

ANNUAL REPORT 2020

SUPPLEMENTARY REPORT
AUSTRALIAN STATES AND TERRITORIES



ANZHFR

Australian & New Zealand Hip Fracture Registry

ENHANCING OUTCOMES FOR OLDER PEOPLE



ABBREVIATIONS

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

ACT	Australian Capital Territory	NZ	New Zealand
CT	Computed Tomography	NT	Northern Territory
ED	Emergency Department	OT	Operating Theatre
Hip fracture data	Data collected by hospitals that is in addition to information recorded in the patient's medical record	QLD	Queensland
		SA	South Australia
		TAS	Tasmania
MOC	Model of Care	Therapy	Provision of allied health services, primarily physiotherapy services
MRI	Magnetic Resonance Imaging	VIC	Victoria
N	Number of hospitals providing definitive management for hip fractures	VTE	Venous Thromboembolism
		WA	Western Australia

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CO-CHAIRS' FOREWORD



Welcome to the 2020 ANZHFR Supplementary Report. Unlike the full report, which provides information broken down by hospital, the supplementary report provides information broken down by Australian state, therefore allowing interstate comparisons of performance of hip fracture care. Using this information states can give consideration to where best care is delivered and provide a benchmark for future performance. The inter-state data comparisons use data from the 2019 calendar year and include data on over 10,000 patients treated in 58 hospitals in Australia.

Until the 2020 COVID-19 pandemic, state-based activity in Australia was enhanced by regular Hip Fracture Festivals. These festivals saw clinicians of all disciplines coming together to celebrate their successes and work on solving some of the more challenging issues facing them. In 2020, partly to fill the gap left by the necessary cancellation of the live Hip Festivals, the ANZHFR began producing stand-alone educational videos on hip fracture topics, using local experts. These are available on the Registry website and available to access anytime.

Although the outcomes of hip fracture care are largely the result of service models at a facility level, quality improvement and service redesign at a District / Network and State level are also important. This year's report continues to highlight marked variation in performance between States in the delivery of the Australian Commission on Safety and Quality in Health Care's Hip Fracture Care Clinical Care Standard.

The report shows that there is little inter-state variation in the demographics of people presenting with hip fracture, but there remain important differences in the quality of care. Overall, the excellent quality of care provided in WA is seen again in this report, with that state having the shortest time to surgery, the best early mobilisation figures and the highest use of nerve blocks pre-operatively, where the rate in WA is twice that of most other states.

The Report shows some persistent problems that should be addressed. The two main reasons for delay to surgery remain lack of theatre availability and delays due to anticoagulation. Both of these are potentially addressable, and many sites are adapting and implementing new protocols around the pre-operative management of patients on anticoagulants to minimise these delays. It is hoped that, despite an increase in the proportion of patients presenting on anticoagulants, surgical delays due to their use can be minimised.

Apart from interstate comparisons for 2019 data, Section 2 of the Supplementary Report allows states to see their performance of successive years. This information is gathered from all public hospitals treating hip fractures in each state and is presented as the proportion of hospitals in each state performing various elements of hip fracture, each year from 2013 to 2020. In some states, some elements of care are clearly improving over time, such as the availability of scheduled operating time for hip fractures in WA and SA, and the availability of weekend physiotherapy in many states, but other areas have shown little progress, year on year.

The ANZHFR Steering Committee, which oversees the registry, hopes that states will use the information in this Australian state-based report, to identify areas where improvements can be made in order to achieve the overarching goal of the ANZHFR to improve the care of people who sustain a hip fracture. We recommend discussion and dissemination of these findings and we look forward to continuing to work with states to achieve our common goals.

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

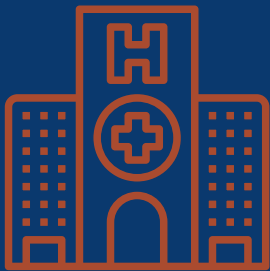
67% of hip fracture patients are female



The assessment of a patient's cognition preoperatively varies from

47%

of patients in Victoria to **94%** of patients in Tasmania



Most hip fracture patients are admitted to hospital from a private residence, ranging from

66% in South Australia

to **73%** in Western Australia

The provision of nerve blocks for the management of pain before the patient is transferred to the operating theatre varies from

68% in Tasmania

to **90%** in Western Australia



The average time to surgery for hip fracture patients varies from

28 hours

in Western Australia to

41 hours

in New South Wales



The proportion of patient's receiving surgery within 48 hours ranges from

75%

in Victoria to

91%

in Tasmania

The opportunity to mobilise on the first day after surgery is provided to

86%

of patients in Victoria to

95%

of patient's in Western Australia



The proportion of patients discharged on active treatment for bone health ranges from

16%

in Victoria to

46%

in South Australia

SECTION 1: PATIENT LEVEL AUDIT

AUSTRALIAN STATES

These charts include data from Australia for all patients with an ED arrival, In-hospital fracture, or transfer date in the range of the 1st January 2019 up to and including 31st December 2019. The data slice used to generate the supplementary report contains 10,225 records from 58 Australian hospitals.

