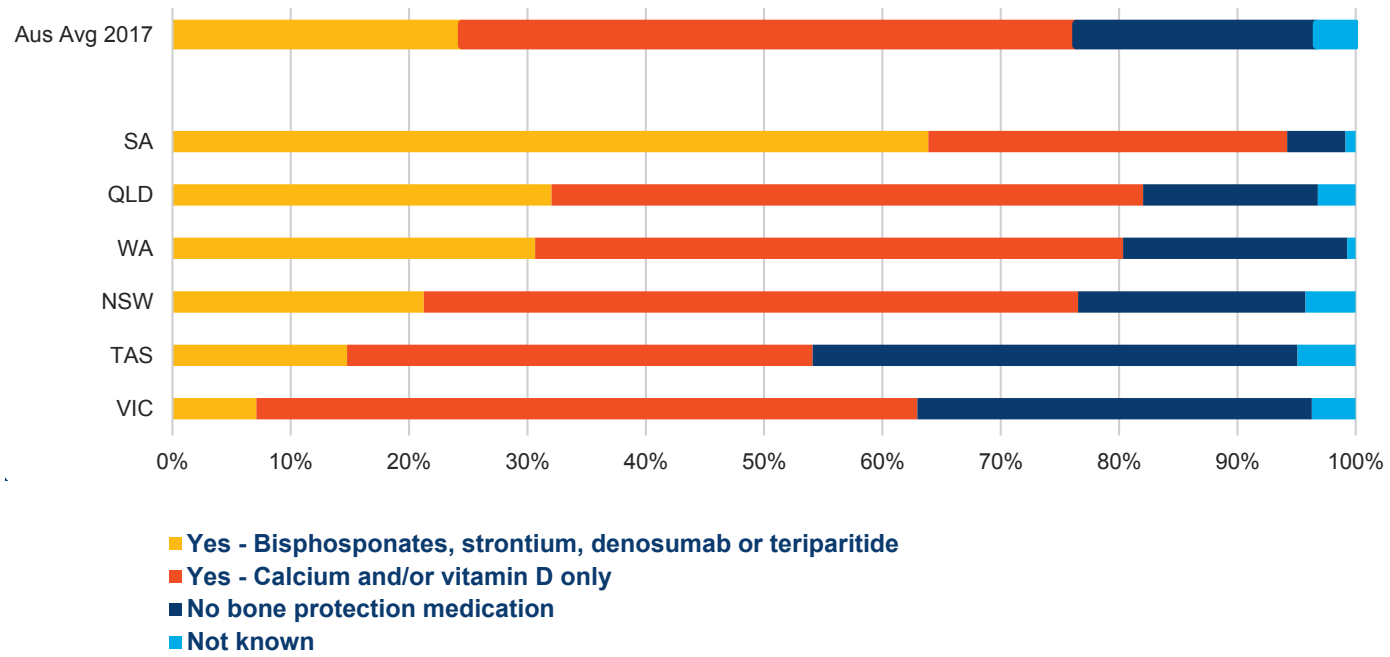


FIGURE S14 ACUTE LENGTH OF STAY BY STATE

