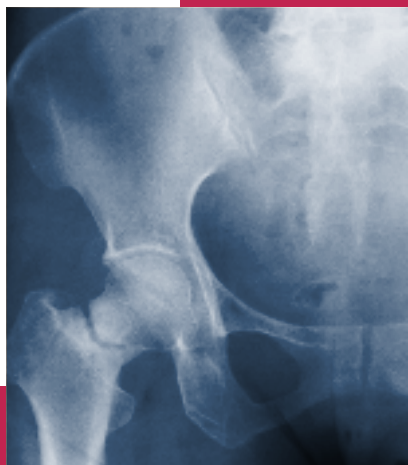




ANNUAL REPORT 2023



ENHANCING OUTCOMES FOR OLDER PEOPLE

The Australian and New Zealand Hip Fracture Registry (ANZHFR) extends its sincere thanks to the multidisciplinary teams of the 97 hospitals that contributed patient level data (76 in Australia and 21 in New Zealand) and the 117 hospitals that contributed to the facility-level data. Your extraordinary efforts make this report possible.

The ANZHFR receives funding from the Australian Government Department of Health and Aged Care, New Zealand Accident Compensation Corporation, NSW Health Agency for Clinical Innovation, Victorian Agency for Health Information, SA Health, WA Health and Queensland Health, and receives in-kind support from Neuroscience Research Australia, UNSW Sydney and the New Zealand Orthopaedic Association.



ABBREVIATIONS

ACT	Australian Capital Territory	NOF	Neck of femur
AIHW	Australian Institute of Health and Welfare	NSW	New South Wales
ANZ	Australia and New Zealand	NT	Northern Territory
ANZHFR	Australian and New Zealand Hip Fracture Registry	NZ	New Zealand
ACSQHC	Australian Commission on Safety and Quality in Health Care	NZOA	New Zealand Orthopaedic Association
AOA	Australian Orthopaedic Association	OT	Operating Theatre
ASA	American Society of Anesthesiologists	PREM	Patient Reported Experience Measure
AUS	Australia	QLD	Queensland
CFS	Clinical Frailty Scale	SA	South Australia
CT	Computed Tomography	TAS	Tasmania
ED	Emergency Department	VIC	Victoria
FLS	Fracture Liaison Service	VTE	Venous Thromboembolism
GP	General Practitioner	WA	Western Australia
HDU	High Dependency Unit		
ICU	Intensive Care Unit		
JHH	John Hunter Hospital		
LOS	Length of stay		
MRI	Magnetic Resonance Imaging		

NOTE: Rehabilitation – when used in the figures, rehabilitation refers to inpatient rehabilitation at a public or private hospital. It does not include rehabilitation provided in the community or private residence.



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In the spirit of reconciliation, the ANZHFR acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

The ANZHFR acknowledges Māori as tangata whenua and Treaty of Waitangi partners in Aotearoa New Zealand.

Extracts from this report may be reproduced provided the source of the extract is acknowledged.

Report prepared on behalf of the ANZHFR Steering Group by:

Ms Jamie Hallen, Registry Manager; Mr Stewart Fleming, Webmaster; Dr Morag Taylor, Data analyst; Professor Jacqueline Close, ANZHFR Co-Chair Geriatric Medicine; A/Professor Catherine McDougall, ANZHFR Co-Chair Orthopaedic Surgery.

The ANZHFR extends its sincere thanks to Dr Reidar Lystad, Australian Institute of Health Innovation, Macquarie University NSW, for assistance with the outlier reports.

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CO-CHAIRS' FOREWORD

We are delighted to welcome you to the 2023 ANZHFR Annual Report, which includes the eighth patient level report and the eleventh facility level report. This report is possible because of the extraordinary efforts of the teams involved in hip fracture care across Australia and New Zealand. We are grateful for the time you dedicate to Registry activities and thank you for your commitment to improving outcomes for older people after hip fracture.

We continue to see a year-on-year increase in Registry participation. This report includes 16,395 records from 97 hospitals and facility level data from 117 hospitals. It has been encouraging to not only maintain participation but also welcome new hospitals on-board over the last year, despite the ongoing challenges for health systems due to the global COVID-19 pandemic. Whilst all eligible New Zealand hospitals have been contributing data for some time, we continue to strive towards 100% of eligible Australian public hospitals providing patient level data.

The printed report again focuses on performance against the Hip Fracture Care Clinical Care Standard. This year, performance against the quality indicators is also presented by Australian state for the last five years. This is an opportunity to see jurisdictional performance over time and where system-level opportunities for improvement may exist. The digital report covers additional domains relevant to clinicians, managers, and funders of health systems. Both reports are available on our website anzhfr.org/registry-reports. Mortality is not included in this report as we will be releasing an expanded supplementary report focused on hip fracture mortality in 2024.

We continue to see improvements in a number of domains, including **preoperative assessment of cognition** and **assessment of delirium**. Early recognition and prompt treatment of delirium reduces the risk of other hospital-acquired complications and offers patients with delirium the best chance of recovery. The **use of nerve blocks** for pain management remains high, with 81% of patients receiving a nerve block prior to arriving in the operating theatre. And while progress has been slow, there continues to be an improvement in the proportion of people leaving hospital on **bone protection medication**.

Conversely, there are areas that have shown little or no improvement over the last five years. Understanding the reasons for this and identifying system level strategies to address these challenges remains a priority. Average **length of stay in the Emergency Department (ED)** increased in both Australia and New Zealand. **Average time to surgery** increased and the proportion of patients who had **surgery within 48 hours** decreased in both Australia and New Zealand. We highlight a variety of perspectives on what is driving the increase in surgical delay and potential system- and hospital-level improvement strategies. **First day walking** remains low, with less than half of patients taking a step the day after surgery.

Given the challenges associated with early mobility, a sprint audit examining acute rehabilitation was performed in 2022. A summary report of the key findings is available at anzhfr.org/sprintaudits/. The research team are working on more detailed analysis and the ANZHFR looks forward to sharing further details on the association between frequency and timing of commencement of acute rehabilitation, type of therapy received on day one and the impact on patient outcomes. The ANZHFR has just completed its fourth sprint audit reviewing fasting practices prior to surgery. We sincerely thank the participating teams for their efforts collecting the additional data and welcome



suggestions as to how we can improve and build on sprint audits moving forward.

In alignment with our priority of increased consumer engagement, the ANZHFR progressed work under the My Hip My Voice pilot projects. These projects developed new resources for patients, families and friends, as well as integrating a patient reported experience tool into the Registry. We highlight some of these resources later in the report. As the My Hip My Voice projects formally wrap up, we sincerely thank the project team, the consumers and organisations that contributed and the teams that generously volunteered as pilot sites. The resources developed and lessons learned will guide the Registry as we strive to put consumers at the centre of all that we do.

2022 also saw the return to face-to-face Hip Festivals, with a New Zealand Hip Fest in Wellington and a Binational Hip Fest in Melbourne. The Hip Fests were a great opportunity to hear the latest in multidisciplinary hip fracture care and celebrate the Golden Hip awards. In New Zealand, North Shore Hospital won the Golden Hip award for best performing hospital for the second year running. Hutt Hospital won the Golden Hip award for most improved. In Australia, Sunshine Coast University Hospital won the Golden Hip award for best performing hospital. The Sutherland Hospital won the Golden Hip for most improved. It was wonderful to see so many friends and colleagues in person, and we look forward to welcoming you to future events.

We would also like to take this opportunity to recognise some long-standing members of the ANZHFR Steering

Group, who are moving on. Dr Gretchen Poiner stepped down as a consumer representative in 2022. Gretchen's extraordinary dedication and contribution over many years has been invaluable to the Registry, and we extend our sincere gratitude to her. Dr Hannah Seymour, Dr Roger Harris and Mr Brett Baxter have been on this journey with us for over a decade, representing various professional organisations and tirelessly driving work in fragility fracture prevention and care. Their respective contributions have been enormous and we thank them for their commitment, passion and friendship.

Our thanks also to Jamie Hallen, the Australian Hip Fracture Registry manager, who has been instrumental in pulling this report together and also to the Australian and New Zealand Registry management teams who make the endeavours of the Registry possible.

The ANZHFR remains committed to collaboration and evolving in a manner that aligns with the priorities of the patients, the clinicians, and the broader health system. We look forward to continuing to work together towards better outcomes for older people after hip fracture.

**Professor
Jacqueline Close
Geriatrician**

Co-Chair
Australian and New Zealand
Hip Fracture Registry

**A/Professor
Catherine McDougall
Orthopaedic Surgeon**

Co-Chair
Australian and New Zealand
Hip Fracture Registry

2022 SNAPSHOT

CALENDAR YEAR

PATIENT LEVEL REPORT



65%
of patients had a documented assessment of pain within 30 minutes of arrival at the ED



72%
of patients had a preoperative assessment of cognition



81%
of patients had a nerve block to manage pain before arriving in the operating theatre

97
ANZ Hospitals

16,395
Records



86%
of Australian patients and

88%
of NZ patients were seen by a geriatrician during their acute hospital stay

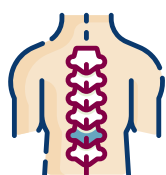
91%
of patients were given the opportunity to mobilise on the day of or day after surgery



78%
of patients had surgery within 48 hours



45%
of patients achieved first day walking



32%
of patients were on active treatment for osteoporosis at discharge from hospital

FACILITY LEVEL REPORT



89%
of hospitals reported
having a hip
fracture pathway



26%
of hospitals utilise
an orthopaedic/
geriatric medicine
shared care
service model



85%
of hospitals
reported having
a pain pathway



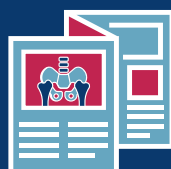
86%
of hospitals
have a weekend
therapy service

117
ANZ Hospitals






50%
of hospitals had planned
operating lists for hip
fracture patients

66%
of hospitals routinely
provide written
information on
treatment and care after
hip fracture



LEGEND:

-  Improvement
-  No change
-  Decline in performance

USING ANZHFR DATA FOR QUALITY IMPROVEMENT AND RESEARCH

The ANZHFR has developed the capabilities of the Registry over the last few years to make monitoring your hospital's performance easier. The Registry dashboard gives a real-time summary of performance against the ACSQHC quality indicators and other key metrics.



Live reports enable you to review and benchmark your performance over time for many aspects of hip fracture care.



Do you know how to access the Registry dashboard for your hospital? Have you seen the reports available at the press of a button?



The dashboard and reports can be customised to show a specified period of time and the reports can be displayed by month, quarter or year.

Different levels of access to the ANZHFR allow sites to collect, submit, view and use data to improve hip fracture care, whilst maintaining the confidentiality and privacy of data. Hospital Reporter access allows access to the aggregated data held in the Registry. One generic hospital account is created, which only allows a user to view aggregated data. The user will not have access to any individual, record-level data. This level of access allows team members to view the dashboard and run and export the live reports. Contact the lead for the ANZHFR at your hospital to request the login details. The ANZHFR team is happy to help if you need any guidance on utilising the Registry functions. Contact database manager Mr Stewart Fleming on admin@hipfracture.com.au.



With data on more than 95,000 hip fractures, the ANZHFR is growing as a platform for clinical research and practice development.

Publications and more information about using ANZHFR data can be found at: anzhfr.org/research

RESEARCH PUBLICATIONS USING ANZHFR DATA

Fajardo Pulido, D., et al. (2021). "Patient, surgical and hospital factors associated with the presence of a consultant surgeon during hip fracture surgery. Do we know the answer?" *ANZ Journal of Surgery* 91(7-8): 1435-1440.

Gill, C. E., et al. (2022). "Experience of a systematic approach to care and prevention of fragility fractures in New Zealand." *Arch Osteoporos* 17(1): 108.