FIGURE S1 PATIENT COUNT BY STATE

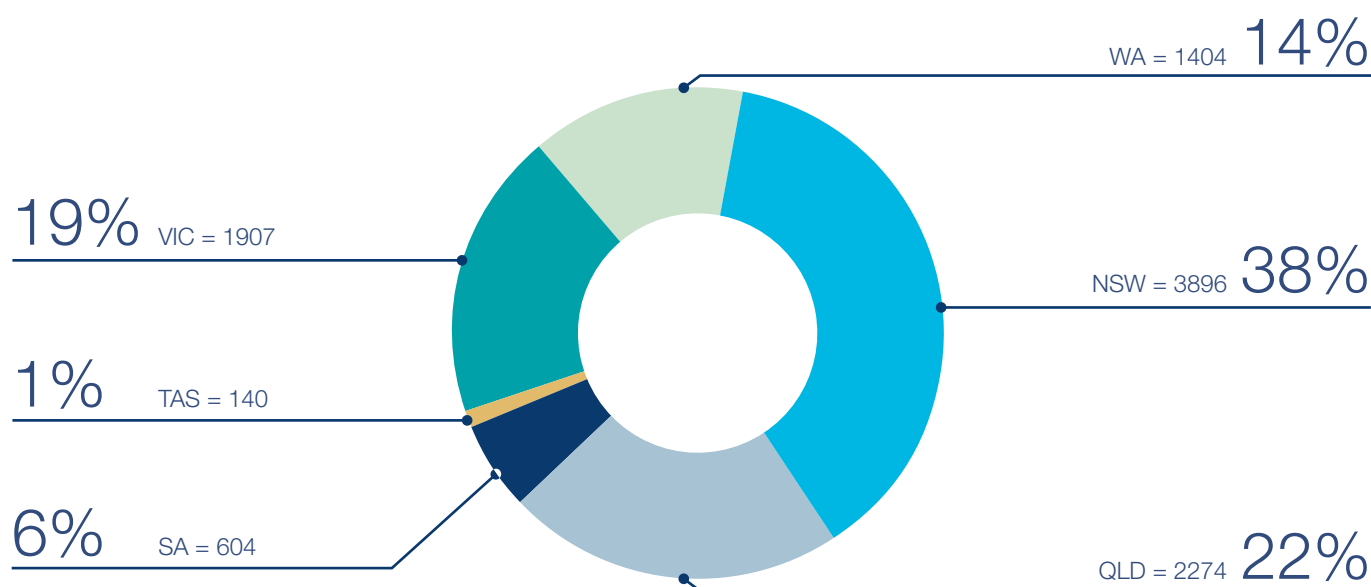


FIGURE S2 SEX BY STATE

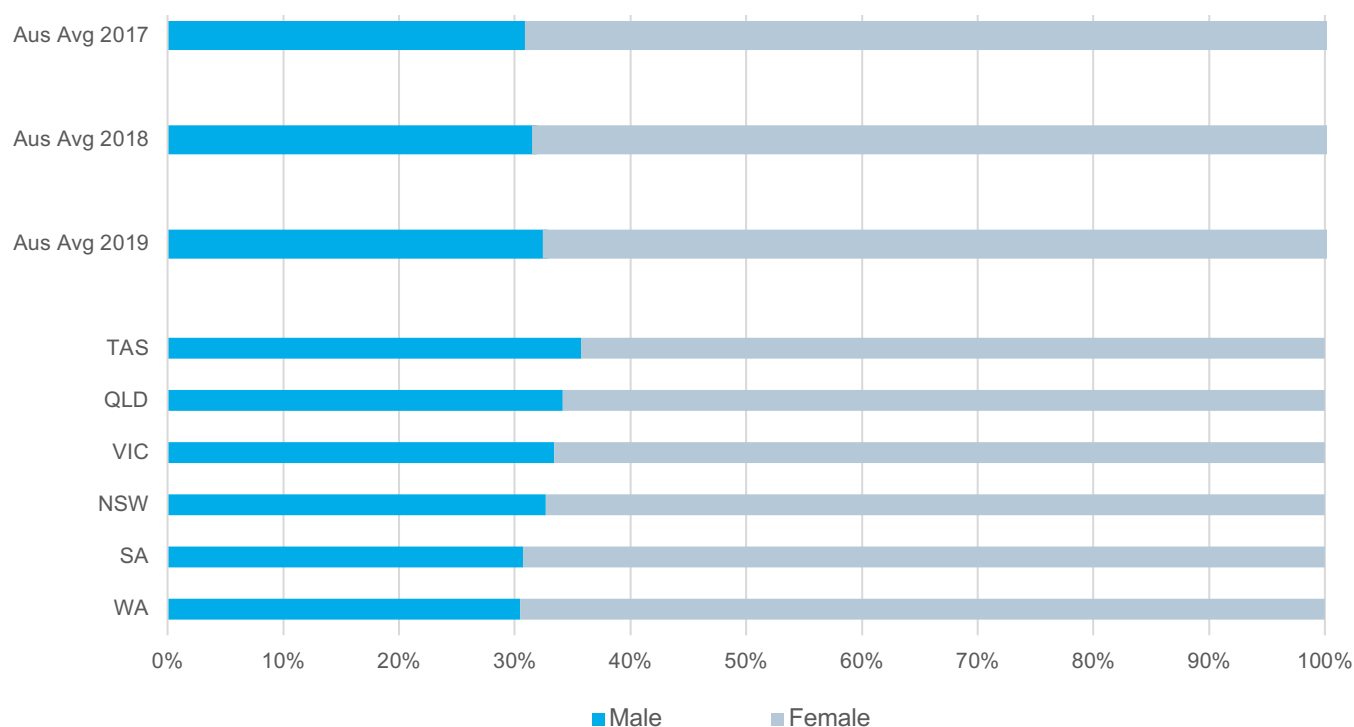


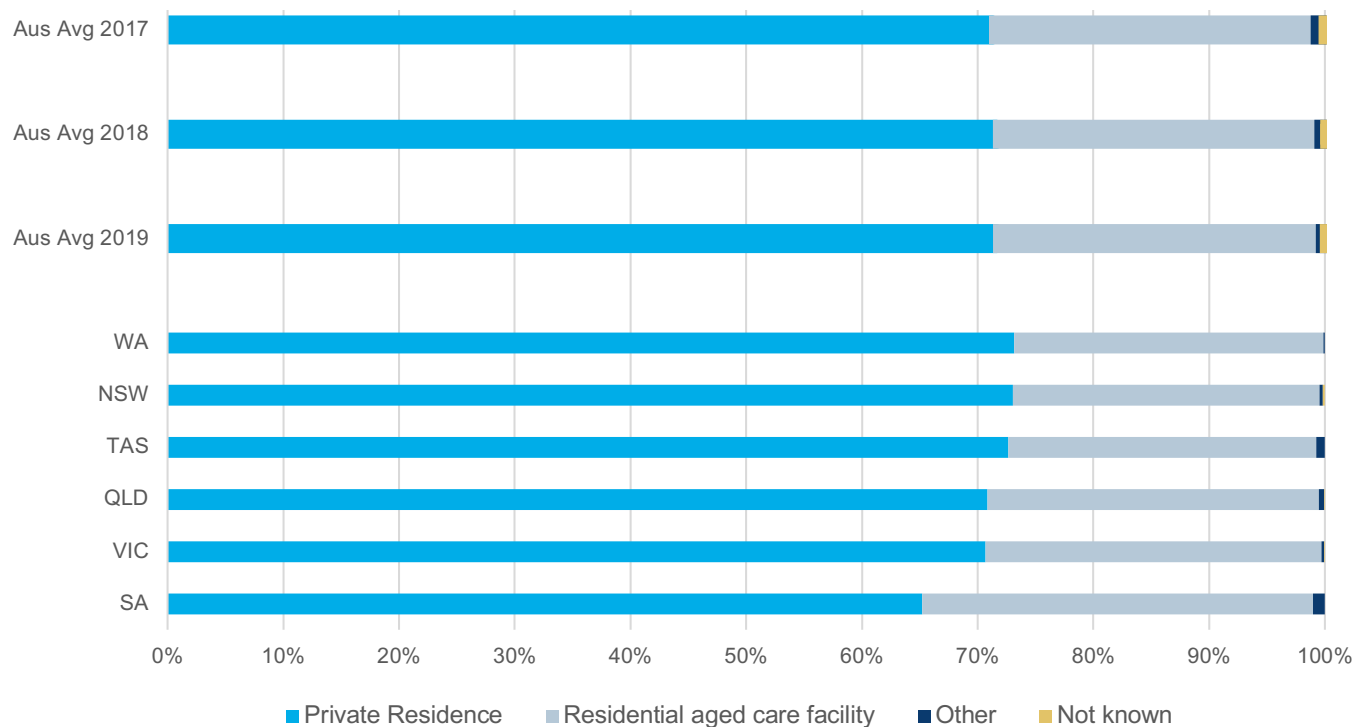
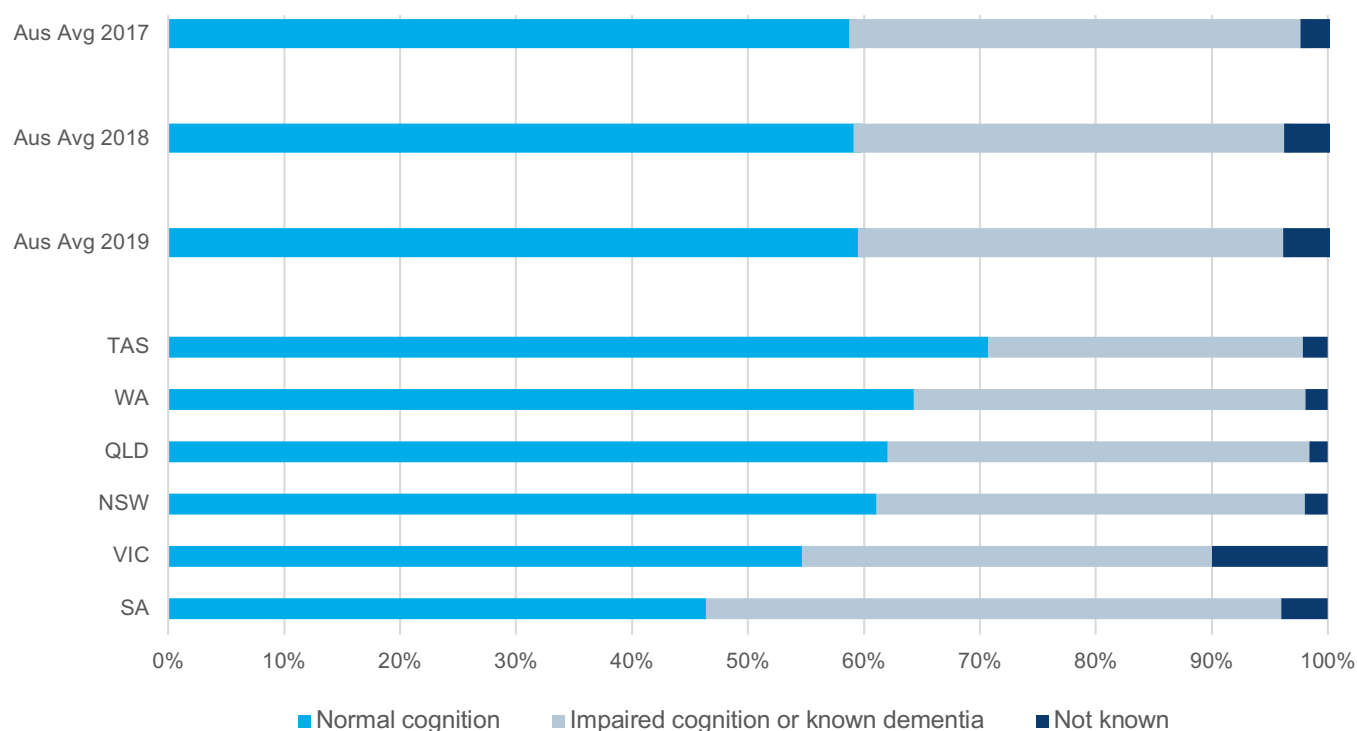
FIGURE S3 USUAL PLACE OF RESIDENCE BY STATE**FIGURE S4 PREADMISSION COGNITION BY STATE**