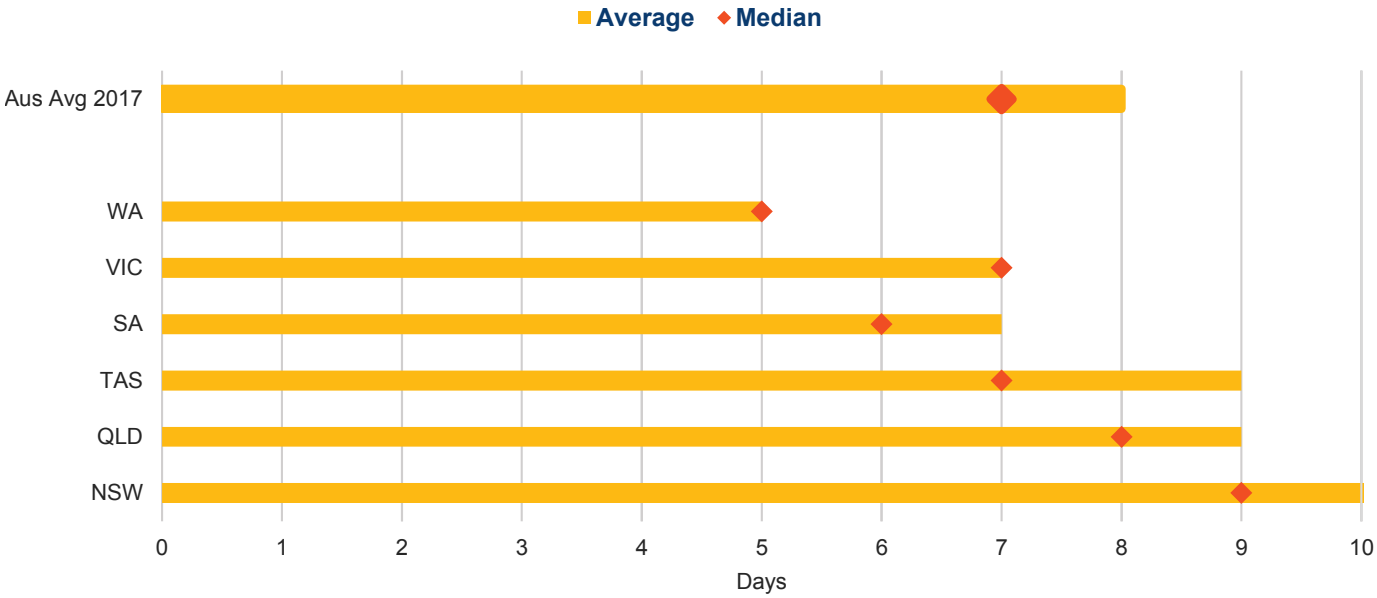
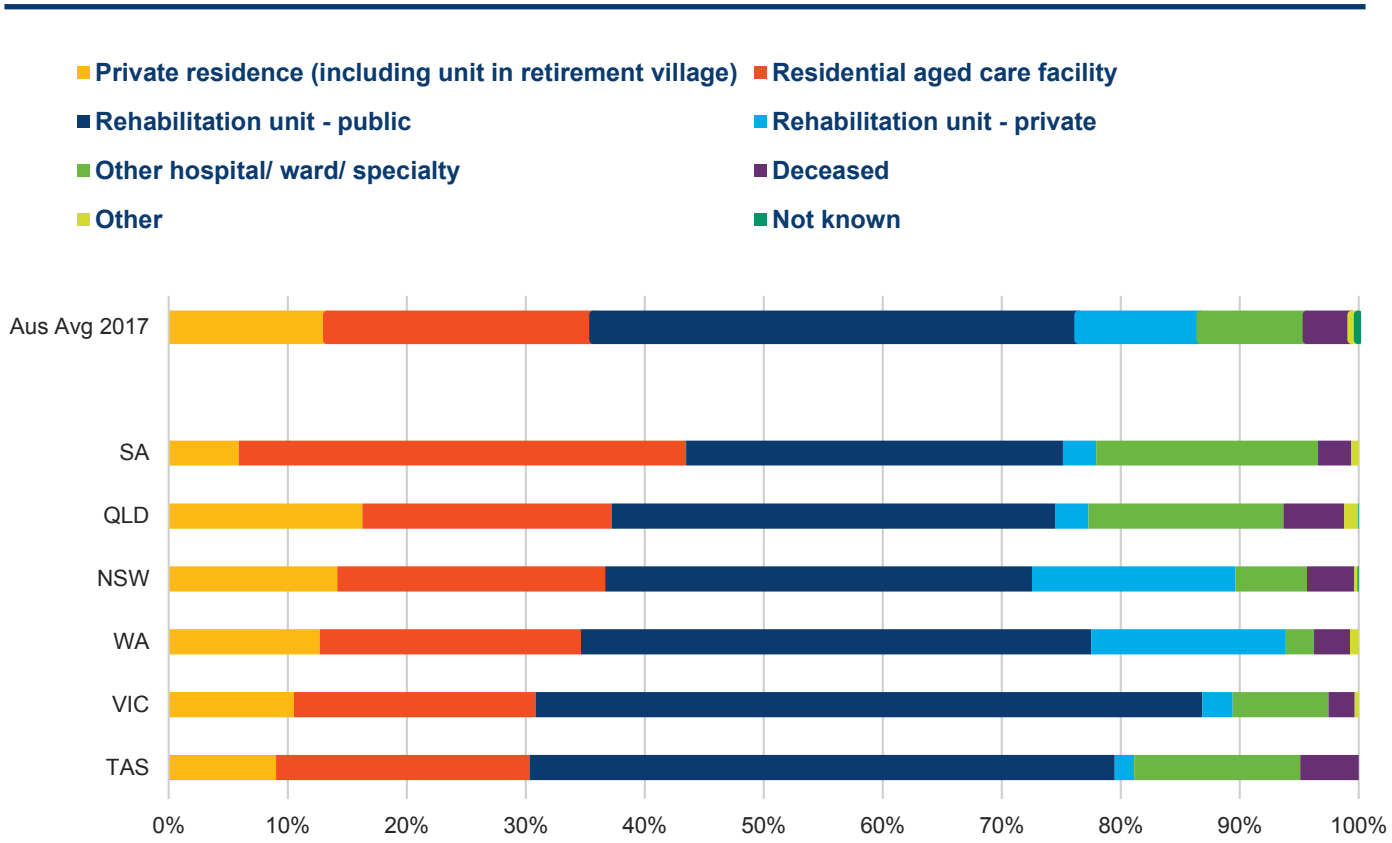