Halim, N. K., et al. (2022). "Two-country comparison of the prescription of bone protection medication before and early after hip fracture." *Archives of Osteoporosis* 18(1): 8.

Harvey, L., et al. (2022). "Improved survival rates after hip fracture surgery in New South Wales, 2011–2018." *Med J Aust* 216: 420-421.

Harvey, L. A., et al. (2021). "Impact of pre-surgery hospital transfer on time to surgery and 30-day mortality for people with hip fractures." *Medical Journal of Australia* 215(2): 87-88.

Lin, D.-Y., et al. (2023). "Association of anesthesia and analgesia with long-term mortality after hip fracture surgery: an analysis of the Australian and New Zealand hip fracture registry." *Regional Anesthesia & Pain Medicine* 48(1): 14-21.

Mitchell, R. J., et al. (2022). "Synthesis of the evidence on the impact of pre-operative direct oral anticoagulants on patient health outcomes after hip fracture surgery: rapid systematic review." *European Journal of Trauma and Emergency Surgery* 48(4): 2567-2587.

Narula, S., et al. (2020). "Clinical Frailty Scale is a good predictor of mortality after proximal femur fracture." *Bone & Joint Open* 1(8): 443-449.

Oberai, T., et al. (2021). "Development of a postoperative delirium risk scoring tool using data from the Australian and New Zealand Hip Fracture Registry: an analysis of 6672 patients 2017-2018." *Archives of Gerontology and Geriatrics* 94: 104368.

Oberai, T., et al. (2022). "Is delirium associated with negative outcomes in older patients with hip fracture: analysis of the 4904 patients 2017–2018 from the Australian and New Zealand hip fracture registry." *ANZ Journal of Surgery* 92(1-2): 200-205.

Onggo, J., et al. (2023). "Comparing outcomes of total hip arthroplasty versus hemiarthroplasty in neck of femur fracture patients: an Australian registry study." *European Journal of Trauma and Emergency Surgery*: 1-7.

Ramsay, N., et al. (2023). "The impact of cement fixation on early mortality in arthroplasty for hip fracture." *Bone & Joint Open* 4(3): 198.

Ramsay, N., et al. (2023). "The impact of fixation type for intertrochanteric femoral fracture on patient survival." *ANZ Journal of Surgery*.

Ryder, T., et al. (2021). "Patient and hospital factors influencing discharge destination following hip fracture." *Australasian journal on ageing* 40(3): e234-e243.

Tan, A. C., et al. (2019). "Data quality audit of a clinical quality registry: a generic framework and case study of the Australian and New Zealand Hip Fracture Registry." *BMJ Open Quality* 8(3): e000490.



MAYSIE IS 100 YEARS OLD AND LIVES ALONE.

She fell at home and broke her hip on the 26th June. She had her operation the next day at Fiona Stanley Hospital in Perth.

She was transferred to rehabilitation on the 29th June.

When asked about her experience, Maysie highlighted the importance of good nutrition in hip fracture care. She was given oral nutrition supplements throughout her hospital stay.

This photo was taken nine days after her operation and she went home two weeks after her injury.

The food I have had here is the best in any hospital. It has helped me improve my strength and get home.

ANZHFR PARTICIPATION

Hospitals in Australia and New Zealand that provide surgical treatment to patients admitted with a proximal femur fracture are eligible to contribute data to the ANZHFR. The proportion of eligible public hospitals approved to participate in the ANZHFR and be included in the annual report has increased from 21% of ANZ hospitals in 2016 to 93% in 2023. The total number of hospitals eligible for both patient and facility audits varies each year as public health system services are reconfigured, or private hospitals increase their participation in the ANZHFR.

The number of hospitals contributing data continues to grow, with year-on-year increases in participation. Not all authorised sites have been able to contribute data, primarily due to resource limitations, and the ANZHFR continues to work with these sites to help identify sustainable processes for participation. Image 1 shows eligible public hospital participation by Australian state and territory and New Zealand. Six private hospitals currently contribute data to the ANZHFR; one mixed public/private in NSW, one in WA, two in QLD and two in Victoria.

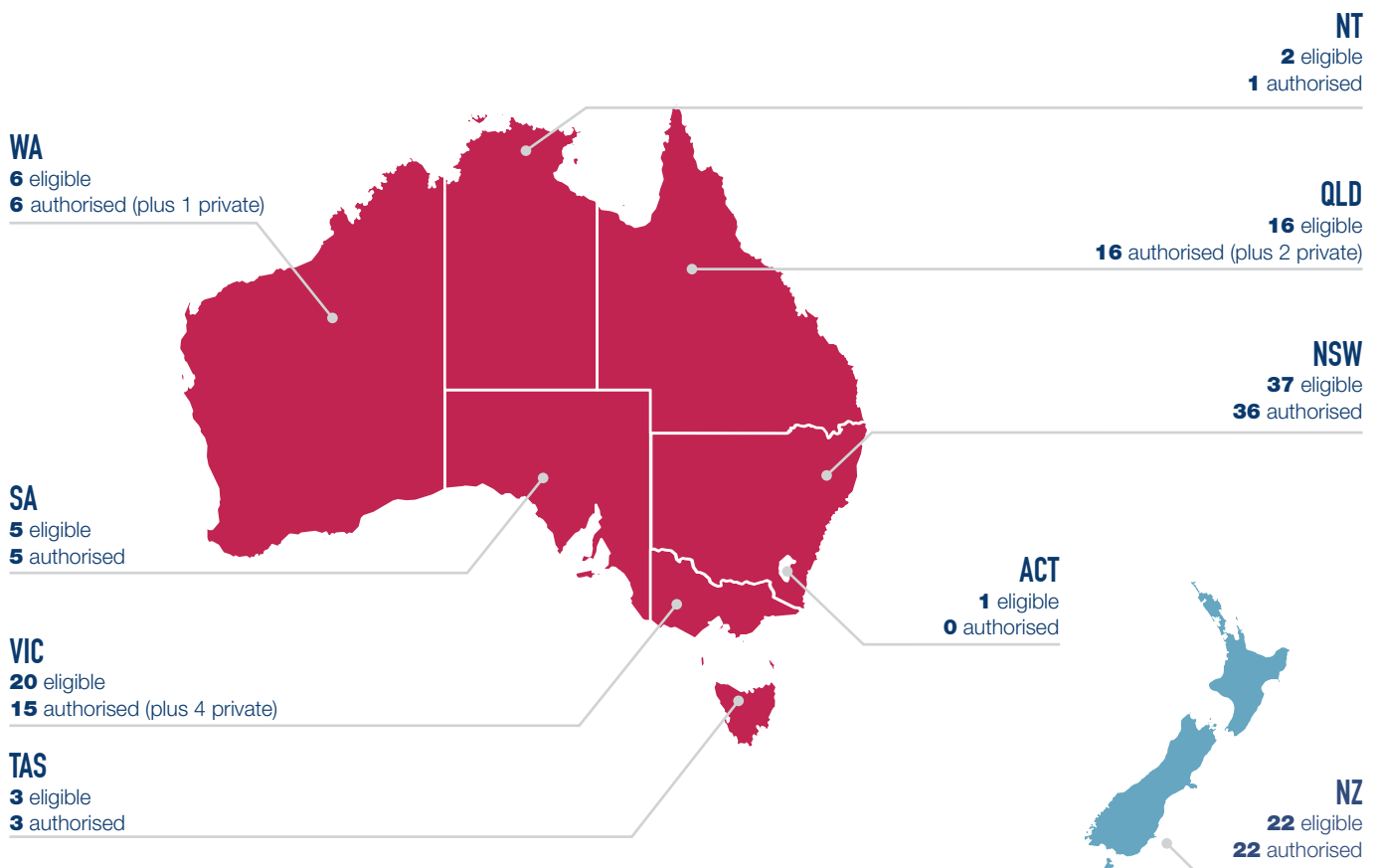


Image 1: Public sector participation by Australian state and territory and New Zealand at July 2023

CONTRIBUTING HOSPITALS 2022

PATIENT LEVEL AUDIT

NEW ZEALAND HOSPITALS

	REPORT ID	2022
Auckland City Hospital	ACH	264
Christchurch Hospital	CHC	489
Dunedin Hospital	DUN	167
Gisborne Hospital	GIS	30
Hawkes Bay Hospital	HKB	126
Hutt Hospital	HUT	112
Middlemore Hospital	MMH	269
Nelson Hospital	NSN	111
North Shore Hospital	NSH	430
Palmerston North Hospital	PMR	161
Rotorua Hospital	ROT	89

	REPORT ID	2022
Southland Hospital	INV	90
Taranaki Base Hospital	TAR	123
Tauranga Hospital	TGA	191
Timaru Hospital	TIU	68
Waikato Hospital	WKO	355
Wairau Hospital	BHE	50
Wellington Hospital	WLG	22
Whakatane Hospital	WHK	35
Whanganui Hospital	WAG	55
Whangarei Hospital	WRE	142

AUSTRALIAN HOSPITALS

	REPORT ID	2022
Albany Hospital	ABA	51
Armidale Hospital	ARM	48
Ballarat Base Hospital	###	151
Bankstown-Lidcombe Hospital	BKL	197
Bendigo Health	###	111
Blacktown Hospital	###	176
Box Hill Hospital	BOX	222
Bunbury Regional Hospital	BRH	126
Bundaberg Hospital	###	30
Cabrini Malvern	CHM	83
Cairns Hospital	CNS	181
Campbelltown Hospital	CAM	106
Canterbury Hospital	CAN	75
Coffs Harbour Base Hospital	CFS	115
Concord Hospital	CRG	150
Dandenong Hospital	DDH	465
Fiona Stanley Hospital	FSH	572
Flinders Medical Centre	FMC	238
Frankston Hospital	FRA	209
Geelong Hospital	GUH	213
Geraldton Regional Hospital	GRH	18
Gold Coast University Hospital	GCH	36
Gosford Hospital	GOS	379
Goulburn Base Hospital	GLB	31
Grafton Hospital	GBH	55
Hornsby Ku-ring-gai Hospital	HKH	134
Ipswich Hospital	IPS	121
John Hunter Hospital	JHH	454
Joondalup Hospital	JHC	189
Launceston Hospital	LGH	103
Lismore Base Hospital	LBH	120
Liverpool Hospital	LIV	246

	REPORT ID	2022
Logan Hospital	LOG	93
Lyell McEwin Hospital	LMH	237
Mackay Base Hospital	MKY	105
Maitland Hospital	TMH	49
Manning Base Hospital	MBH	118
Maroondah Hospital	MAR	146
Mater Hospital Brisbane	MSB	106
Nepean Hospital	NEP	249
North West Regional Hospital	NWR	94
Northeast Health Wangaratta	NHW	49
Northern Beaches Hospital	NBH	173
Orange Health Service	OHS	127
Prince of Wales Hospital	POW	151
Princess Alexandra Hospital	PAH	178
QEII Jubilee Hospital	QII	169
Queen Elizabeth Hospital	QEH	89
Redcliffe Hospital	RED	121
Robina Hospital	ROB	321
Rockhampton Hospital	ROK	132
Royal Adelaide Hospital	RAH	337
Royal Hobart Hospital	RHH	151
Royal Melbourne Hospital	RMH	203
Royal North Shore Hospital	RNS	120
Royal Perth Hospital	RPH	479
Royal Prince Alfred Hospital	RPA	196
Ryde Hospital	RYD	106
Sir Charles Gairdner Hospital	SCG	284
St George Hospital	STG	175
St Vincent's Hospital Darlinghurst	SVD	125
St Vincent's Hospital Melbourne	SVM	153
Sunshine Coast University Hospital	SCU	286
Tamworth Hospital	TAM	104

(continued page 13)

The patient level report includes data from 97 hospitals. In 2022, 16,395 hip fracture records were contributed for the calendar year: 13,016 records from 76 Australian hospitals and 3,379 records from 21 New Zealand hospitals.