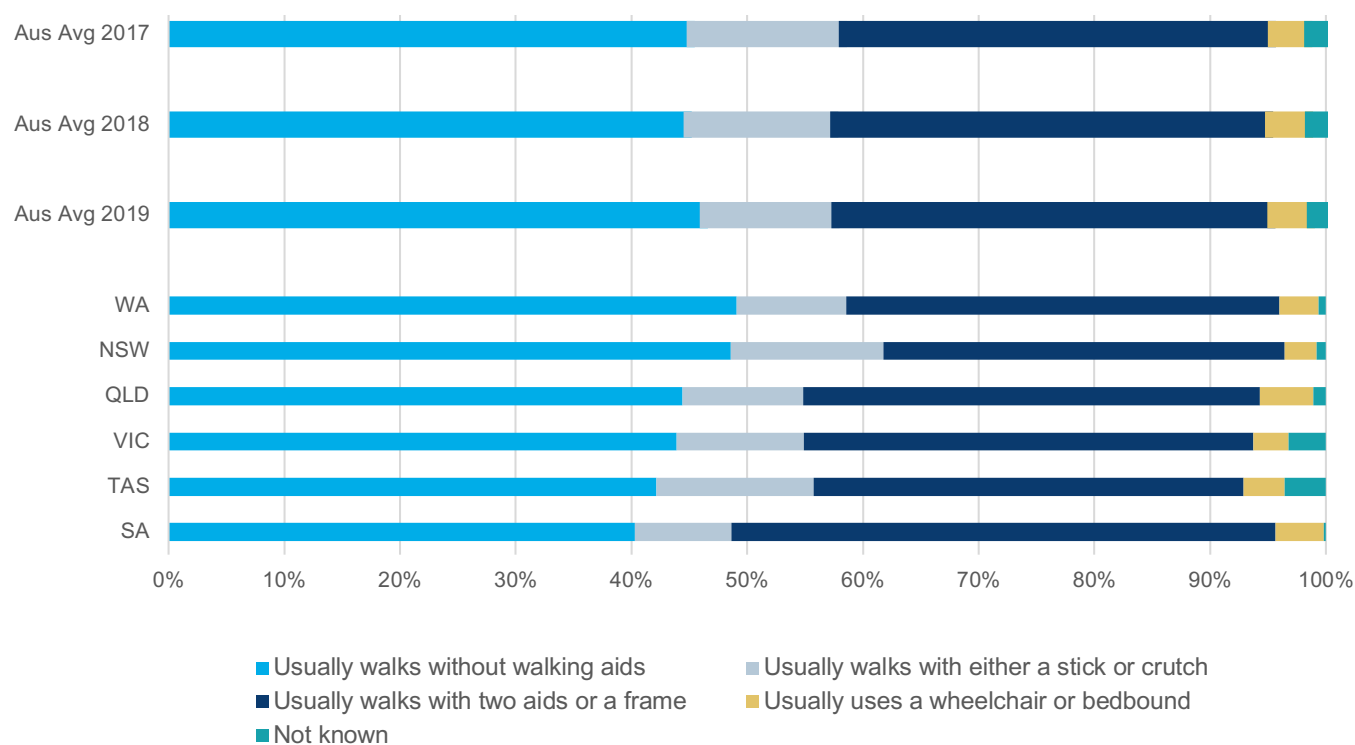
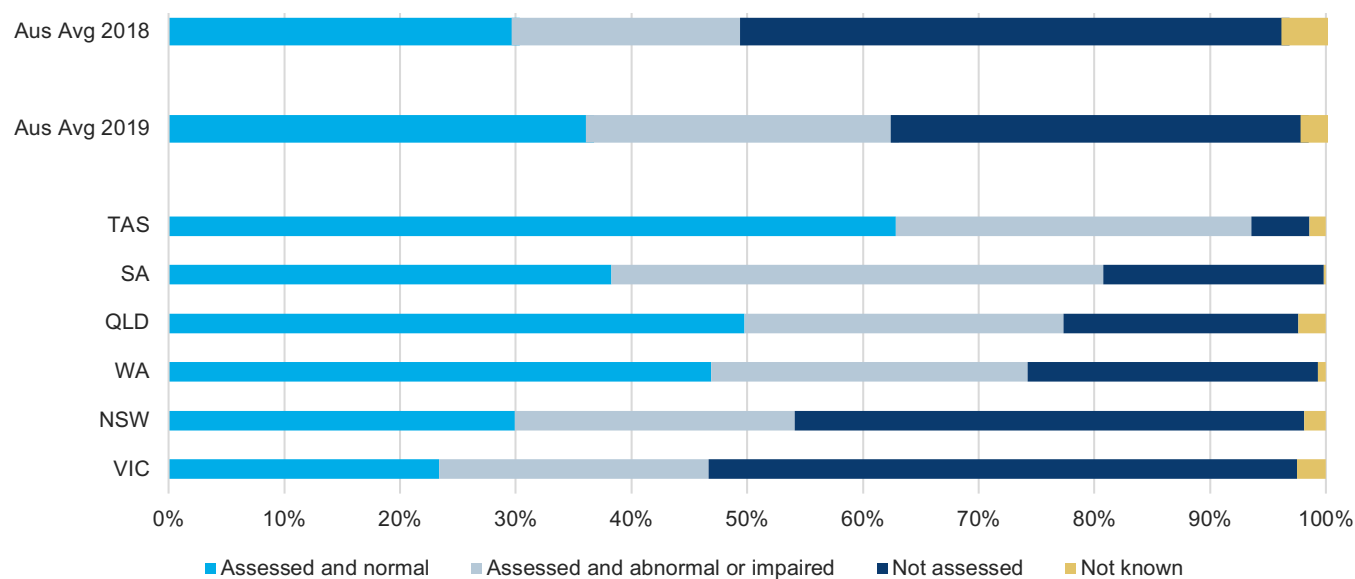

FIGURE S5 PREADMISSION WALKING ABILITY BY STATE

FIGURE S6 PREOPERATIVE COGNITIVE ASSESSMENT BY STATE


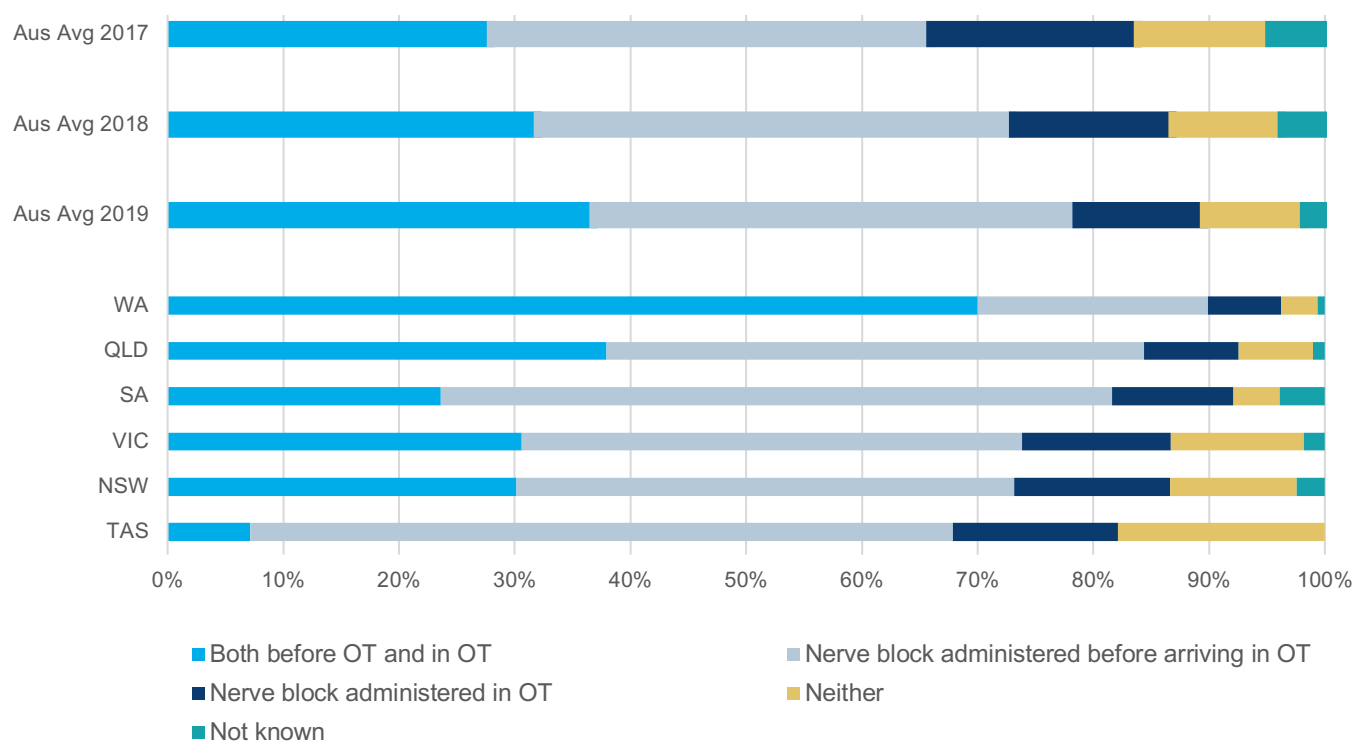
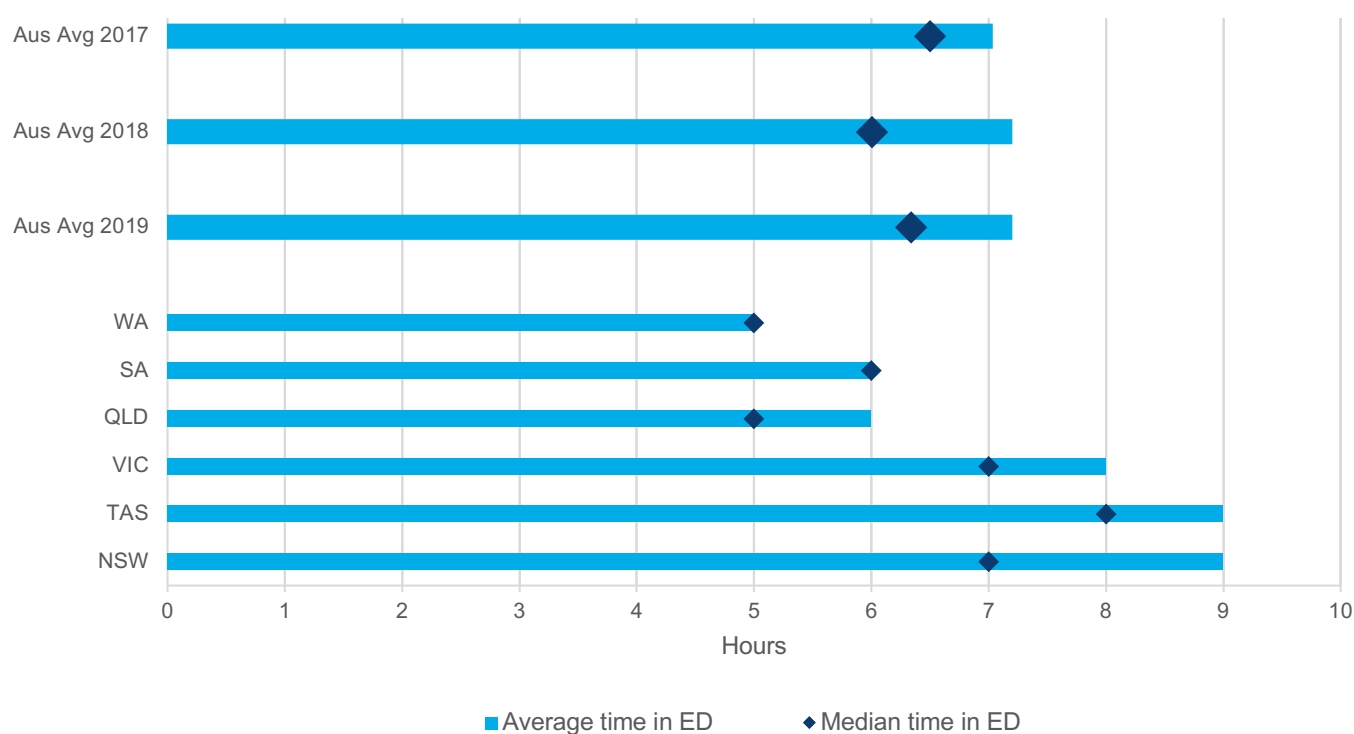
FIGURE S7 NERVE BLOCKS BY STATE**FIGURE S8 AVERAGE TIME IN THE EMERGENCY DEPARTMENT (ED) BY STATE**