FIGURE S15 DISCHARGE DESTINATION FROM ACUTE WARD BY STATE



SECTION 2: FACILITY LEVEL AUDIT AUSTRALIAN STATES AND TERRITORIES

2.1 NEW SOUTH WALES

TABLE S1 NSW HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018

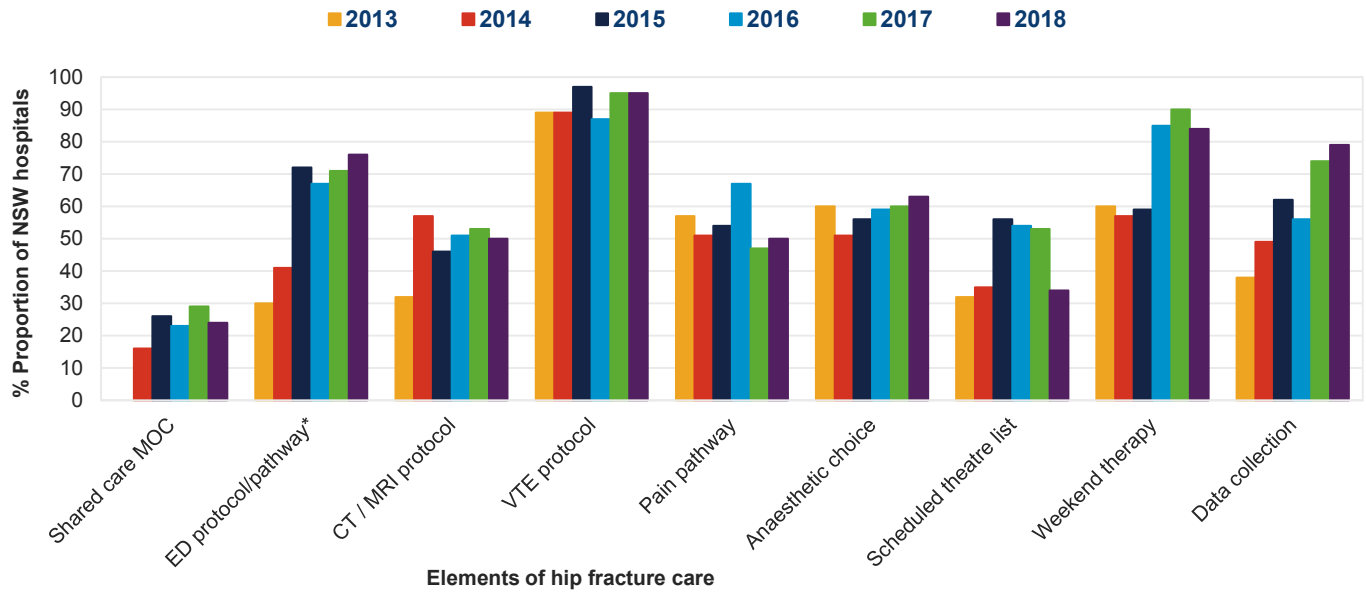
	2013 (n = 37)	2014 (n = 37)	2015 (n = 39)	2016 (n = 39)	2017 (n = 38)	2018 (n = 38)
Shared-care model of care (MOC)	n/a	16%	26%	23%	29%	24%
Protocol / pathway in the ED*	30%	41%	72%	67%	71%	76%
Protocol / pathway for access to CT / MRI	32%	57%	46%	51%	53%	50%
Protocol for VTE prevention	89%	89%	97%	87%	95%	95%
Protocol / pathway for management of pain	57%	51%	54%	67%	53%	50%
Given choice of anaesthesia^	60%	51%	56%	59%	60%	63%
Scheduled theatre list time	32%	35%	56%	54%	47%	34%
Provision of routine weekend therapy	60%	57%	59%	85%	90%	84%
Collecting hip fracture data	38%	49%	62%	56%	74%	79%

n/a = not asked

* protocol/pathway in the ED: 2015 to 2018 includes pathway in ED only and pathway for the whole acute journey