Contributing hospitals are listed below with their three-letter report identifier and the number of records contributed for the 2022 calendar year. All New Zealand hospitals and 71 Australian hospitals have elected to be identified in this report.

All 117 eligible hospitals completed the facility level audit for 2022.

PATIENT LEVEL AUDIT

AUSTRALIAN HOSPITALS

	REPORT ID	2022
The Alfred	TAH	241
The Northern Hospital	TNH	206
The Prince Charles Hospital	PCH	521
The Sutherland Hospital	TSH	83
The Wesley Hospital	###	39
Toowoomba Hospital	TWB	179

	REPORT ID	2022
Townsville Hospital	TSV	206
Tweed Hospital	TWE	68
Wagga Wagga Base Hospital	WGG	148
Werribee Mercy Hospital	WMH	23
Westmead Hospital	WMD	239
Wollongong Hospital	TWH	232

FACILITY LEVEL AUDIT

NEW ZEALAND HOSPITALS

Auckland City Hospital
Christchurch Hospital
Dunedin Hospital
Gisborne Hospital
Hawkes Bay Hospital
Hutt Hospital

Middlemore Hospital
Nelson Hospital
North Shore Hospital
Palmerston North Hospital
Rotorua Hospital
Southland Hospital

Taranaki Base Hospital
Tauranga Hospital
Timaru Hospital
Waikato Hospital
Wairarapa Hospital
Wairau Hospital

Wellington Hospital
Whakatane Hospital
Whanganui Hospital
Whangarei Base Hospital

AUSTRALIAN HOSPITALS

New South Wales

Armidale Hospital
Bankstown-Lidcombe Hospital
Bathurst Base Hospital
Blacktown Hospital
Bowral and District Hospital
Campbelltown Hospital
Canterbury Hospital
Coffs Harbour Base Hospital
Concord Hospital
Dubbo Base Hospital
Gosford Hospital
Goulburn Base Hospital
Grafton Hospital
Hornsby Ku-ring-gai Hospital
John Hunter Hospital
Lismore Base Hospital
Liverpool Hospital
Maitland Hospital
Manning Base Hospital
Nepean Hospital
Northern Beaches Hospital
Orange Health Service
Port Macquarie Base Hospital
Prince of Wales Hospital
Royal North Shore Hospital
Royal Prince Alfred Hospital
Ryde Hospital
Shoalhaven District Memorial Hospital

St George Hospital
St Vincent's Hospital
Darlinghurst
South East Regional Hospital,
Bega
Tamworth Base Hospital
The Sutherland Hospital
The Tweed Hospital
The Wollongong Hospital
Wagga Wagga Base Hospital
Westmead Hospital

Victoria

Albury Wodonga Health
Ballarat Health Service
Bendigo Health
Box Hill Hospital
Cabrini Malvern
Dandenong Hospital
Frankston Hospital
Geelong Hospital
Goulburn Valley Health
Shepparton
Latrobe Regional Hospital
Maroondah Hospital
Mildura Base Hospital
Northeast Health Wangaratta
Royal Melbourne Hospital
Sandringham Hospital
South West Healthcare
Warrnambool

St Vincent's Hospital
Melbourne
The Alfred
The Austin Hospital
The Northern Hospital
Werribee Mercy Hospital
Western Health (Footscray)

Queensland

Bundaberg Hospital
Cairns Base Hospital
Gold Coast University
Hospital
Hervey Bay Hospital
Ipswich Hospital
Logan Hospital
Mackay Base Hospital
Mater Hospital Brisbane
Princess Alexandra Hospital
QEII Jubilee Hospital
Redcliffe Hospital
Robina Hospital
Rockhampton Base Hospital
Sunshine Coast University
Hospital
The Prince Charles Hospital
The Wesley Hospital
Toowoomba Hospital
Townsville Hospital

Western Australia

Albany Hospital
Bunbury Regional Hospital
Fiona Stanley Hospital
Geraldton Regional Hospital
Joondalup Health Campus
Royal Perth Hospital
Sir Charles Gairdner Hospital

South Australia

Flinders Medical Centre
Lyell McEwin Health Service
Mount Gambier Hospital
Royal Adelaide Hospital
The Queen Elizabeth Hospital

Tasmania

Launceston General Hospital
North West Regional Hospital
Royal Hobart Hospital

Northern Territory

Alice Springs Hospital
Royal Darwin Hospital

Australian Capital Territory

Canberra Hospital

HIP FRACTURE CARE CLINICAL CARE STANDARD

The Hip Fracture Care Clinical Care Standard was released in 2016 by the Australian Commission on Safety and Quality in Health Care, in collaboration with the Health Quality and Safety Commission New Zealand. The Clinical Care Standard plays a role in ensuring the delivery of high-quality hip fracture care by describing the components of care that should be provided to older people admitted with a hip fracture.

The Hip Fracture Care Clinical Care Standard contains seven quality statements and 16 indicators. The next sections of this report detail results from both the patient and facility level audits against the Hip Fracture Care Clinical Care Standard quality indicators. The quality statements and indicators enable the calculation of a quantitative measure of care processes, structures, or outcomes. The ANZHFR continues to report on outliers against each indicator, which can be used by clinicians or health service providers to identify areas of high-quality care, or areas that may require review.



QUALITY STATEMENT 1:

Care at presentation

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.



QUALITY STATEMENT 2:

Pain management

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.



QUALITY STATEMENT 3:

Orthogeriatric model of care

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.



QUALITY STATEMENT 4:

Timing of surgery

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.



QUALITY STATEMENT 5:

Mobilisation and weight bearing

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.



QUALITY STATEMENT 6:

Minimising risk of another fracture

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.



QUALITY STATEMENT 7:

Transition from hospital care

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.

ANZHFR GOLDEN HIP AWARDS 2022

The Golden Hip award was initiated by the Scottish Hip Fracture Audit to promote and reward better health care for people with hip fractures.

In 2022, the best performing and most improved hospitals in Australia and New Zealand were recognised for their achievements against the Hip Fracture Care Clinical Care Standard quality indicators.

The **New Zealand Golden Hip Awards** were held as part of the NZ Hip Fest in Wellington. **North Shore Hospital** won the Golden Hip award for best performing hospital for the second year running. **Hutt Hospital** won the Golden Hip award for most improved.

The **Australian Golden Hip Awards** were announced at the Binational Hip Fest in Melbourne. **Sunshine Coast University Hospital** won the Golden Hip award for best performing hospital. **The Sutherland Hospital** won the Golden Hip for most improved.

The ANZHFR congratulates the winners and all finalists on their achievements providing high-quality hip fracture care.

NEW ZEALAND FINALISTS: BEST PERFORMING HOSPITAL

North Shore Hospital (Winner)
Palmerston North Hospital
Middlemore Hospital
Tauranga Hospital
Waikato Hospital

NEW ZEALAND FINALISTS: MOST IMPROVED HOSPITAL

Hutt Hospital (Winner)
Southland Hospital
Tauranga Hospital



Dr Min Yee Seow
Top Performing Hospital NZ: North Shore Hospital



Ms Irene Puran, Ms Anne Taylor and Dr Jo Williams
Most Improved Hospital NZ, Hutt Hospital

AUSTRALIAN FINALISTS: BEST PERFORMING HOSPITAL

Sunshine Coast University Hospital, QLD (Winner)
Albany Hospital, WA
Concord Repatriation General Hospital, NSW
Fiona Stanley Hospital, WA
Prince of Wales Hospital, NSW
Princess Alexandra Hospital, QLD
Robina Hospital, QLD
Royal Melbourne Hospital, VIC
Royal North Shore Hospital, NSW
Townsville University Hospital, QLD

AUSTRALIAN FINALISTS: MOST IMPROVED HOSPITAL

The Sutherland Hospital, NSW (Winner)
The Northern Hospital, VIC
Westmead Hospital, NSW



Dr Annette Holian (President, Australian Orthopaedic Association), A/Professor Catherine McDougall (Co-Chair, ANZHFR), Dr Stephen Murray (Geriatrician, SCUH), Ms Nicol Lightbody (Clinical Nurse Consultant, Orthopaedics, SCUH)
Top Performing Hospital Australia: Sunshine Coast University Hospital, QLD (SCUH)



Most improved hospital Australia: The Sutherland Hospital, NSW

DATA QUALITY, CAVEATS AND LIMITATIONS

The patient level report includes data from 97 hospitals. In 2022, 16,395 hip fracture records were contributed for the calendar year: 13,016 records from 76 Australian hospitals and 3,379 records from 21 New Zealand hospitals.

CAVEATS

- › The figures in this report include data from Australia and New Zealand for all records with an ED arrival, in-hospital fracture, or transfer date, from midnight 1 January 2022 to midnight on 31 December 2022.
- › Figures in the patient level report only include records where data is available.
- › Hospitals must have contributed at least 10 patient records during the relevant calendar year to be included in the patient level report.
- › All figures adhere strictly to a minimum 10 records required rule, other than 120-day follow-up where all available records are included.
- › Where the figure has featured in previous years, average bars from the previous four reports are included for comparison. If the variable has been reported for less than five years, all available average bars are reported.
- › New Zealand has elected to identify all hospitals with a hospital specific code. Five Australian hospitals have chosen not to be identified and have been randomly assigned a number that has been used consistently throughout this report. The number has been provided to the principal investigator for each hospital. Where the hospital has never been identified, the number has been consistently used for all years. The number will not be allocated to any other hospital in a future report.
- › The facility level report includes aggregated data only. Responses were received from all 117 hospitals invited to participate.

COMPLETENESS

Completeness refers to the number of variables completed per record over the number of variables eligible to be completed for that patient. The Registry utilises automated and manual data completeness checks for each record. When logged into the Registry, users can view the percentage of variables completed per record and details of missing variables. In 2022, completeness was 99% for New Zealand hospitals and 98% for Australia.

CORRECTNESS

Correctness refers to the accuracy of the data entered into each data field. The ANZHFR utilises data validation rules and inbuilt date/time sequence checks to reduce the possibility of incorrect data being entered. Pop-up warnings alert users if the data falls outside any of the specified limits, which assists users to identify potentially incorrect data. Yearly validation checks built into the Registry database also allows users to review any outliers (values that appear too high or low).

The ANZHFR has also released a quality audit tool. The tool enables participating sites to check the quality of a random selection of 10% of records entered into the registry (up to a maximum of 25 records for high volume sites). Undertaking the audit is voluntary. The ANZHFR received valuable feedback around the benefits and challenges associated with completing the audit and will continue to work with sites to enhance the value of the quality audit tool, which will be made available again later this year.