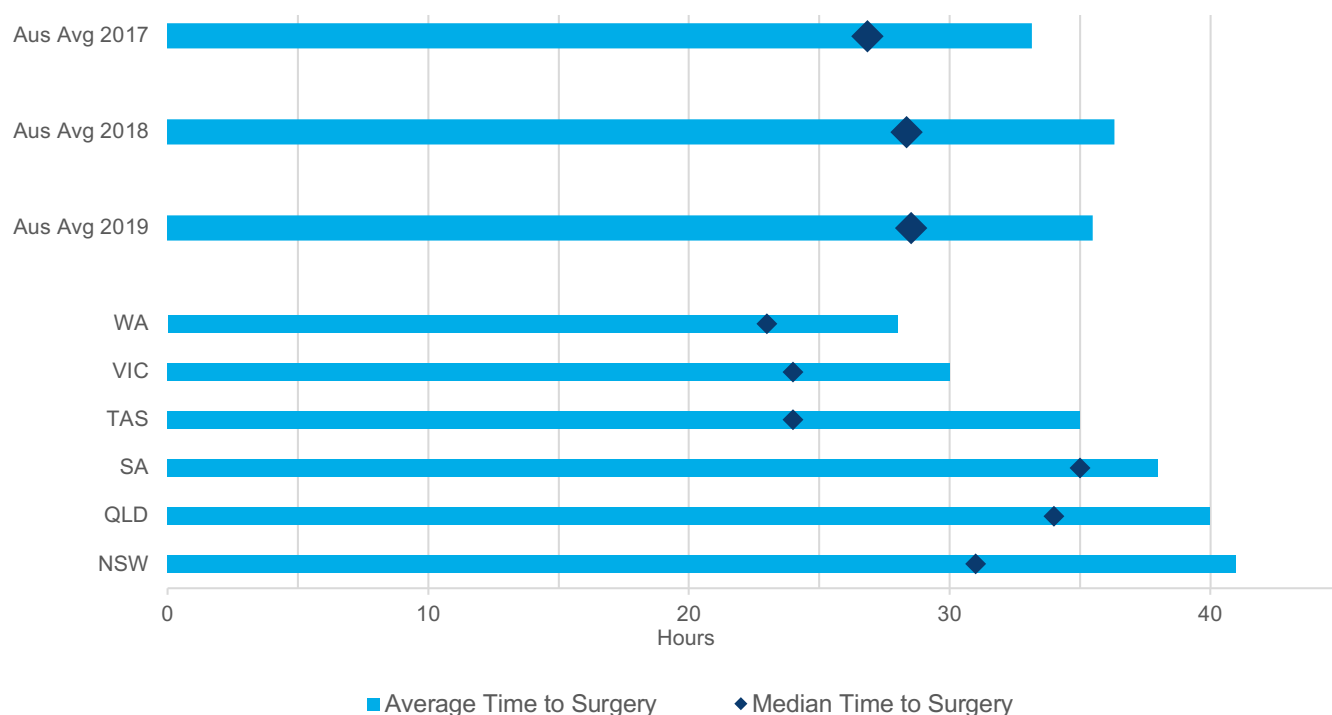
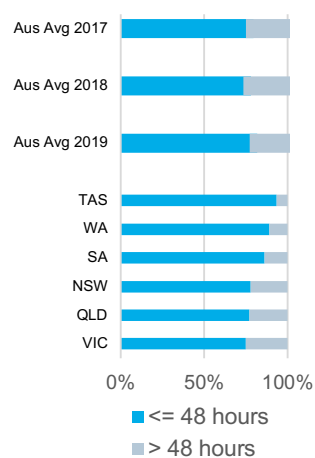
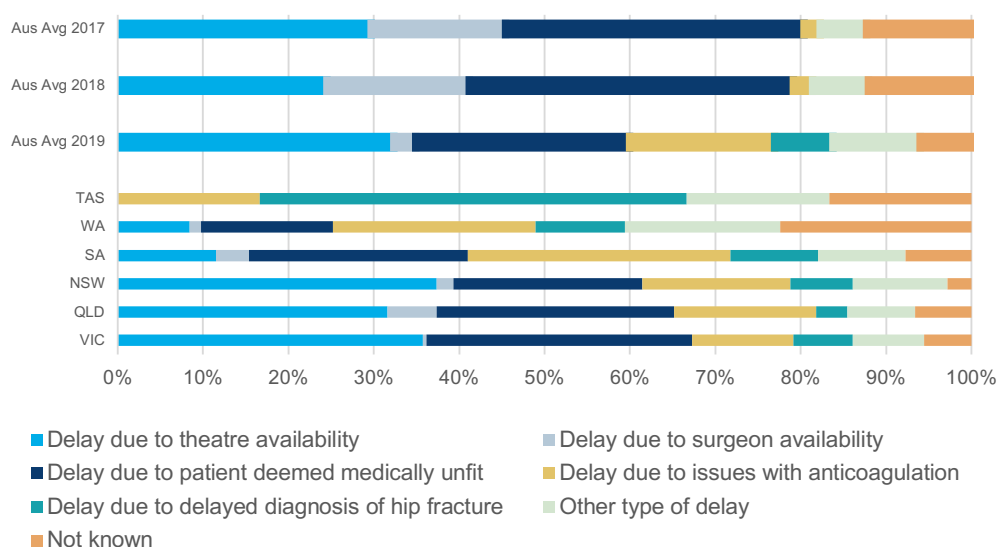

FIGURE S9 AVERAGE TIME TO SURGERY BY STATE (INCLUDES ALL PATIENTS)