^ given choice of anaesthesia: 2014 to 2018 Always or Frequently = Yes

FIGURE S16 NSW HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018



2.2 VICTORIA

TABLE S2 VICTORIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018

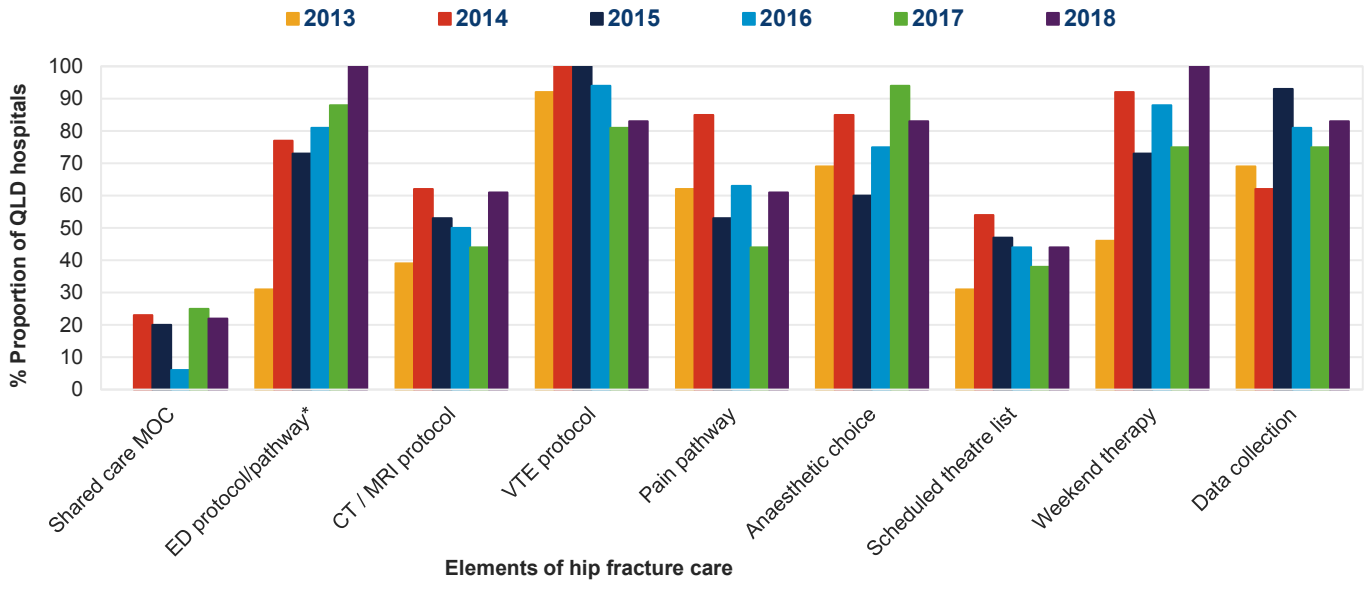
	2013 (n = 24)	2014 (n = 24)	2015 (n = 23)	2016 (n = 23)	2017 (n = 23)	2018 (n = 23)
Shared-care model of care (MOC)	n/a	8%	26%	13%	30%	22%
Protocol / pathway in the ED*	33%	46%	61%	74%	65%	65%
Protocol / pathway for access to CT / MRI	50%	46%	52%	57%	70%	61%
Protocol for VTE prevention	79%	96%	100%	100%	100%	87%
Protocol / pathway for management of pain	54%	71%	61%	57%	57%	52%
Given choice of anaesthesia^	71%	71%	65%	74%	61%	70%
Scheduled theatre list time	33%	50%	39%	35%	39%	48%
Provision of routine weekend therapy	58%	54%	74%	87%	78%	96%
Collecting hip fracture data	67%	63%	74%	78%	78%	61%

n/a = not asked

* protocol/pathway in the ED: 2015 to 2018 includes pathway in ED only and pathway for the whole acute journey