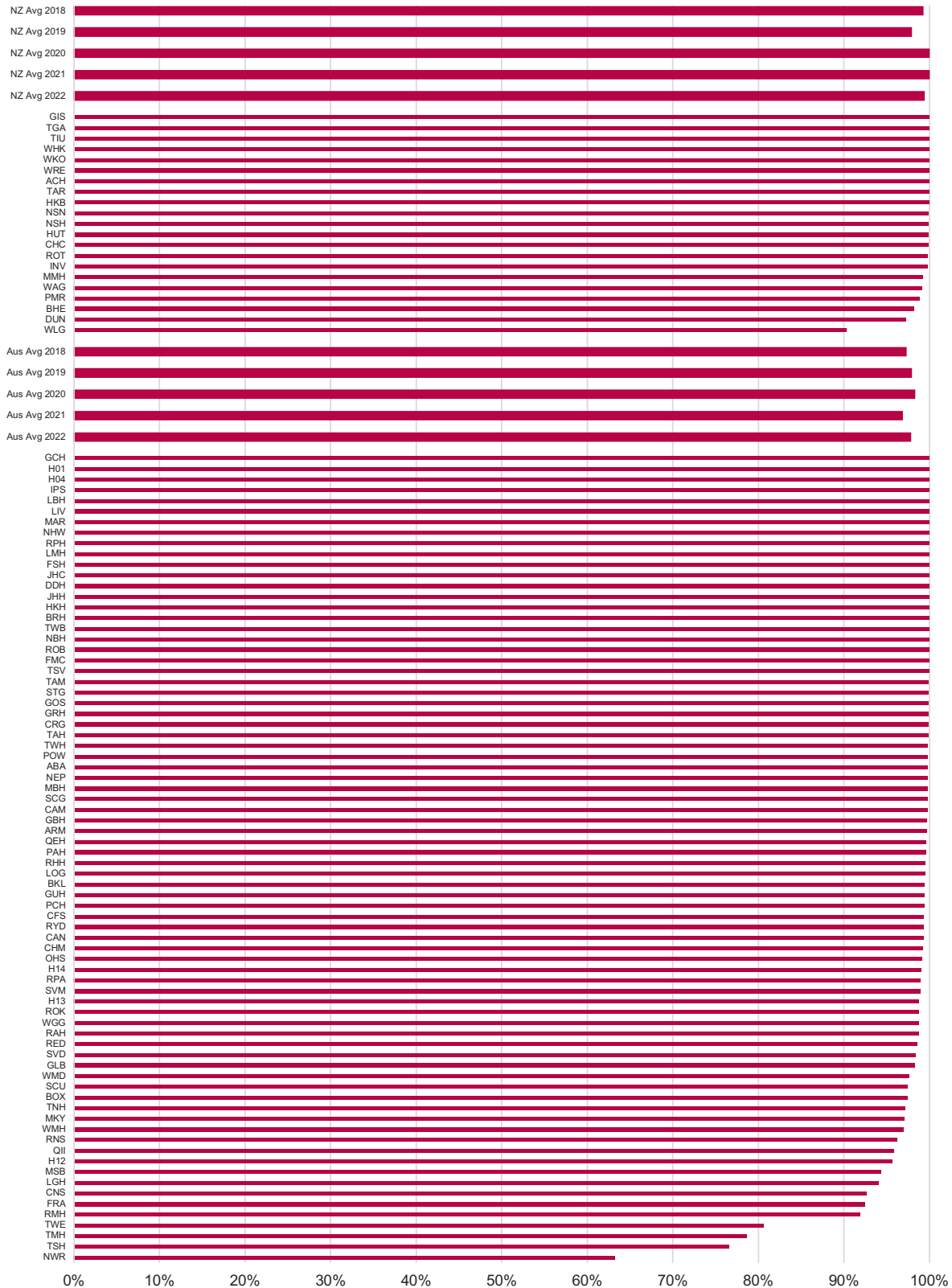
CAPTURE/ASCERTAINMENT

Capture/Ascertainment refers to the proportion of eligible patients that are captured by the Registry. High levels of capture allow the findings to be generalised to the whole population. If the capture rate is low, selection bias may be introduced where patients included or excluded are systematically different from each other. This may affect the generalisability of the findings.

In New Zealand, the number of hip fracture cases in the registry can be compared with the discharge coding from the National Minimum Data Set (NMDS). The numbers are extracted in March for the previous calendar year during which the data collection took place. There is minimal change in the numbers after this date and this provides a good comparator with which to judge ascertainment. Ascertainment has increased from 20% in 2016 to 86% in 2022. This has remained consistent over the last four years and reflects sustained hospital participation and refined data collection systems over time.

In Australia, ascertainment is difficult to source due to jurisdictional differences in the collection and reporting of data. The ANZHFR hopes to be able to report this information for Australia in the future.

FIGURE I Data completeness







PATIENT LEVEL AUDIT

SECTION 1: DEMOGRAPHICS

FIGURE 2 Sex

Females comprised 70% of New Zealand and 66% of Australian hip fracture patients, respectively.

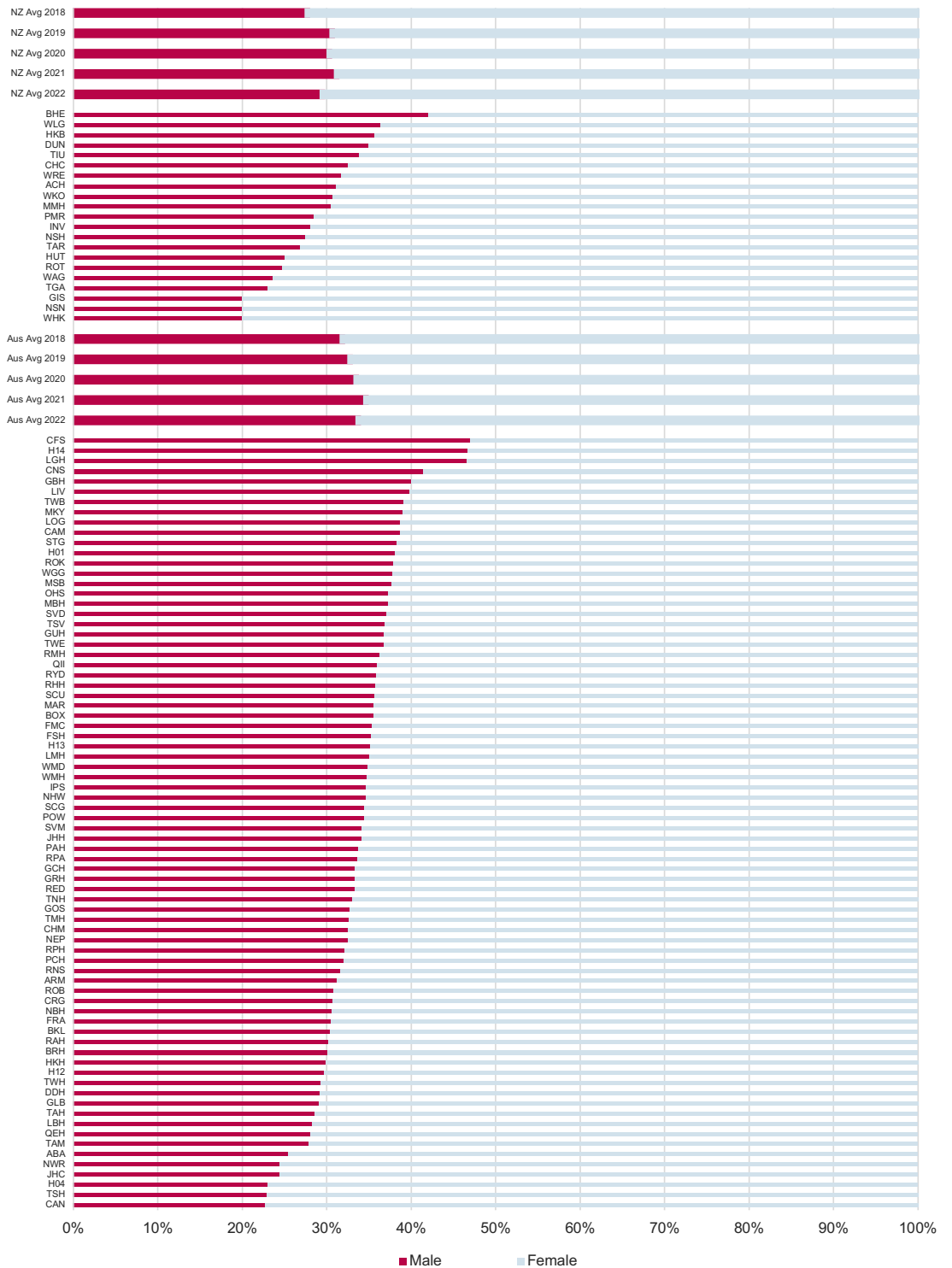


FIGURE 3 Age at admission

The average age of hip fracture patients was 83 years (SD = 9) in New Zealand and 82 years (SD = 10) in Australia. In Australia and New Zealand, the median age was 84 years. People aged 90 years and older made up 26% of hip fracture patients in New Zealand and 25% in Australia. Figure 3 shows the distribution of hip fracture patients by 10-year age bands, and sites are sorted by the proportion of patients aged ≥ 90 years.

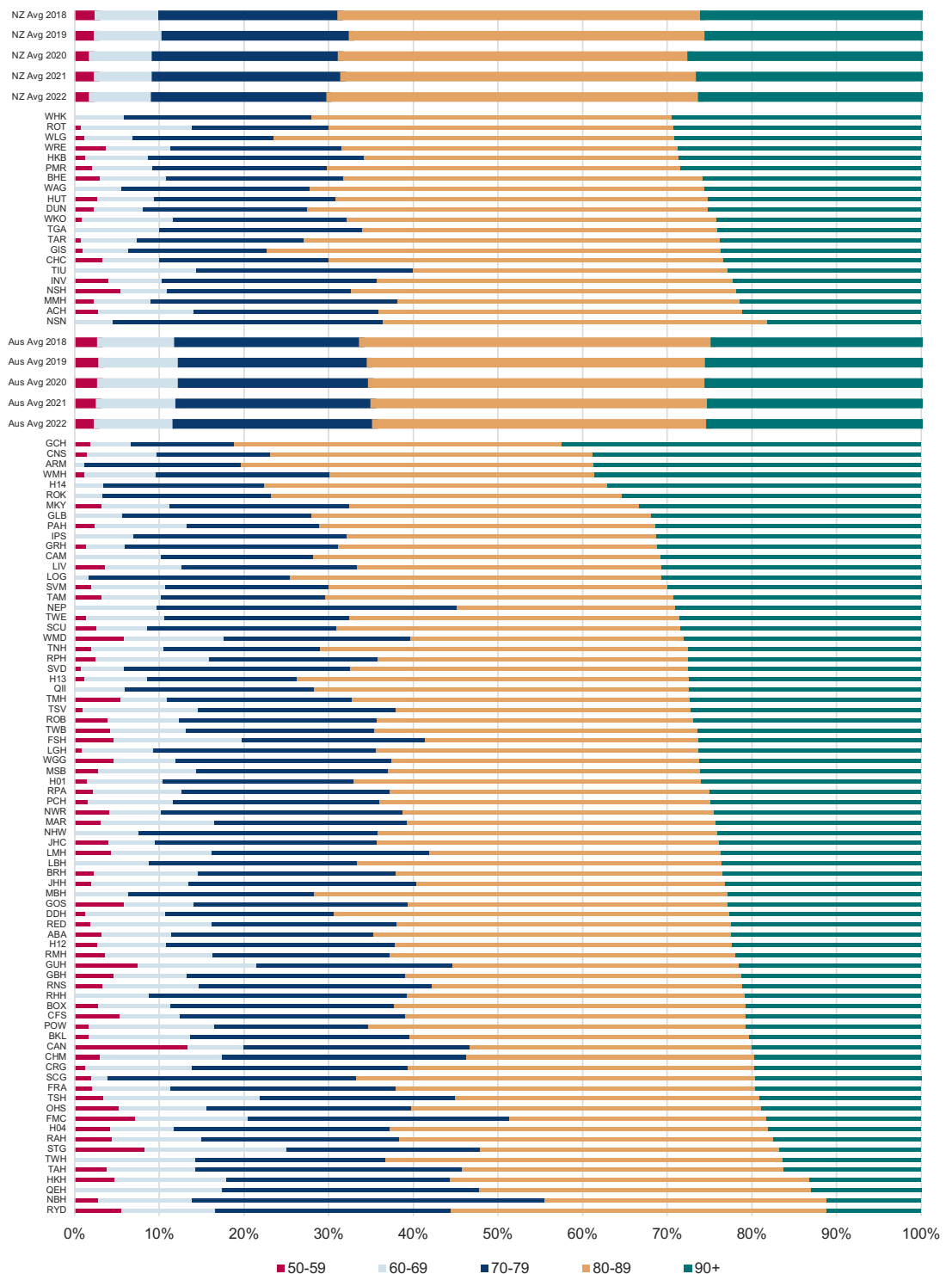


FIGURE 4 New Zealand ethnicity

New Zealand ethnicity has been reported using a prioritised ethnicity approach, which allocates each person to a single ethnic group using agreed prioritisation tables. The ANZHFR used the prioritisation for level 2 codes, which prioritises Māori where a person identifies with more than one ethnic group.