**FIGURE S10
SURGERY WITHIN 48
HOURS BY STATE**

**FIGURE S11
REASON FOR SURGICAL DELAY BY STATE**


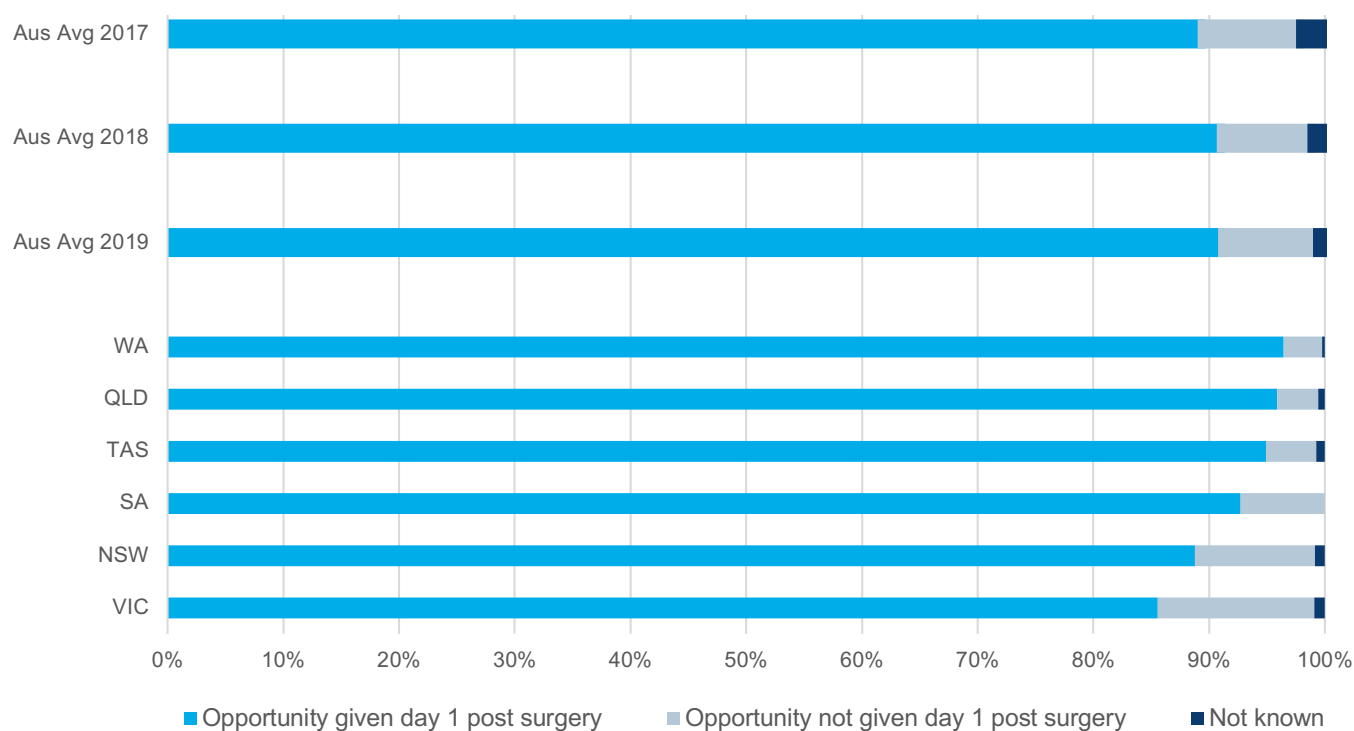
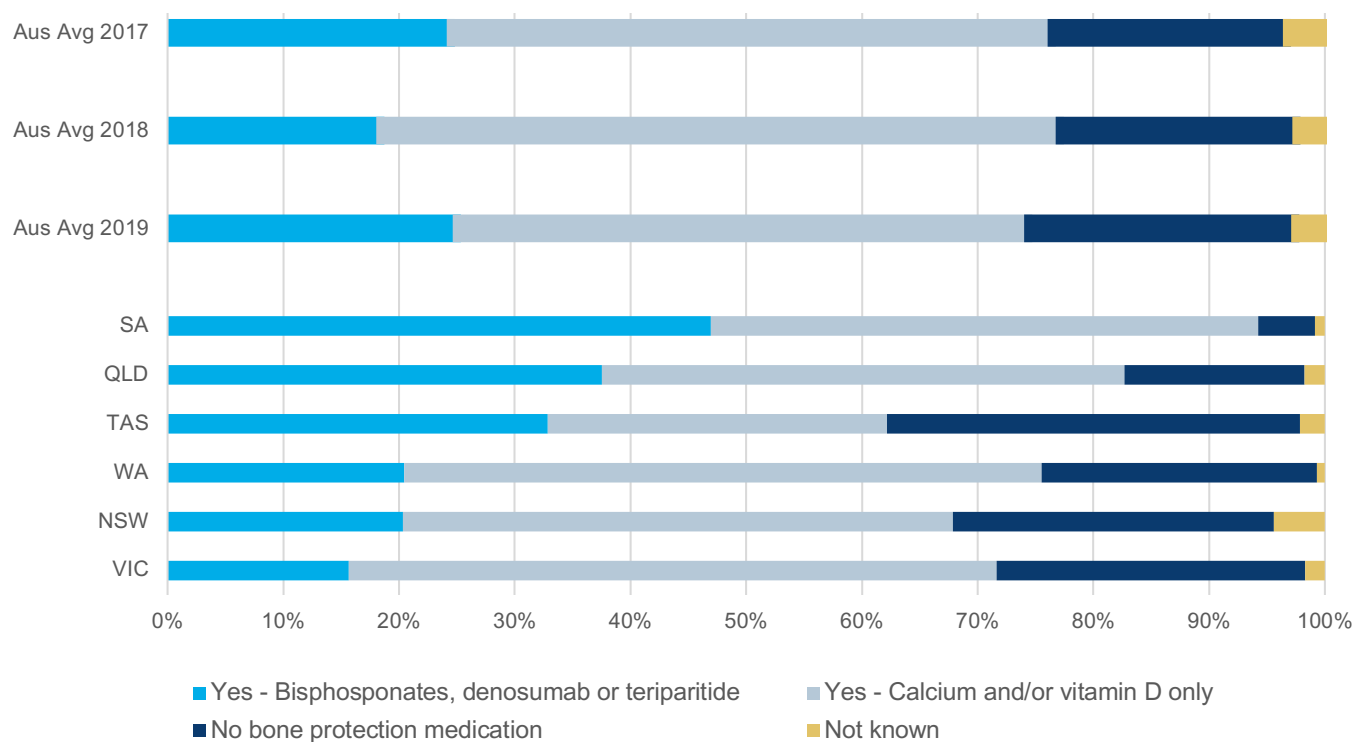
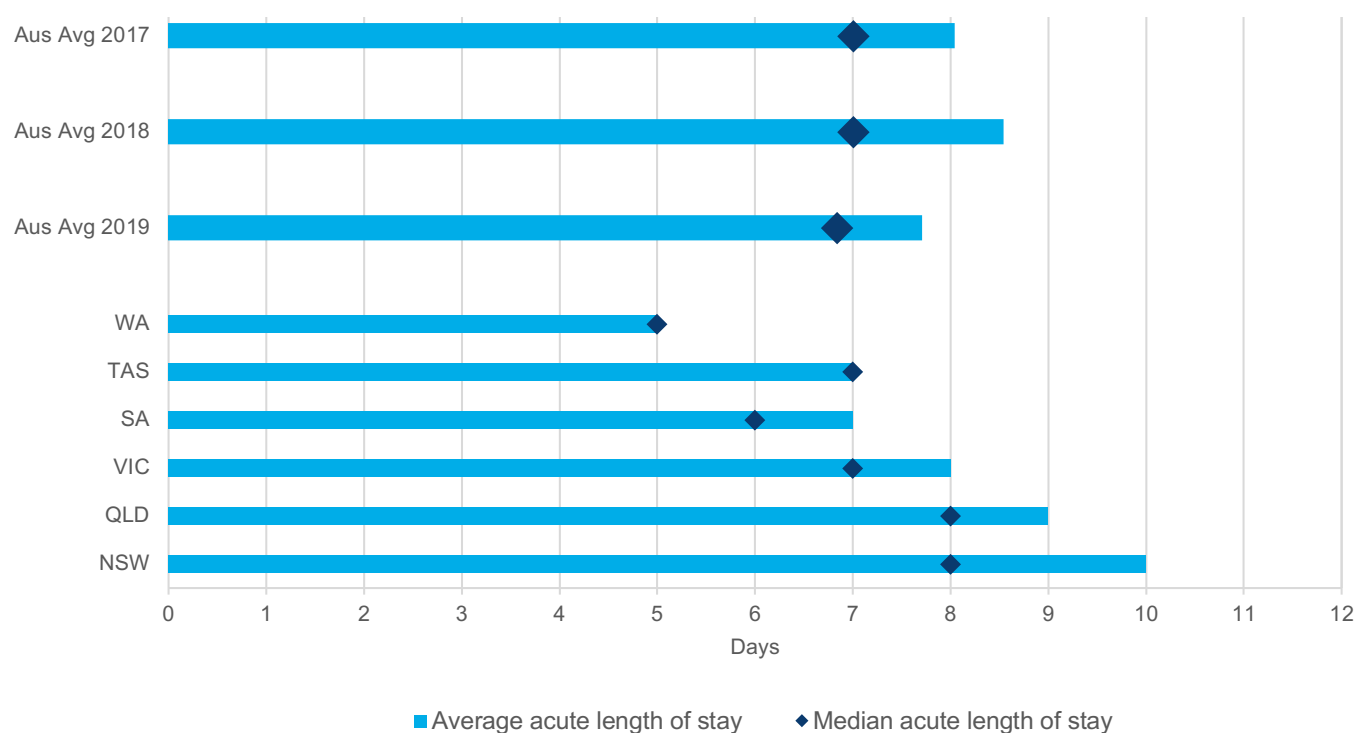
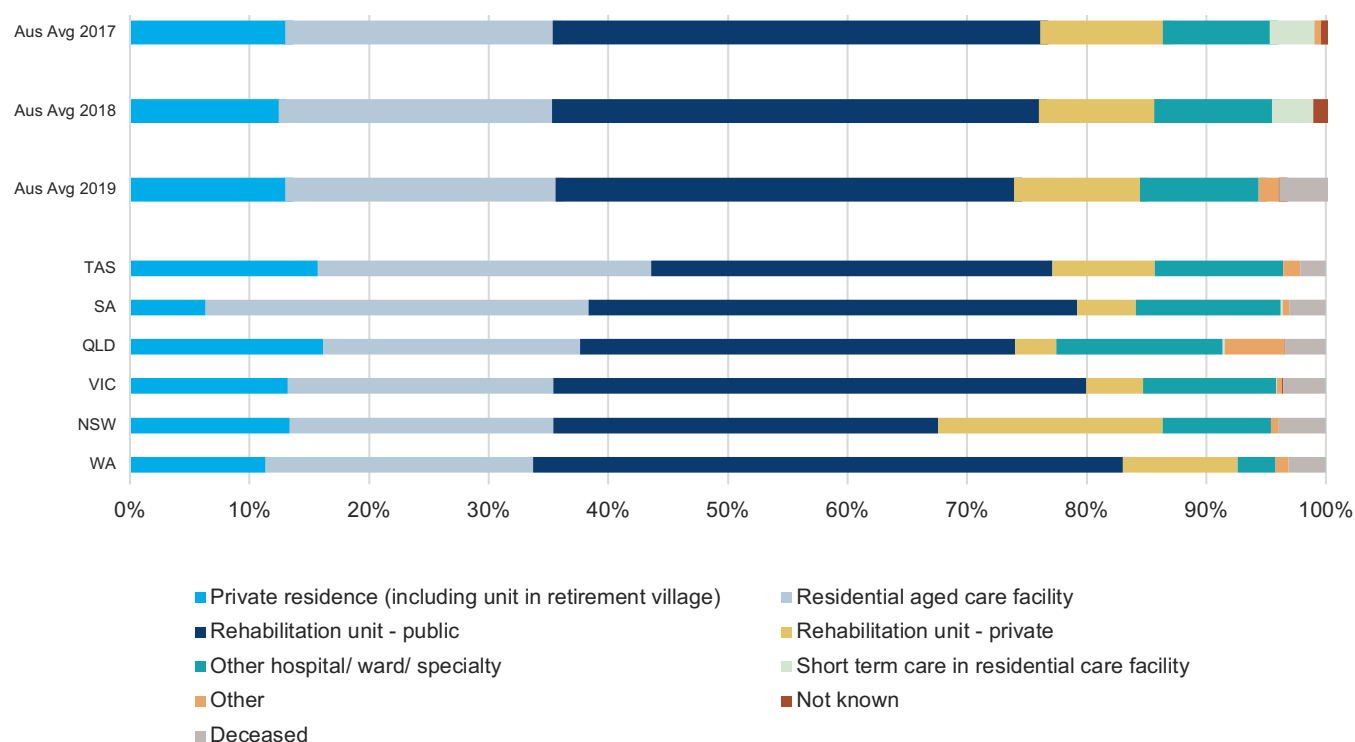
FIGURE S12 MOBILISATION BY STATE**FIGURE S13 BONE MEDICATION ON DISCHARGE FROM ACUTE CARE BY STATE**