^ given choice of anaesthesia: 2014 to 2018 Always or Frequently = Yes

FIGURE S17 VICTORIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018



2.3 QUEENSLAND

TABLE S3 QUEENSLAND HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018

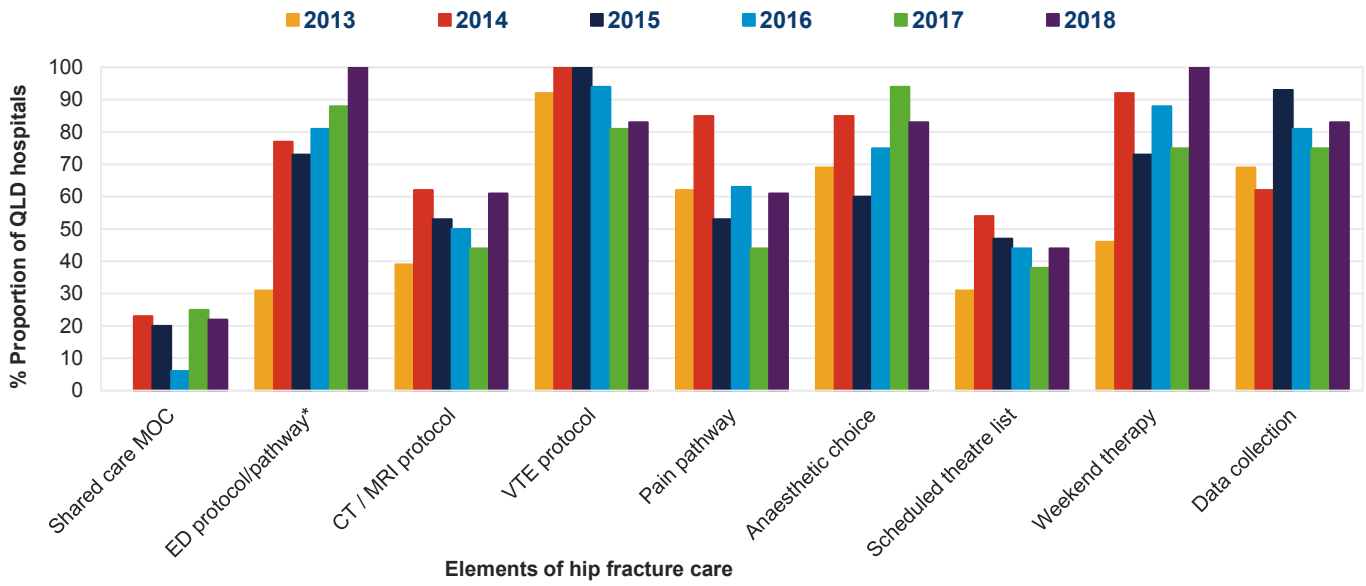
	2013 (n = 13)	2014 (n = 13)	2015 (n = 15)	2016 (n = 16)	2017 (n = 16)	2018 (n = 16)
Shared-care model of care (MOC)	n/a	23%	20%	6%	25%	22%
Protocol / pathway in the ED*	31%	77%	73%	81%	88%	100%
Protocol / pathway for access to CT / MRI	39%	62%	53%	50%	44%	61%
Protocol for VTE prevention	92%	100%	100%	94%	81%	83%
Protocol / pathway for management of pain	62%	85%	53%	63%	38%	61%
Given choice of anaesthesia^	69%	85%	60%	75%	94%	83%
Scheduled theatre list time	31%	54%	47%	44%	44%	44%
Provision of routine weekend therapy	46%	92%	73%	88%	75%	100%
Collecting hip fracture data	69%	62%	93%	81%	75%	83%

n/a = not asked

* protocol/pathway in the ED: 2015 to 2018 includes pathway in ED only and pathway for the whole acute journey