Maori and Pacific Peoples made up 5% of the New Zealand reported data. The majority of New Zealand hip fracture patients reported being of European origin.

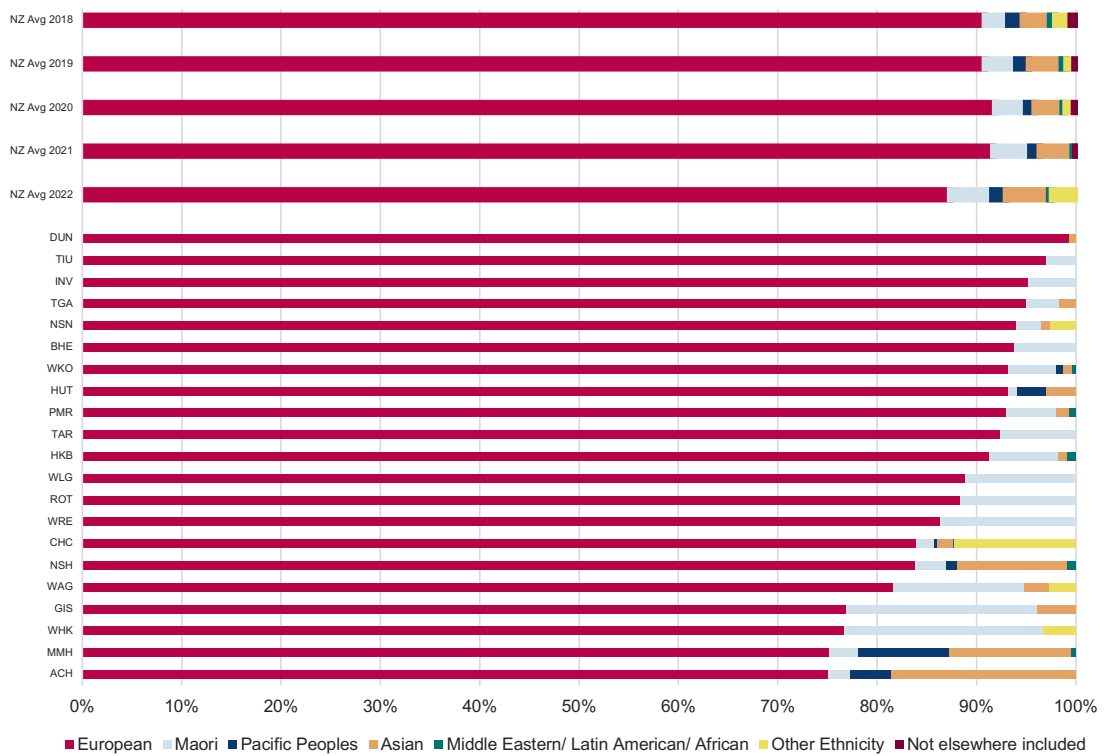




FIGURE 5 Usual place of residence

Seventy-one percent of people in New Zealand and 73% of people in Australia lived at a private residence prior to admission to hospital with a hip fracture. Twenty-eight percent of people in New Zealand and 26% in Australia were admitted from residential aged care.

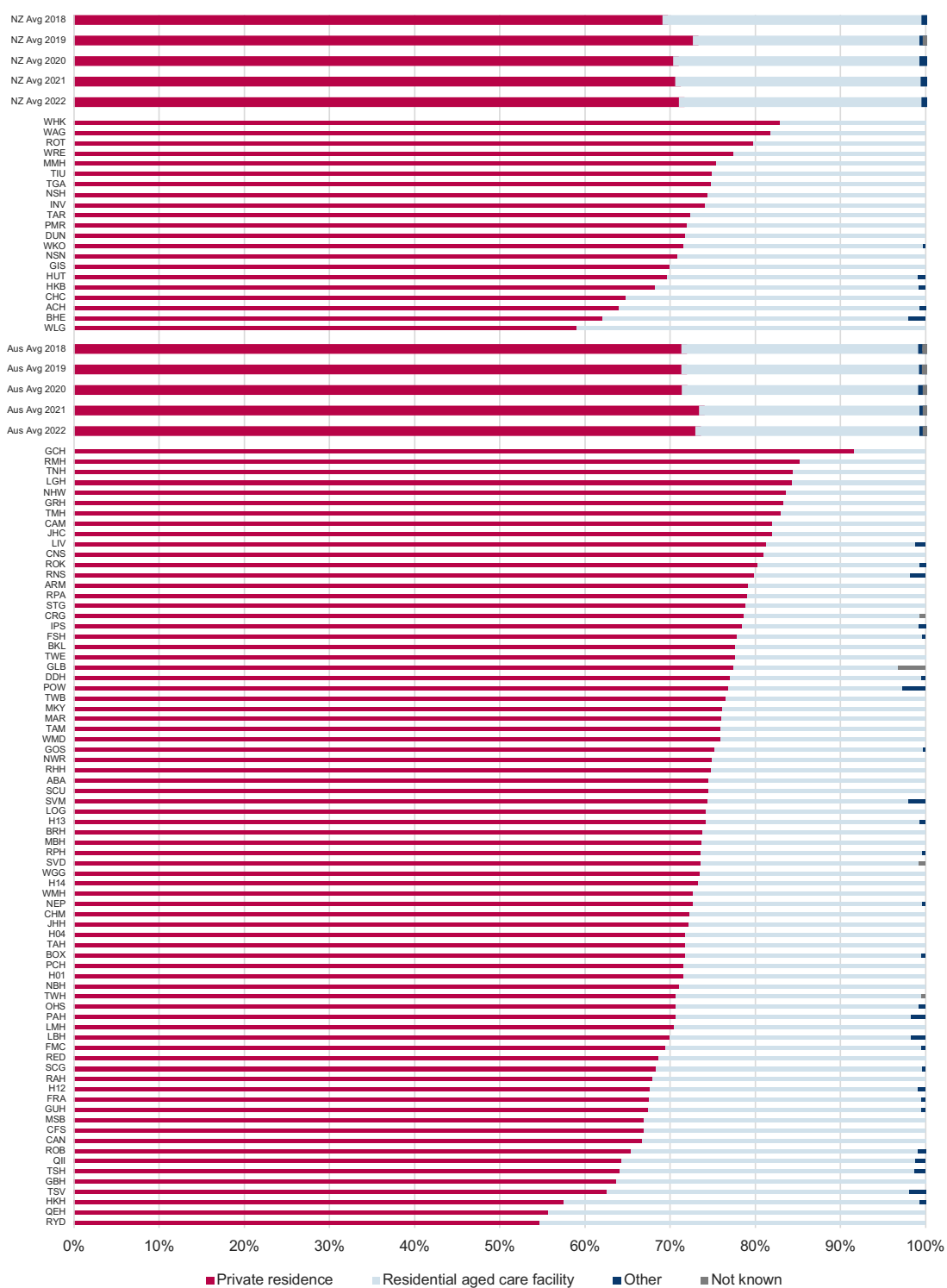


FIGURE 6 Preadmission cognitive status

Thirty-eight percent of patients in New Zealand and Australia had pre-existing impaired cognition or known dementia. Cognitive status prior to admission was not known for 3% of patients in New Zealand and 2% of patients in Australia.

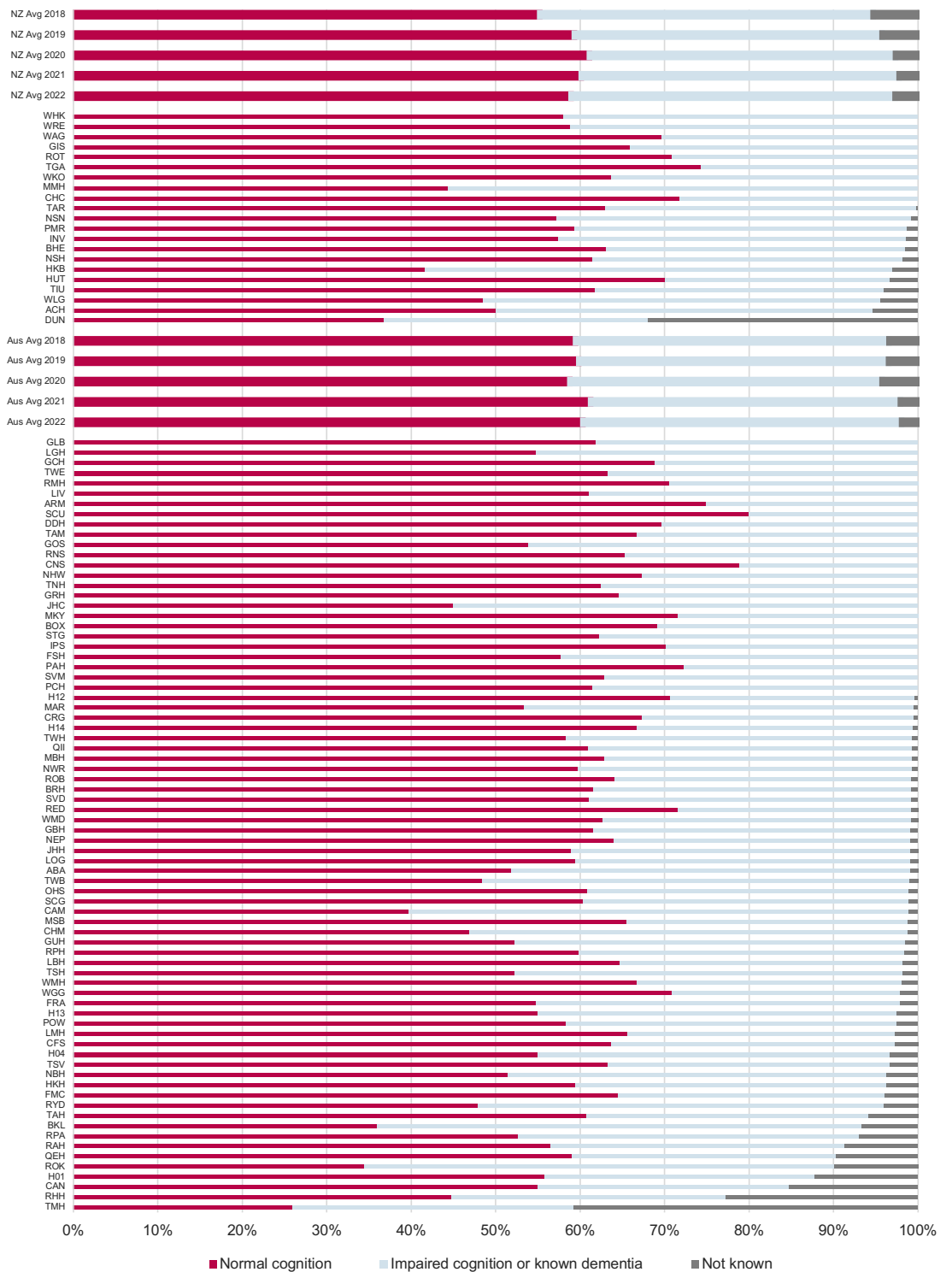
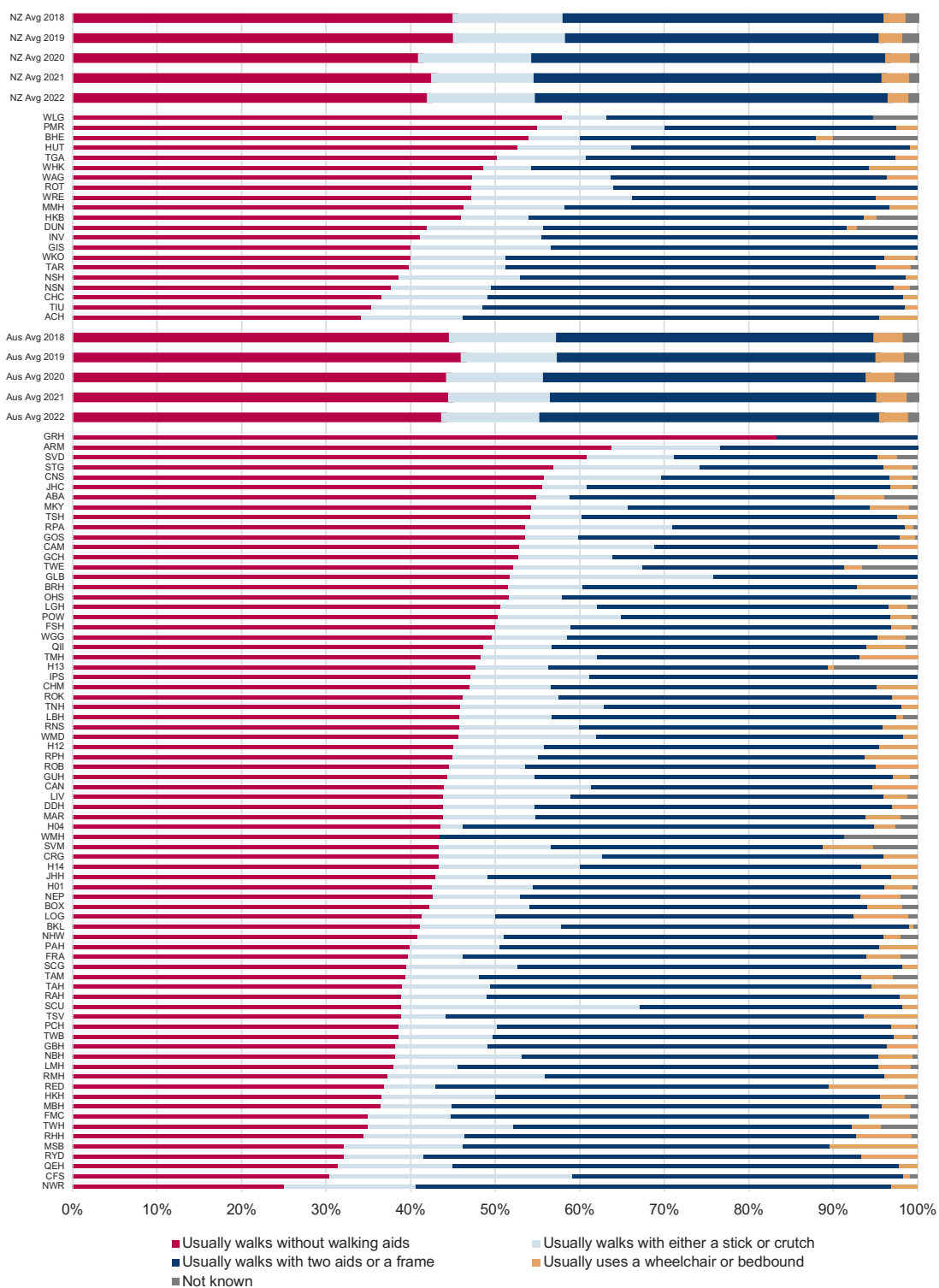