FIGURE S14 AVERAGE ACUTE LENGTH OF STAY BY STATE**FIGURE S15 DISCHARGE DESTINATION FROM ACUTE CARE BY STATE**

SECTION 2: FACILITY LEVEL AUDIT

AUSTRALIAN STATES AND TERRITORIES

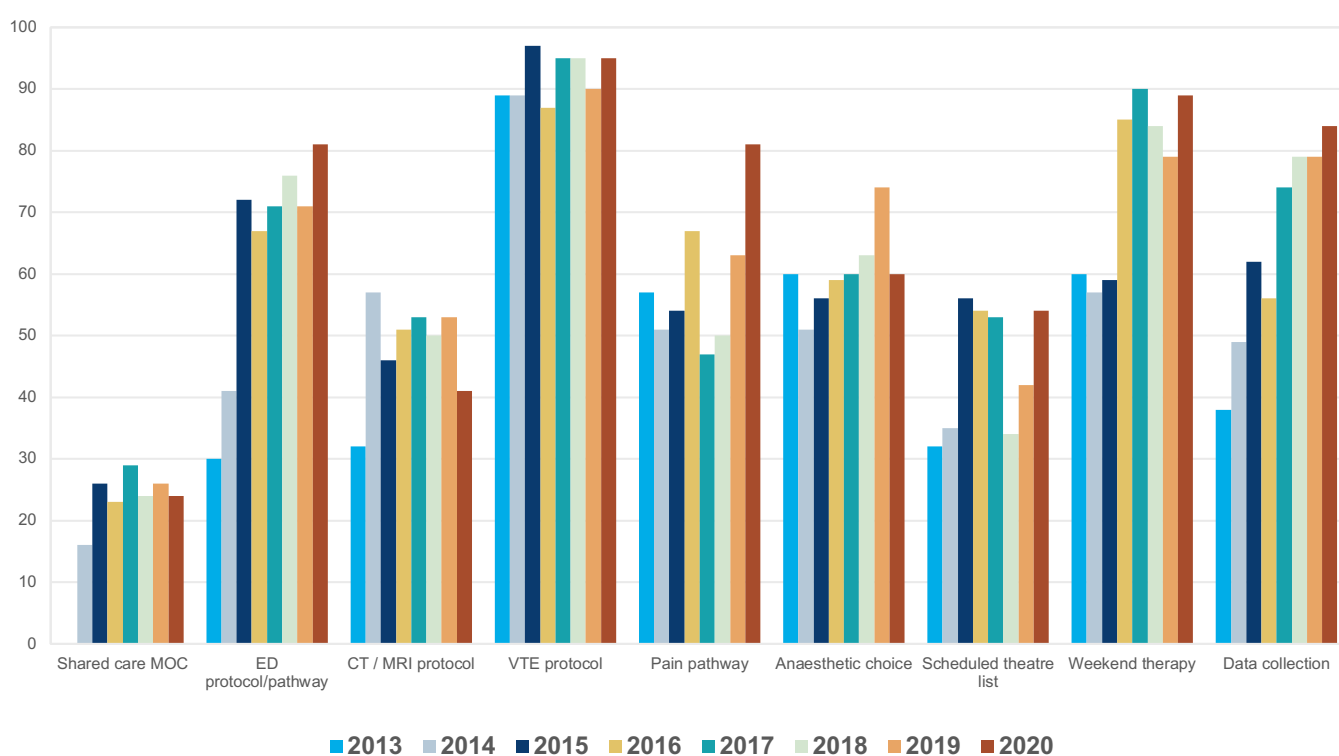
2.1 NEW SOUTH WALES

TABLE S1 NSW HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020

	2013 n=37	2014 n=37	2015 n=39	2016 n=39	2017 n=38	2018 n=38	2019 n=38	2020 n=37
Shared care MOC	n/a	16%	26%	23%	29%	24%	26%	24%
ED protocol/pathway	30%	41%	72%	67%	71%	76%	71%	81%
CT / MRI protocol	32%	57%	46%	51%	53%	50%	53%	41%
VTE protocol	89%	89%	97%	87%	95%	95%	90%	95%
Pain pathway	57%	51%	54%	67%	47%	50%	63%	81%
Anaesthetic choice	60%	51%	56%	59%	60%	63%	74%	60%
Scheduled theatre list	32%	35%	56%	54%	53%	34%	42%	54%
Weekend therapy	60%	57%	59%	85%	90%	84%	79%	89%
Data collection	38%	49%	62%	56%	74%	79%	79%	84%

n/a = not asked

FIGURE S16 PROPORTION OF NSW HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020





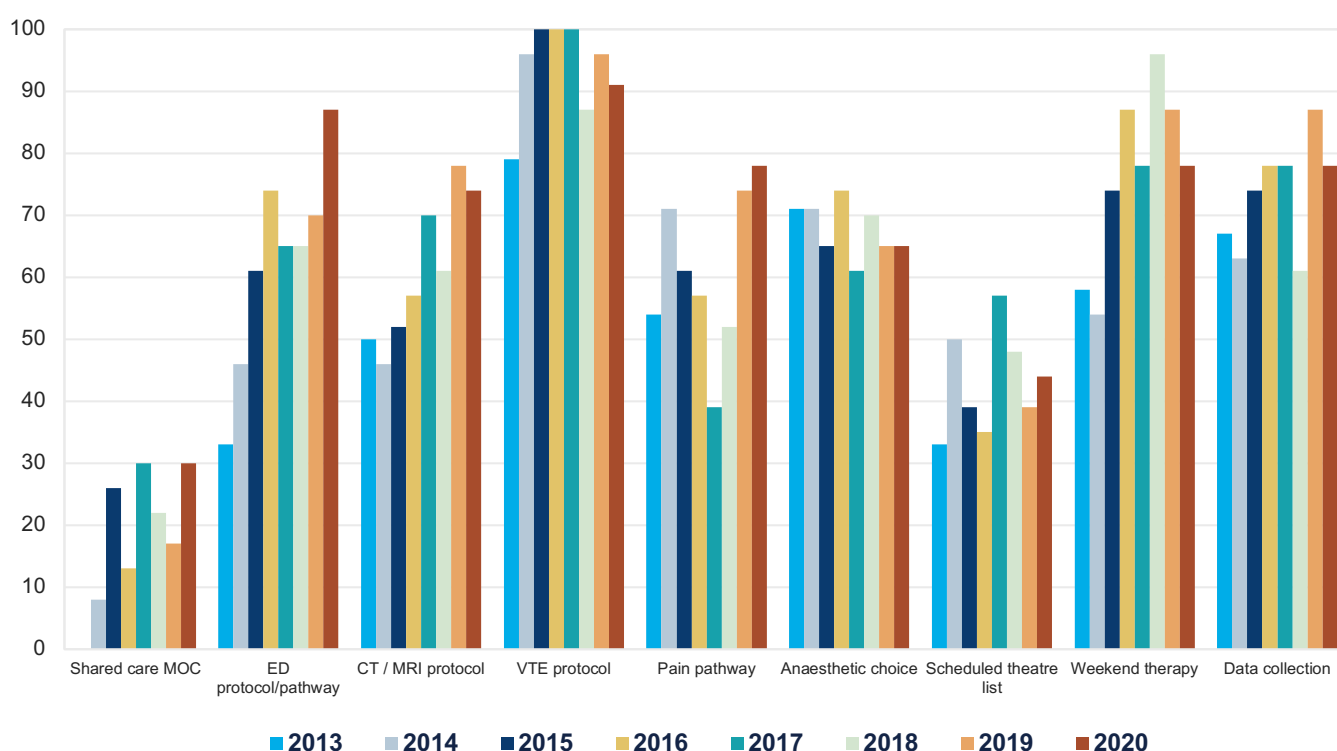
2.2 VICTORIA

TABLE S2 VICTORIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020

	2013 n=24	2014 n=24	2015 n=23	2016 n=23	2017 n=23	2018 n=23	2019 n=23	2020 n=23
Shared care MOC	n/a	8%	26%	13%	30%	22%	17%	30%
ED protocol/pathway	33%	46%	61%	74%	65%	65%	70%	87%
CT / MRI protocol	50%	46%	52%	57%	70%	61%	78%	74%
VTE protocol	79%	96%	100%	100%	100%	87%	96%	91%
Pain pathway	54%	71%	61%	57%	39%	52%	74%	78%
Anaesthetic choice	71%	71%	65%	74%	61%	70%	65%	65%
Scheduled theatre list	33%	50%	39%	35%	57%	48%	39%	44%
Weekend therapy	58%	54%	74%	87%	78%	96%	87%	78%
Data collection	67%	63%	74%	78%	78%	61%	87%	78%

n/a = not asked

FIGURE S17 PROPORTION OF VICTORIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020