^ given choice of anaesthesia: 2014 to 2018 Always or Frequently = Yes

FIGURE S18 QUEENSLAND HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018



2.4 SOUTH AUSTRALIA

TABLE S4 SOUTH AUSTRALIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018

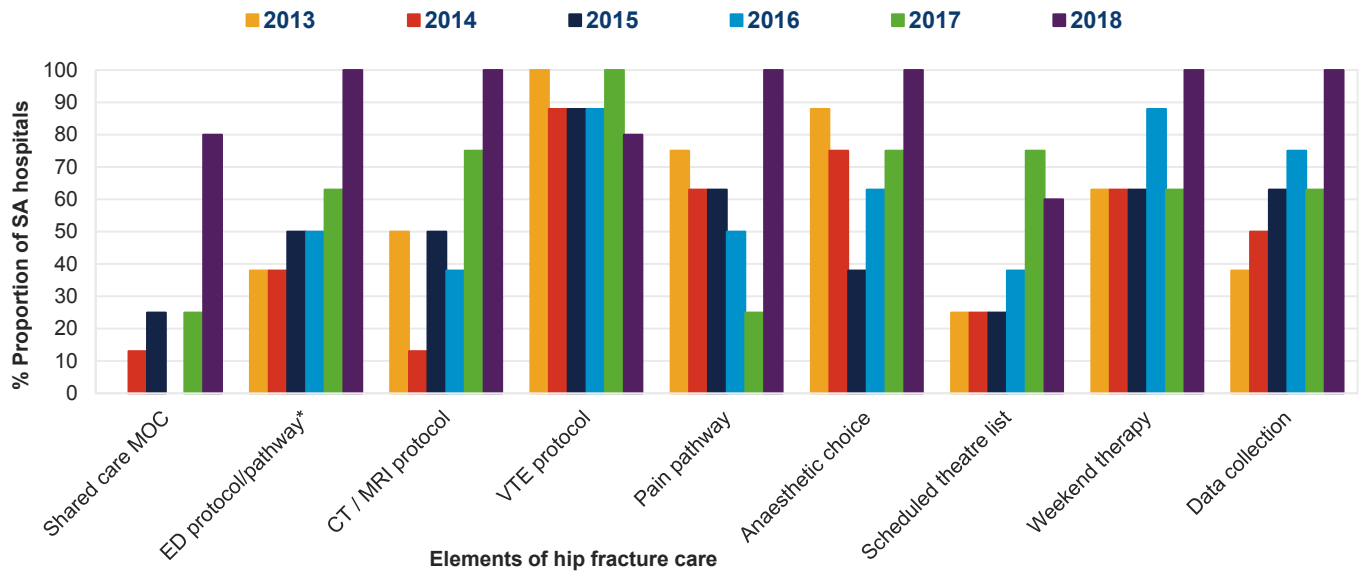
	2013 (n = 8)	2014 (n = 8)	2015 (n = 8)	2016 (n = 8)	2017 (n = 8)	2018 (n = 5)
Shared-care model of care (MOC)	n/a	13%	25%	0%	25%	80%
Protocol / pathway in the ED*	38%	38%	50%	50%	63%	100%
Protocol / pathway for access to CT / MRI	50%	13%	50%	38%	75%	100%
Protocol for VTE prevention	100%	88%	88%	88%	100%	80%
Protocol / pathway for management of pain	75%	63%	63%	50%	75%	100%
Given choice of anaesthesia^	88%	75%	38%	63%	75%	100%
Scheduled theatre list time	25%	25%	25%	38%	25%	60%
Provision of routine weekend therapy	63%	63%	63%	88%	63%	100%
Collecting hip fracture data	38%	50%	63%	75%	63%	100%

n/a = not asked

* protocol/pathway in the ED: 2015 to 2018 includes pathway in ED only and pathway for the whole acute journey

^ given choice of anaesthesia: 2014 to 2018 Always or Frequently = Yes

FIGURE S 19 SOUTH AUSTRALIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018



2.5 WESTERN AUSTRALIA

TABLE S5 WESTERN AUSTRALIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018

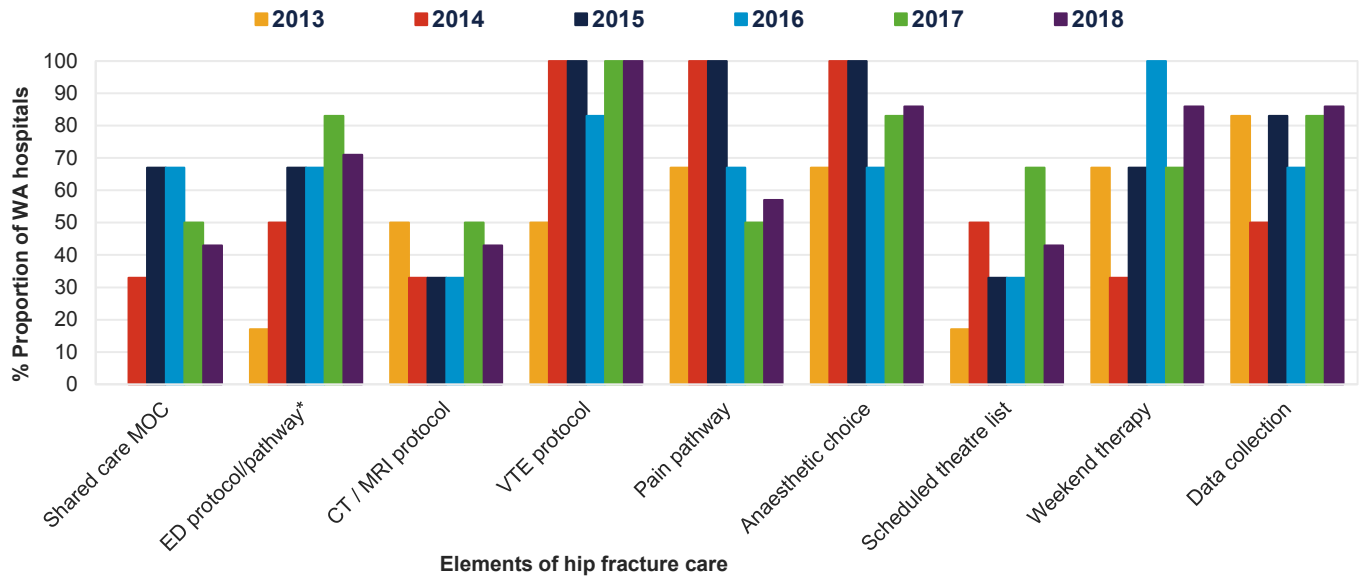
	2013 (n = 6)	2014 (n = 6)	2015 (n = 6)	2016 (n = 6)	2017 (n = 6)	2018 (n = 7)
Shared-care model of care (MOC)	n/a	33%	67%	67%	50%	43%
Protocol / pathway in the ED*	17%	50%	67%	67%	83%	71%
Protocol / pathway for access to CT / MRI	50%	33%	33%	33%	50%	43%
Protocol for VTE prevention	50%	100%	100%	83%	100%	100%
Protocol / pathway for management of pain	67%	100%	100%	67%	67%	57%
Given choice of anaesthesia^	67%	100%	100%	67%	83%	86%
Scheduled theatre list time	17%	50%	33%	33%	50%	43%
Provision of routine weekend therapy	67%	33%	67%	100%	67%	86%
Collecting hip fracture data	83%	50%	83%	67%	83%	86%