FIGURE 7 Preadmission walking ability

Prior to admission, 42% of hip fracture patients in New Zealand and 44% in Australia walked without a walking aid.





myHIP myvoice

In 2022, the Registry commenced two pilot projects under a body of work known as “My Hip My Voice”.

HIP FRACTURE
In Australia and New Zealand about 20,000 older people break their hip each year

Someone you care about has suffered a broken hip and you may have suddenly found yourself needing to learn a few new things.

WHAT IS A HIP FRACTURE?

- A hip fracture describes the same injury to the hip as a broken hip. It is a break in the ball of the hip.
- The hip is a ball and socket joint where the thigh bone (femur) fits into the pelvis. A hip fracture is when the thigh bone breaks near to where the ball fits into the socket.
- A hip fracture is broken into two different types depending on which side of the upper thigh bone is broken. You might hear the doctors talking about these different types of hip fractures.
- The words you might hear them for are a hip fracture are: “intracapsular” fracture, “subcapital” fracture, “trochanteric” fracture, “intertrochanteric” fracture, “subtrochanteric” fracture.
- The common term that most often hear is a simple fall to the most common cause.
- While a broken hip is more common in older people, it can happen at any age.
- Being an older person is usually the main reason for a broken hip. This is called osteoporosis.

30 MINUTES

Visit www.anzfr.org for more information

THINKING AND MEMORY

Monitoring changes in memory and thinking (cognitive function) is important while in hospital because cognitive function affects recovery after hip fracture

Someone you care about has had a hip fracture. There is some information about how memory and thinking can impact their recovery.

Dementia is a memory condition that affects thinking, memory and communication (language function).

- Dementia is a state of confusion that can occur after a person suffers a broken hip.
- Dementia can occur in an older person after any operation, especially if they already have difficulties with their memory and thinking.
- Dementia is not the same as delirium but having dementia increases the risk of delirium.
- Delirium is usually reversible.
- Delirium can be caused by many things, but the most common causes in people with a hip fracture are:
 - Pain
 - Noting an anaesthetic
 - New medications including strong painkillers
 - Dehydration
 - Disorientation
 - Infection
 - Drug or alcohol withdrawal
- Symptoms of delirium are not always obvious, and family and friends are often the first people to notice changes in someone's thinking.

37% of patients with a hip fracture already had memory problems prior to being admitted to hospital with their hip fracture?

Visit www.anzfr.org for more information

CONSUMER REPORTING PILOT

The My Hip My Voice project aimed to increase consumer access to meaningful information on hip fracture care. The outcome of this project was the development of several new resources for patients, families and friends.

These new resources include a consumer dashboard, an updated version of the My Hip Fracture Care Guide, and a video explaining the hip fracture journey through hospital. There are also six information sheets educating carers about different aspects of hip fracture care and providing them with practical suggestions of ways they can be involved in the care of their friend or family member.

The resources can be found at anzhfr.org/resourcesforpatients/ and offer a variety of ways to enhance the information provided to older people and their carers after a hip fracture.

Carer resources for families and friends provide practical information to help you support someone when they have gone to hospital with a broken hip.

AVOIDING DISCOMFORT AND MANAGING PAIN

Keeping people with a hip fracture comfortable and out of pain improves recovery and avoids complications in the short, medium and longer term

Someone you care about has suffered a broken hip and you may have suddenly found yourself needing to learn a few new things.

While the injury has been assessed and treatment is being planned, it is important to help the patient comfortable and out of pain. This will reduce the risk of medication before their surgery.

A local injection in the groin called a “nerve block” can reduce pain by numbing the hip.

The nerve block can be given in the emergency department and will provide relief for several hours.

Pain relief surgery from simple painkillers through to more powerful painkillers.

After surgery, avoiding discomfort allows the person with the hip fracture to start moving again.

Medication is available after the operation to help with standing and sleeping is not too uncomfortable.

Some medications can cause confusion in the person with the fracture who may also need medication to manage this.

People with an existing condition with their memory and thinking like dementia may experience their discomfort or pain in unusual ways. Some examples of unusual behaviours are being agitated or very restless.

7/10 hip fracture patients in Australia and New Zealand received pain relief from the ambulance officers or in the first 30 minutes after arriving at hospital

30 MINUTES

Visit www.anzfr.org for more information

HIP FRACTURE SURGERY

Surgery within 48 hours of arriving at the first hospital is recommended for optimal recovery and to avoid complications

Someone you care about has suffered a broken hip and you may have suddenly found yourself needing to learn a few new things.

The main reason for surgery is to relieve pain and get people back on their feet as soon as possible.

The type of surgery recommended by the doctors will depend on the type of fracture, how bad the break is, the person's age and medical condition, and their level of ability and activity before breaking their hip.

Early surgery (within 48 hours) is recommended because older people are vulnerable to complications from prolonged bed rest such as blood clots, pressure sores and pneumonia.

Early surgery has been shown to be better for the recovery of mobility and independence.

The consultant orthopaedic surgeon leads a team that includes doctors who are at various stages of their training in orthopaedic surgery.

The consultant orthopaedic surgeon oversees hospital care in the operating theatre. They have years of specialist training.

- The type of operation will depend on where the hip is broken and will do one of the following:
 - Fix the fracture with a plate and screws
 - Fix the fracture with a cement only
 - Fix the fracture with a rod inside the thigh bone
- Surgery can be done with a general anaesthetic which puts the patient to sleep and does not numb the operation. Or a regional spinal anaesthetic can be used and this means the patient is conscious but will feel no pain. This can be used with or without sedation, and the sedation means it's unlikely the patient will remember the whole operation.
- Sometimes both general and regional anaesthetic may be used.
- The research shows there is no difference in patient outcomes between the two types of anaesthesia and the decision will be made based on what is best for the individual.

48 HOURS

Visit www.anzfr.org for more information

MOBILISATION AND MOBILITY

Standing up and taking steps the day after surgery (even if it's just a few steps) has been shown to improve walking and other activity, even up to 12 months later

With surgery over, it is time for the person you care for to start moving again. Here's what you need to know to help them take these first steps after their surgery and to prepare for leaving hospital.

The day after the operation is called day 1.

- On day 1, health professionals will offer patient's support to stand up and take some steps.
- In about 48 hours, the support operates to allow patients to stand up with walking weights on the operated leg from Day 2.
- Patients start walking again with some sort of walking aid, commonly a frame, and will be physiotherapist or nurse who support the patient the first time they get out of bed.
- It is common for patients to feel worried, unsure or anxious about getting up and walking, and being after the operation.

Research shows that getting up the day after surgery and making steady gains reduce the risk of complications like blood clots or pneumonia. Patients who have started walking and are more independent up to a year after their broken hip.

Because of this, it's important to encourage them to get out of bed on day 1, unless there is a medical reason that prevents it.

30 MINUTES

Visit www.anzfr.org for more information

REDUCING THE RISK OF FUTURE FRACTURES: OSTEOPOROSIS AND FALL PREVENTION

Patients, carers, and health care teams, working together, can reduce the risk of future falls and fractures

Minimising someone you care about going through treatment for a hip fracture is an experience that you would like to avoid. Here is some information about reducing the risk of a fracture in the future.

A hip fracture that occurs in the context of a pre-existing osteoporosis is the most serious complication of osteoporosis.

To prevent future fractures, it is important to look about bone health, general strength and balance, and nutrition and diet, with the purpose of preventing another fall and fracture.

- Osteoporosis is a condition where bones become thinner and are more likely to break.
- Anyone who has broken their hip from a fall should be treated for osteoporosis.
- There are medications available that can help to improve bone health.

Patients should be assessed for future fall and fracture risk and a plan made to reduce any identified risks.

30 MINUTES

Visit www.anzfr.org for more information

PATIENT REPORTED EXPERIENCE MEASURES (PREM) PILOT

A Patient Reported Experience Measure (PREM) collects the views of consumers as an indirect measure of the quality of the care they receive. The results provide insights into what's important to the patient.