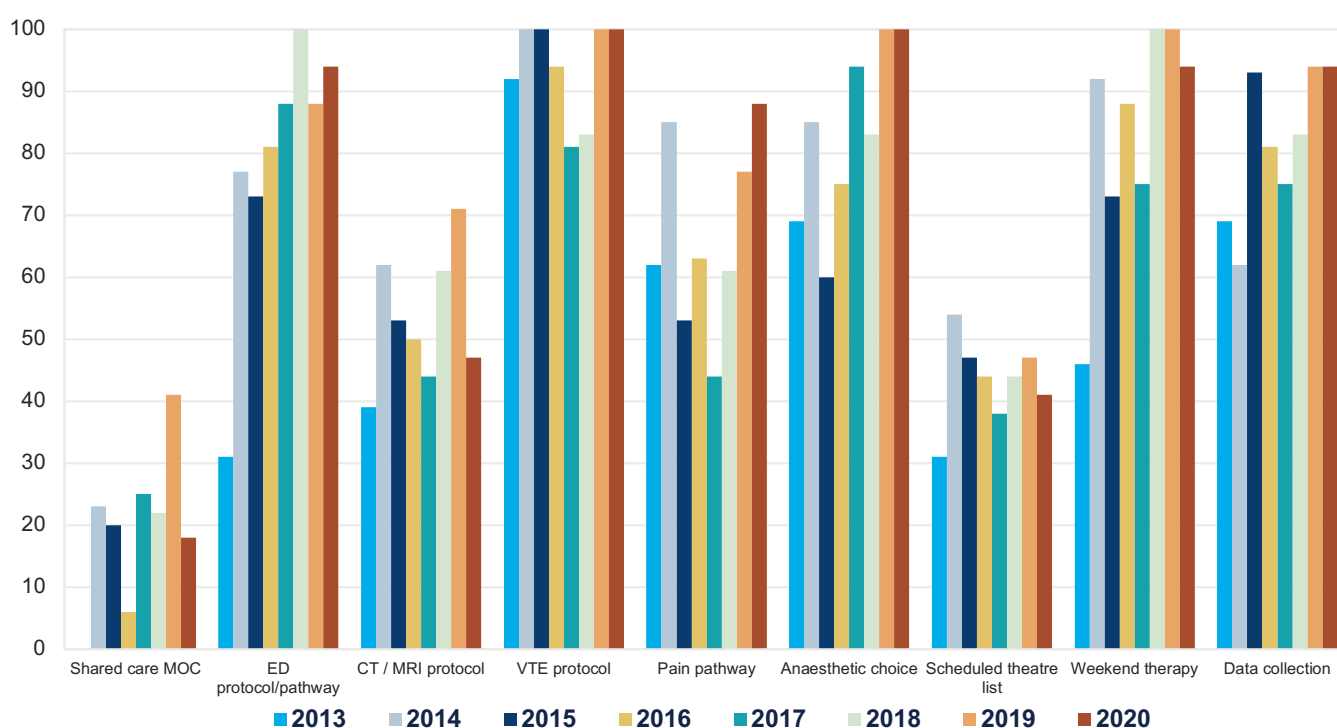
2.3 QUEENSLAND

TABLE S3 QUEENSLAND HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020

	2013 n=13	2014 n=13	2015 n=15	2016 n=16	2017 n=16	2018 n=18	2019 n=17	2020 n=17
Shared care MOC	n/a	23%	20%	6%	25%	22%	41%	18%
ED protocol/pathway	31%	77%	73%	81%	88%	100%	88%	94%
CT / MRI protocol	39%	62%	53%	50%	44%	61%	71%	47%
VTE protocol	92%	100%	100%	94%	81%	83%	100%	100%
Pain pathway	62%	85%	53%	63%	44%	61%	77%	88%
Anaesthetic choice	69%	85%	60%	75%	94%	83%	100%	100%
Scheduled theatre list	31%	54%	47%	44%	38%	44%	47%	41%
Weekend therapy	46%	92%	73%	88%	75%	100%	100%	94%
Data collection	69%	62%	93%	81%	75%	83%	94%	94%

n/a = not asked

FIGURE S18 PROPORTION OF QUEENSLAND HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020





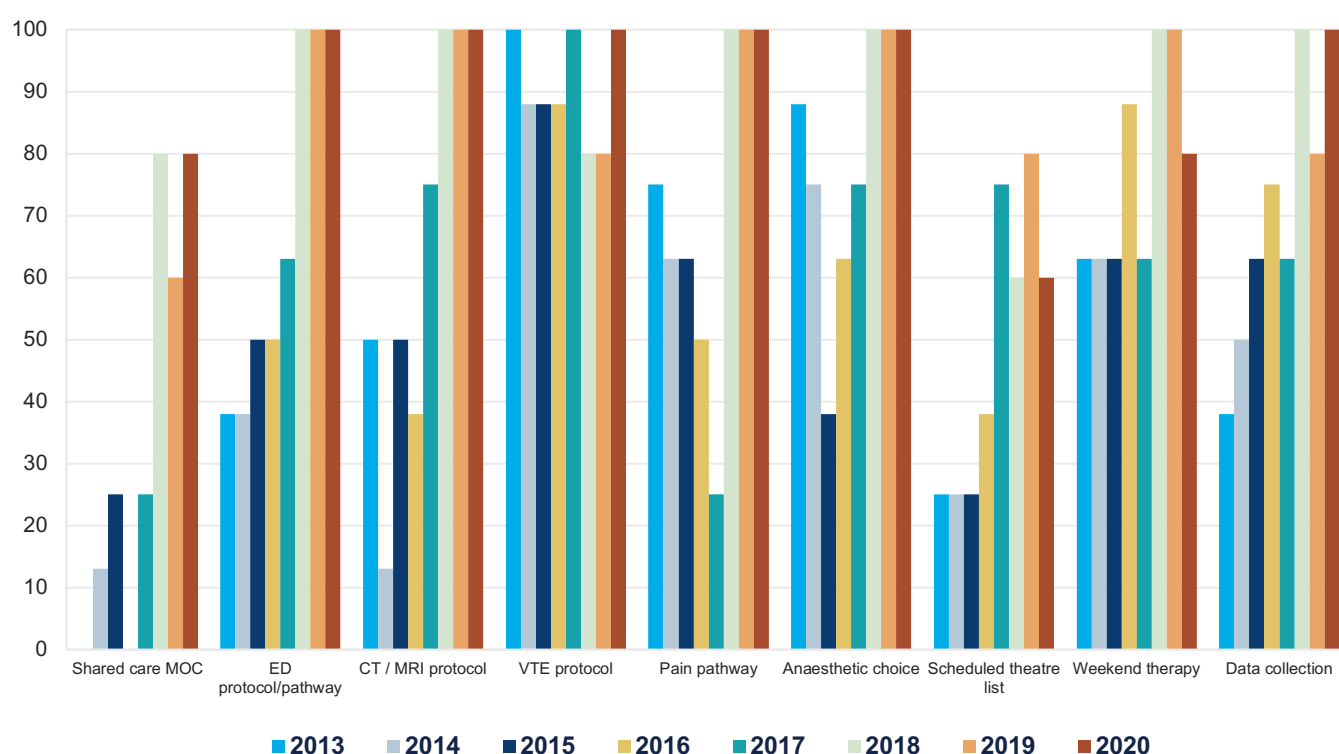
2.4 SOUTH AUSTRALIA

TABLE S4 SOUTH AUSTRALIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020

	2013 n=8	2014 n=8	2015 n=8	2016 n=8	2017 n=18	2018 n=5	2019 n=5	2020 n=5
Shared care MOC	n/a	13%	25%	0%	25%	80%	60%	80%
ED protocol/pathway	38%	38%	50%	50%	63%	100%	100%	100%
CT / MRI protocol	50%	13%	50%	38%	75%	100%	100%	100%
VTE protocol	100%	88%	88%	88%	100%	80%	80%	100%
Pain pathway	75%	63%	63%	50%	25%	100%	100%	100%
Anaesthetic choice	88%	75%	38%	63%	75%	100%	100%	100%
Scheduled theatre list	25%	25%	25%	38%	75%	60%	80%	60%
Weekend therapy	63%	63%	63%	88%	63%	100%	100%	80%
Data collection	38%	50%	63%	75%	63%	100%	80%	100%

n/a = not asked

FIGURE S19 PROPORTION OF SOUTH AUSTRALIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020