n/a = not asked

* protocol/pathway in the ED: 2015 to 2018 includes pathway in ED only and pathway for the whole acute journey

^ given choice of anaesthesia: 2014 to 2018 Always or Frequently = Yes

FIGURE S20 WESTERN AUSTRALIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018



2.6 TASMANIA

TABLE S6 TASMANIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018

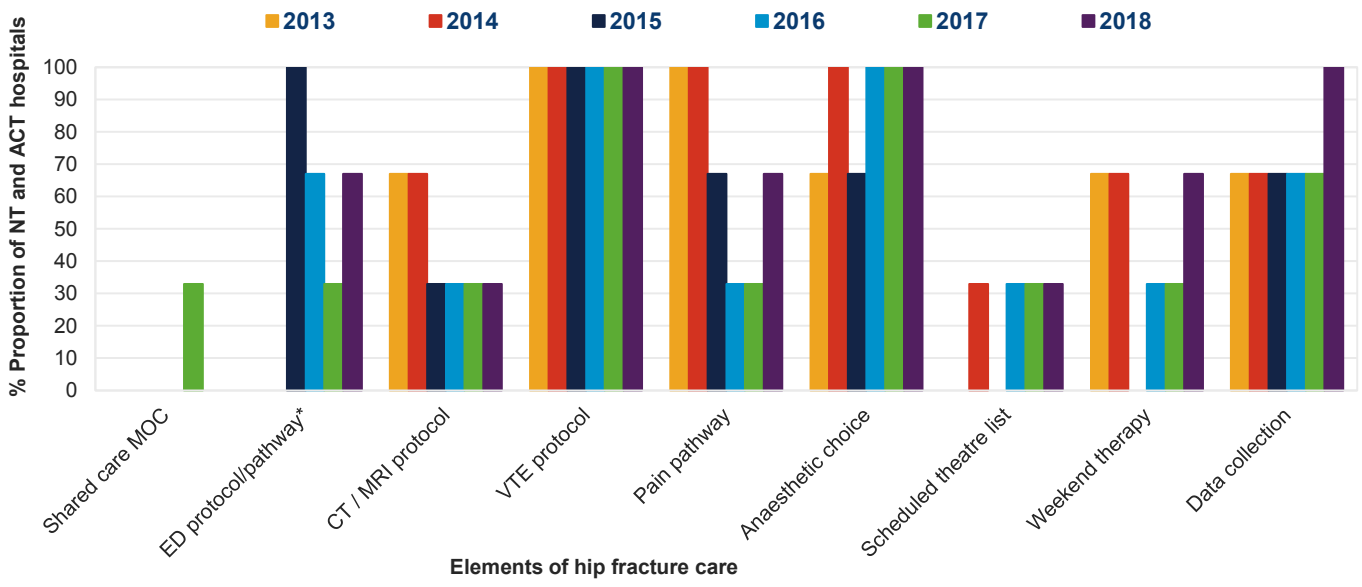
	2013 (n = 3)	2014 (n = 3)	2015 (n = 3)	2016 (n = 3)	2017 (n = 3)	2018 (n = 3)
Shared-care model of care (MOC)	n/a%	0%	0%	0%	0%	33%
Protocol / pathway in the ED*	0%	33%	33%	33%	33%	33%
Protocol / pathway for access to CT / MRI	33%	67%	67%	67%	67%	33%
Protocol for VTE prevention	67%	100%	100%	100%	100%	67%
Protocol / pathway for management of pain	67%	100%	33%	33%	33%	33%
Given choice of anaesthesia^	100%	100%	100%	100%	100%	67%
Scheduled theatre list time	0%	67%	0%	33%	0%	33%
Provision of routine weekend therapy	0%	33%	0%	33%	33%	67%
Collecting hip fracture data	0%	100%	100%	100%	100%	100%

n/a = not asked

* protocol/pathway in the ED: 2015 to 2018 includes pathway in ED only and pathway for the whole acute journey