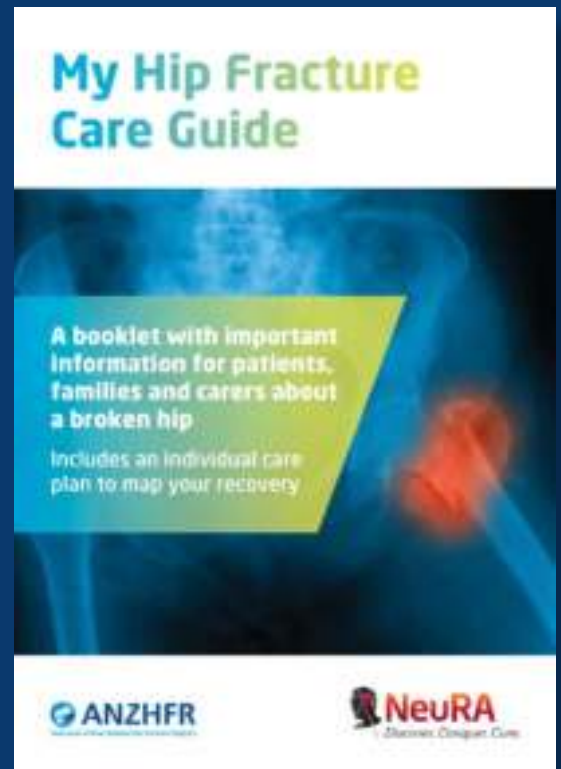
In a pilot program involving nine Australian sites, a patient-reported experience tool was integrated into the ANZHFR, showcasing the feasibility of an electronic PREM.

The evaluation of the hip fracture PREM program revealed the challenges associated with collecting patient and carer experiences in a hip fracture population using an automated process. Nonetheless, patients and healthcare providers responded positively to the program, recognising its potential value in improving the quality of care provided to hip fracture patients.

The ANZHFR would like to thank the pilot sites for their work in trialling the PREM tool: Fiona Stanley Hospital in Western Australia, Northeast Health Wangaratta and Frankston Hospital in Victoria, Lyell McEwin Hospital and Royal Adelaide Hospital in South Australia, Sunshine Coast University Hospital and Toowoomba Hospital in Queensland and Lismore Base Hospital in New South Wales.

All people who experience a hip fracture in Australia are now invited to provide feedback about their experience of hospital care. An invitation to provide feedback is included as part of the My Hip Fracture Care Guide. Patients or carers can scan the QR code to complete 12 multiple choice questions. Answers are anonymous and will be used to improve care for people with a broken hip in the future.

To see a demonstration version of the PREM questionnaire, scan the QR code below:



The My Hip Fracture Care Guide has recently been updated. It provides older people with information about what to expect while in hospital and how to reduce the chance of another broken bone.

It also includes room for the older person and the care team to write down a care plan for recovery after discharge from hospital.

The revised booklet also includes the ANZHFR Patient Information Pamphlet.

The booklets can be downloaded and printed or ordered through the ANZHFR. Contact info@anzhfr.org for more information.

SECTION 2: CARE AT PRESENTATION

FIGURE 8
ASA grade known

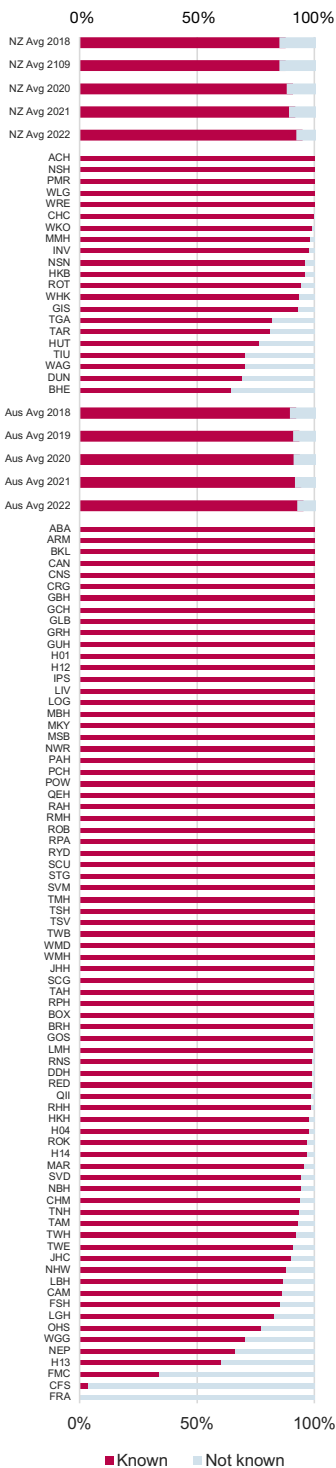
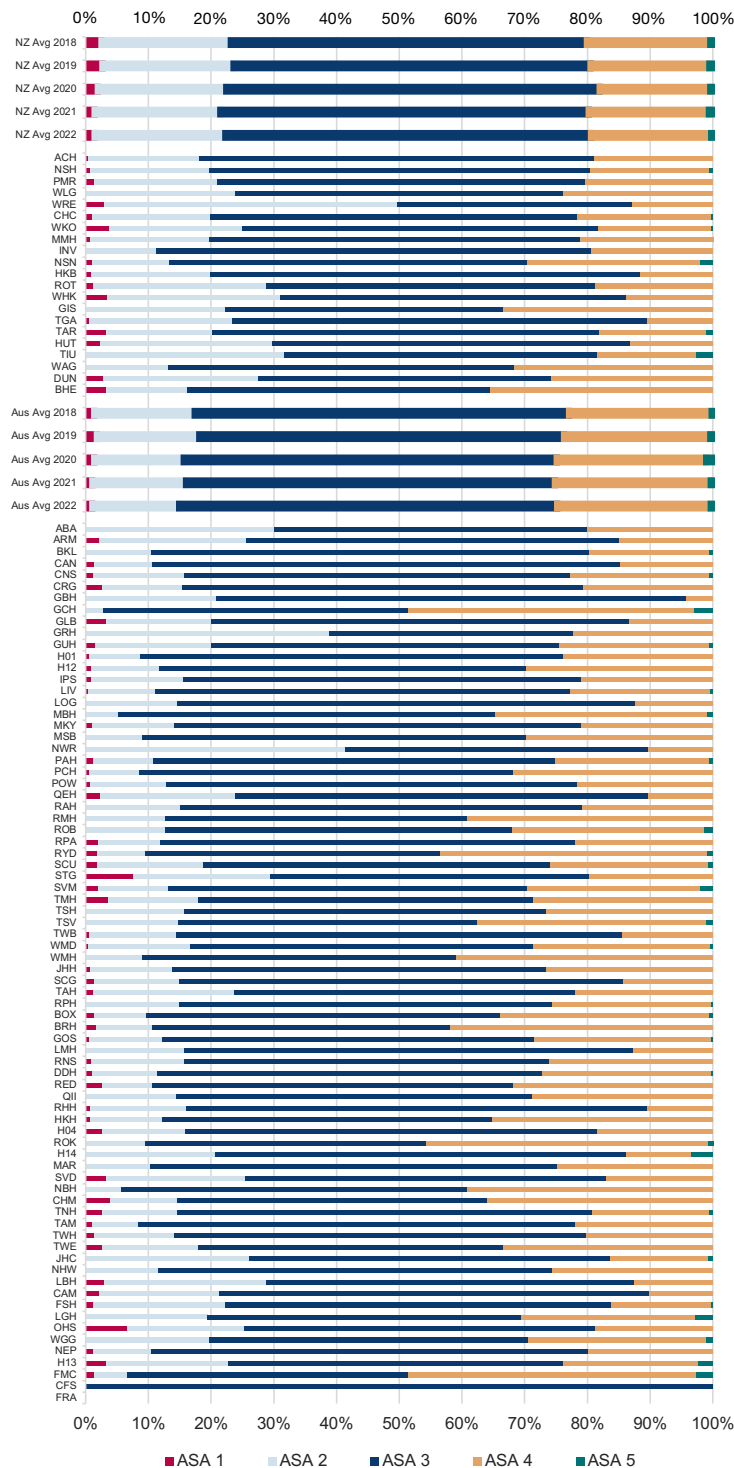


FIGURE 9
ASA grade where ASA is known



ASA grading is a measure of anaesthetic risk. It is often used as a general measure of physical health or comorbidity. Increasing ASA grade is associated with a person's morbidity and mortality risk. Figure 8 shows the proportion of hip fracture patients with ASA grade known continues to increase over time in Australia and New Zealand. Figure 9 shows the grading of anaesthetic risk for patients at each hospital where the ASA grade is known. ASA grade has been used to risk-adjust the mortality rates presented in this report. Reviewing and where needed, increasing, the proportion of patients for whom an ASA grade is recorded as part of the data should be an area of focus for hospitals.



FIGURE 10 Transferred from another hospital

Six percent of hip fracture patients in New Zealand and 14% in Australia were transferred from another hospital for surgical management of their fracture.