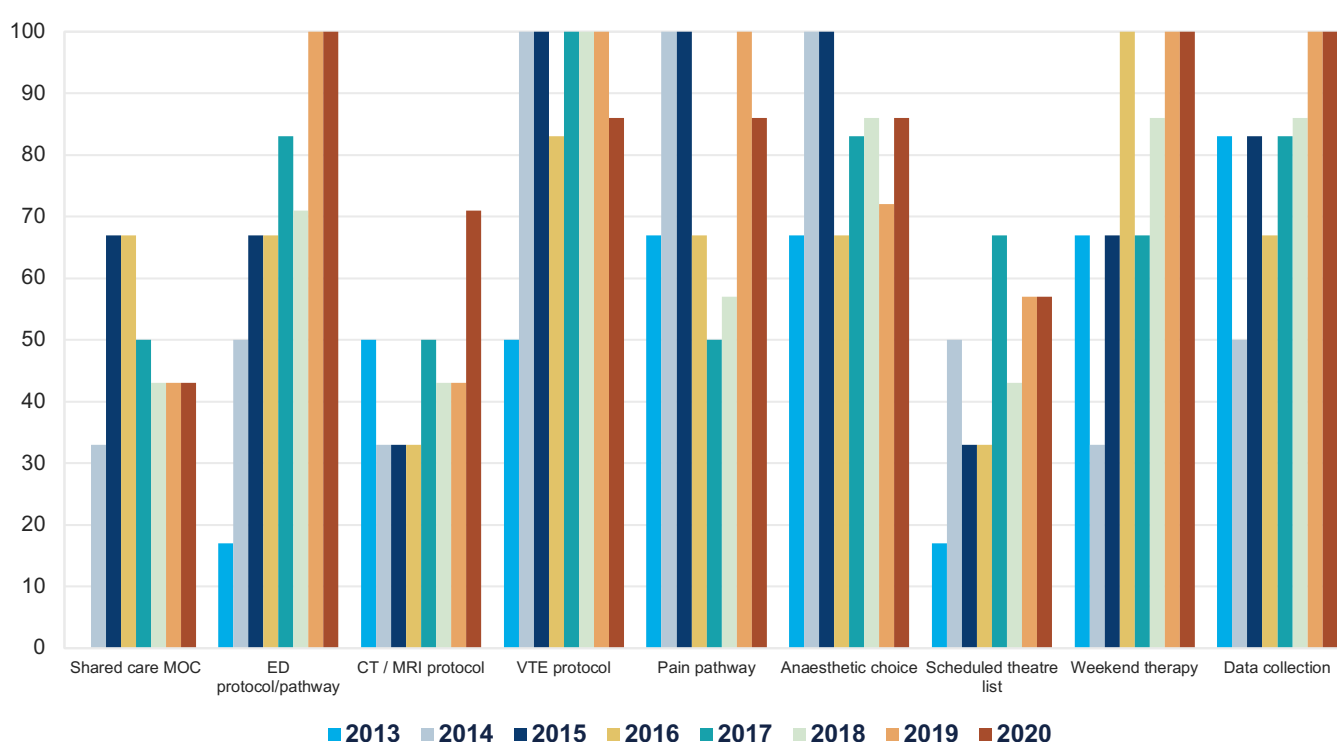
2.5 WESTERN AUSTRALIA

TABLE S5 WESTERN AUSTRALIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020

	2013 n=6	2014 n=6	2015 n=6	2016 n=6	2017 n=6	2018 n=7	2019 n=7	2020 n=7
Shared care MOC	n/a	33%	67%	67%	50%	43%	43%	43%
ED protocol/pathway	17%	50%	67%	67%	83%	71%	100%	100%
CT / MRI protocol	50%	33%	33%	33%	50%	43%	43%	71%
VTE protocol	50%	100%	100%	83%	100%	100%	100%	86%
Pain pathway	67%	100%	100%	67%	50%	57%	100%	86%
Anaesthetic choice	67%	100%	100%	67%	83%	86%	72%	86%
Scheduled theatre list	17%	50%	33%	33%	67%	43%	57%	57%
Weekend therapy	67%	33%	67%	100%	67%	86%	100%	100%
Data collection	83%	50%	83%	67%	83%	86%	100%	100%

n/a = not asked

FIGURE S20 PROPORTION OF WESTERN AUSTRALIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020





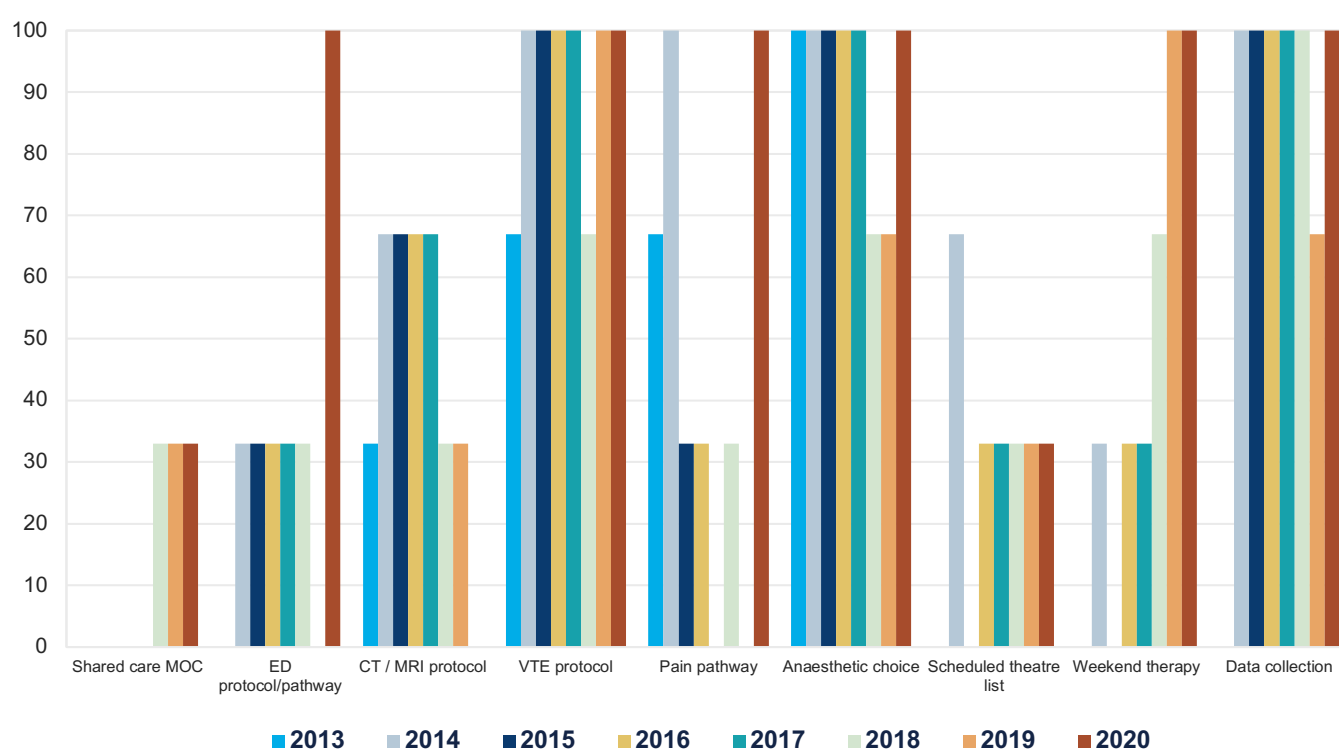
2.6 TASMANIA

TABLE S6 TASMANIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020

	2013 n=3	2014 n=3	2015 n=3	2016 n=3	2017 n=3	2018 n=3	2019 n=3	2020 n=3
Shared care MOC	n/a	0%	0%	0%	0%	33%	33%	33%
ED protocol/pathway	0%	33%	33%	33%	33%	33%	0%	100%
CT / MRI protocol	33%	67%	67%	67%	67%	33%	33%	0%
VTE protocol	67%	100%	100%	100%	100%	67%	100%	100%
Pain pathway	67%	100%	33%	33%	0%	33%	0%	100%
Anaesthetic choice	100%	100%	100%	100%	100%	67%	67%	100%
Scheduled theatre list	0%	67%	0%	33%	33%	33%	33%	33%
Weekend therapy	0%	33%	0%	33%	33%	67%	100%	100%
Data collection	0%	100%	100%	100%	100%	100%	67%	100%

n/a = not asked

FIGURE S2I PROPORTION OF TASMANIAN HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020



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

TABLE S7 NT AND ACT HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020

	2013 n=3	2014 n=3	2015 n=3	2016 n=3	2017 n=3	2018 n=3	2019 n=3	2020 n=3
Shared care MOC	N/A	0%	0%	0%	33%	0%	33%	33%
ED protocol/pathway	0%	0%	100%	67%	33%	67%	67%	100%
CT / MRI protocol	67%	67%	33%	33%	33%	33%	33%	100%
VTE protocol	100%	100%	100%	100%	100%	100%	100%	100%
Pain pathway	100%	100%	67%	33%	33%	67%	67%	100%
Anaesthetic choice	67%	100%	67%	100%	100%	100%	100%	100%
Scheduled theatre list	0%	33%	0%	33%	33%	33%	33%	33%
Weekend therapy	67%	67%	0%	33%	33%	67%	67%	67%
Data collection	67%	67%	67%	67%	67%	100%	67%	67%

n/a = not asked

FIGURE S22 PROPORTION OF NT AND ACT HOSPITALS REPORTED ELEMENTS OF HIP FRACTURE CARE 2013–2020