^ given choice of anaesthesia: 2014 to 2018 Always or Frequently = Yes

FIGURE S21 TASMANIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018



2.7 NORTHERN TERRITORY (NT) AND AUSTRALIAN CAPITAL TERRITORY (ACT)

TABLE S7 NT AND ACT HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018

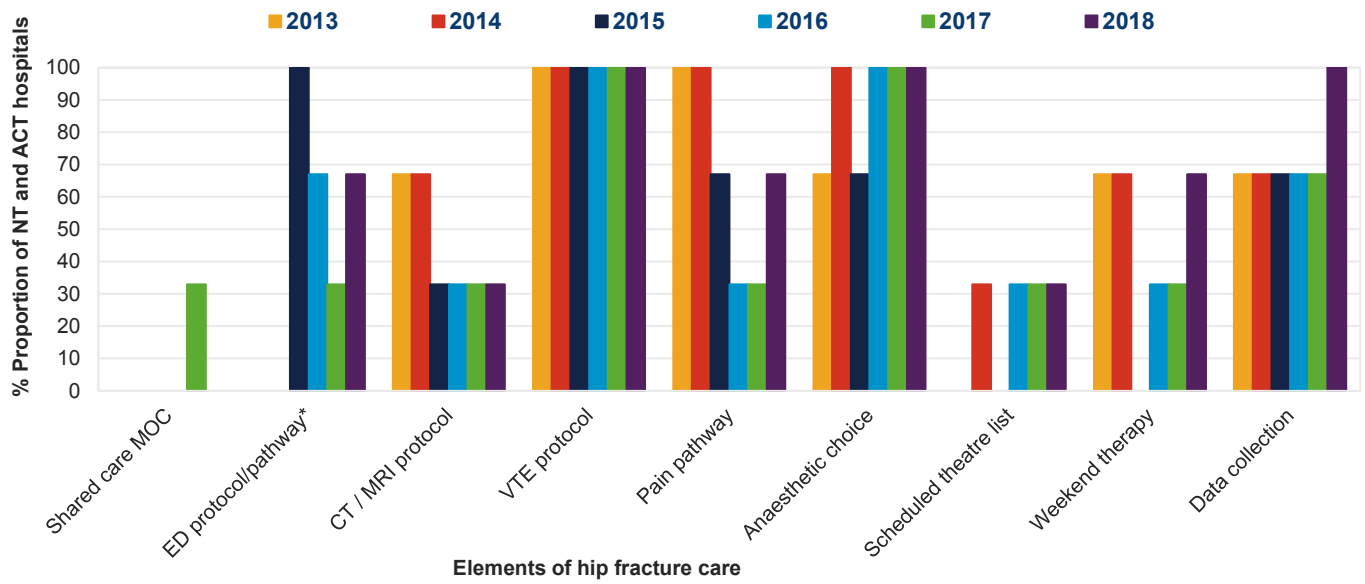
	2013 (n = 3)	2014 (n = 3)	2015 (n = 3)	2016 (n = 3)	2017 (n = 3)	2018 (n = 3)
Shared-care model of care (MOC)	n/a	0%	0%	0%	33%	0%
Protocol / pathway in the ED*	0%	0%	100%	67%	33%	67%
Protocol / pathway for access to CT / MRI	67%	67%	33%	33%	33%	33%
Protocol for VTE prevention	100%	100%	100%	100%	100%	100%
Protocol / pathway for management of pain	100%	100%	67%	33%	33%	67%
Given choice of anaesthesia^	67%	100%	67%	100%	100%	100%
Scheduled theatre list time	0%	33%	0%	33%	33%	33%
Provision of routine weekend therapy	67%	67%	0%	33%	33%	67%
Collecting hip fracture data	67%	67%	67%	67%	67%	100%

n/a = not asked

* protocol/pathway in the ED: 2015 to 2018 includes pathway in ED only and pathway for the whole acute journey

^ given choice of anaesthesia: 2014 to 2018 Always or Frequently = Yes

FIGURE S22 NT AND ACT HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2018



ANZHFR

Australian & New Zealand Hip Fracture Registry