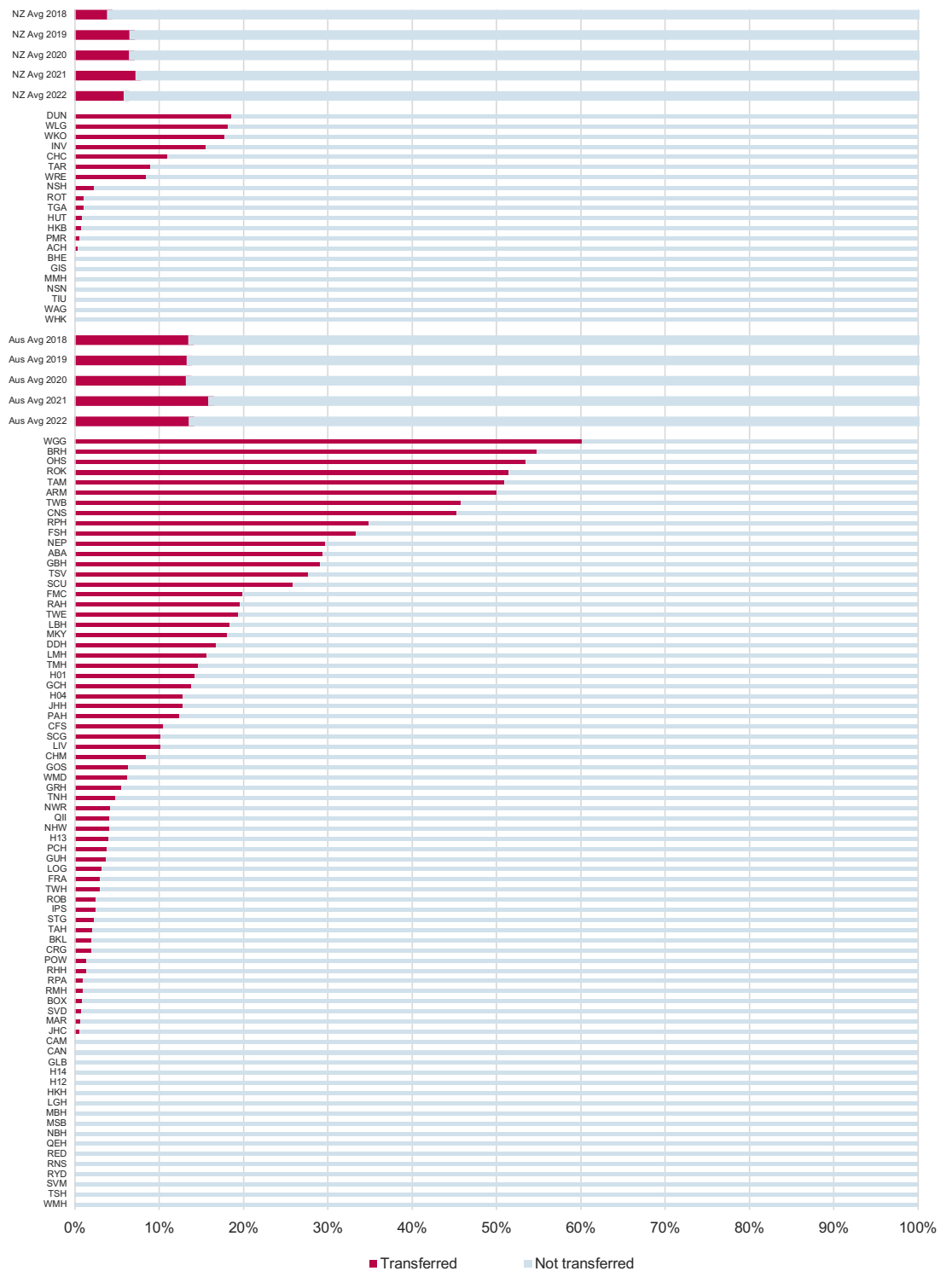
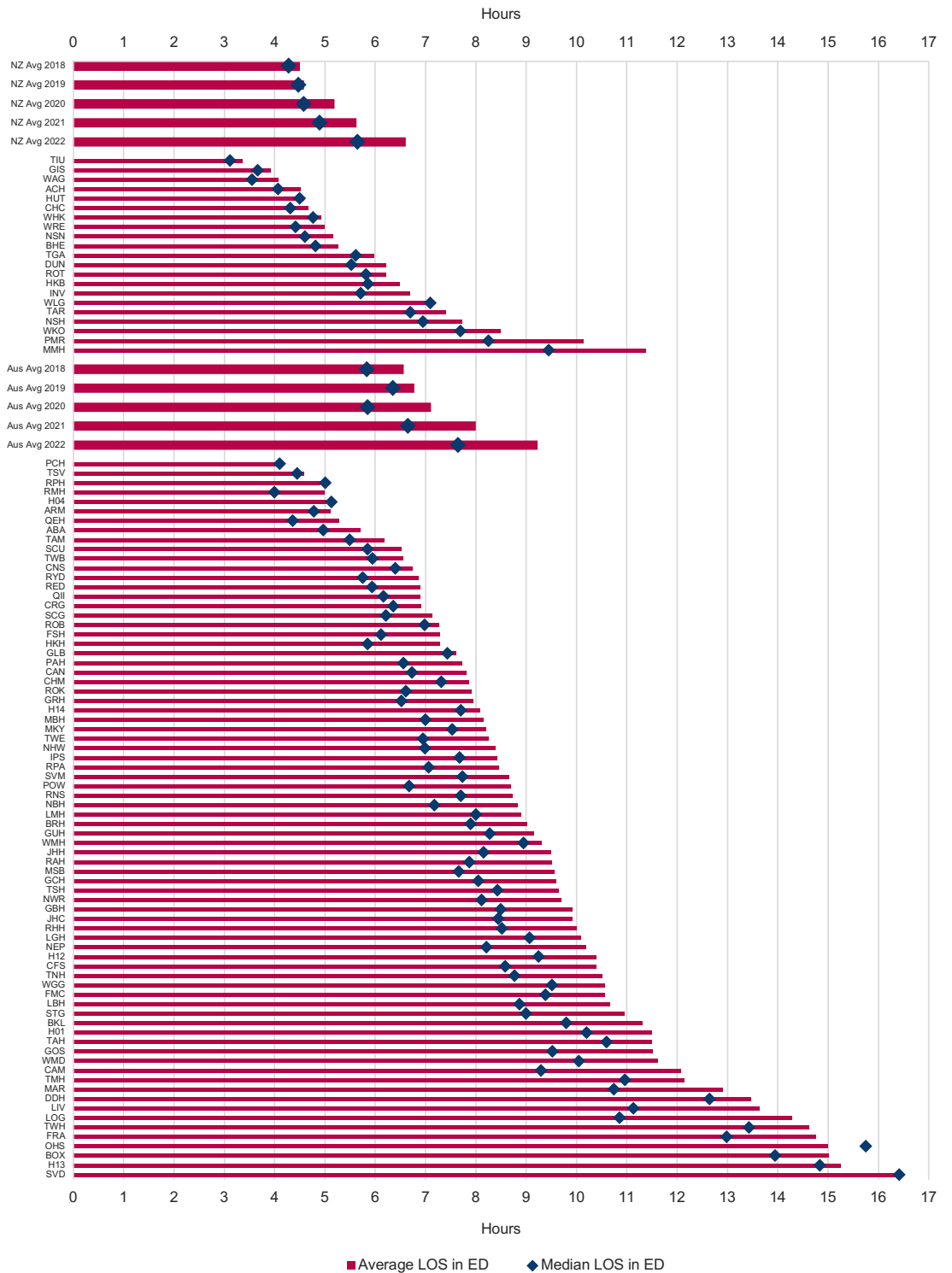




FIGURE II Emergency department (ED) length of stay (LOS)

Average LOS in the ED continues to increase over time in both countries. In 2022, average LOS in New Zealand was 6.6 hours and average LOS in Australia was 9.2 hours. The median LOS in the ED increased to 5.6 hours in New Zealand and 7.7 hours in Australia.



TACKLING THE CHALLENGE OF LONGER TIME IN THE ED

DR CASEY BENNETTS, EMERGENCY PHYSICIAN, QEII JUBILEE HOSPITAL

The ANZHFR has observed increased ED LOS for hip fracture patients over the last year. Multiple factors have contributed to this, and the contributors on any one day, and at each hospital, can vary. Increased patient presentations contribute to ED overcrowding - this limits patient access to appropriate bed spaces to have their care delivered. COVID furlough and staffing shortages further limit the capacity of medical and nursing staff to attend to patients in a timely fashion. Access block into at-capacity hospital inpatient wards is an additional challenge commonly faced by ED's.

NOFEAR TEAM, THE PRINCE CHARLES HOSPITAL

The Prince Charles Hospital orthogeriatric unit has experienced a 30% increase in patients admitted with a diagnosis of fractured neck of femur (NOF). In 2022, our unit admitted 521 patients diagnosed with hip fracture. Despite the 30% increase in numbers over recent years, length of stay in the ED has stayed at 4 hrs. This has been due to a multidisciplinary collaboration between the ED and orthogeriatric unit.

All patients presenting with a suspected hip fracture are put on an ED NOF pathway. This leads to early identification of patients for prioritisation for X-rays

and analgesia, plus prioritisation of nerve blocks. In addition to our NOF pathway, nursing staff utilise a 'Silver Trauma' criterion at triage, where all suspected hip fracture patients are given a Category 2, which is instrumental for early diagnosis and management. This facilitates early ward admission on an interim pathway, whereby the patient is prescribed simple analgesia and intravenous fluids without a full medical / surgical admission being completed in the ED. This is done only if the patient is medically stable.

Our orthogeriatric unit is proactive and flexible to accommodate patients from ED. The model of care as to inpatient bed capacity aims to have a NOF bed available at all times or have an identified patient ready to outlie. This enables both departments to facilitate patient flow and minimise time in ED. Collaborative communication occurs between departments when ED identifies a pre-emptive 'Silver Trauma' as a suspected NOF pathway. ED then links in with the orthogeriatric unit to trigger the process of bed facilitation.

The dedicated collaborative multidisciplinary team understands the frailty and complexity of NOF patients to ensure they receive timely care as per the Hip Fracture Clinical Care Standard. It really exemplifies what we can achieve together despite increasing patient presentations.





This gentleman's experience of a hip fracture was written in the ED by his daughter.

He fell in Residential Aged Care two days prior to transfer to hospital. He subsequently spent 12 hours in the ED at the hospital he presented to, awaiting a bed at another hospital, where he was to be transferred for his surgery.

This delay resulted in ED escalating to the hospital executive and seeking permission to admit the patient to the presenting hospital instead, which occurred. He had surgery 48 hours after arrival to hospital, and approximately 96 hours after his injury.



Delaying the diagnosis and then surgery means extending the pain and recovery. It has been distressing for us as family to witness. It has been devastating for him.

My dad was taken to hospital on a Monday morning. At the hospital, he was diagnosed as having a NOF fracture.

Two days earlier, he had a fallen. This was his second fall in just over a week. After the first fall, he developed a significant haematoma and he was taken to hospital immediately. Scans and x-rays came back clear. This time, he struck his head and must have fallen heavily on his left hip again.

We were told that the staff at the nursing home had assessed him and considered it was not necessary for him to be sent to hospital. An after-hours doctor was called but did not turn up.

On the day of the fall, he was in pain when he was moved around and he was vocal about it. He collapsed again when he was coming back to bed from the toilet and was very fearful of standing up. He kept saying he could not stand but was told he had to stand to get back to bed.

After this incident, he was given a Sara Stedy to move around from bed to toilet and chair.

He was in pain and asked the staff to move him slowly and gently. Changing his incontinence pads, clothes and his wound dressings necessitated more movement. They wanted to give him a shower but he protested and I requested a bed wash.

Dad requested Panadol many times but he was only charted for this 3x/day. I requested Nurofen but they said the doctor had to chart it and it hadn't been ordered.

Over the last two days he has been prodded, pulled, dragged and thrown around "like a log" (his words). He has been in constant pain. On the third day, the nursing home finally sent him to the Emergency Department. Dad being stoic had put up with the pain but this was all so unnecessary.

ED LOS BY AUSTRALIAN STATE

FIGURE 12 New South Wales

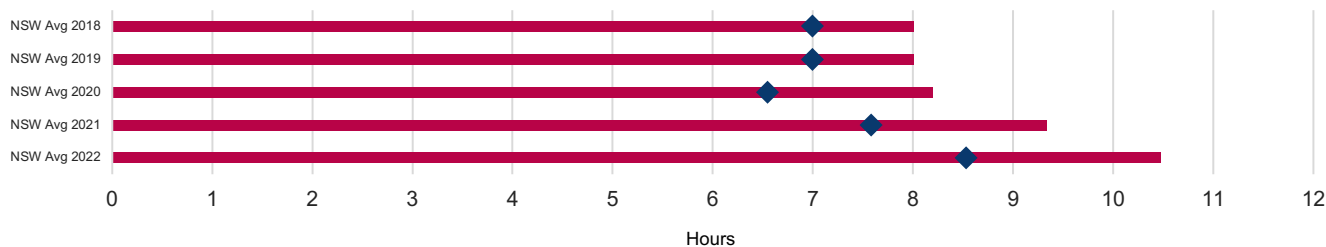


FIGURE 13 Queensland

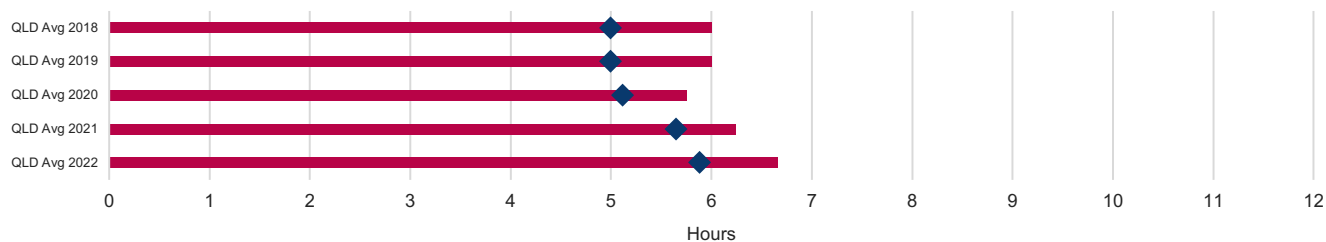


FIGURE 14 South Australia

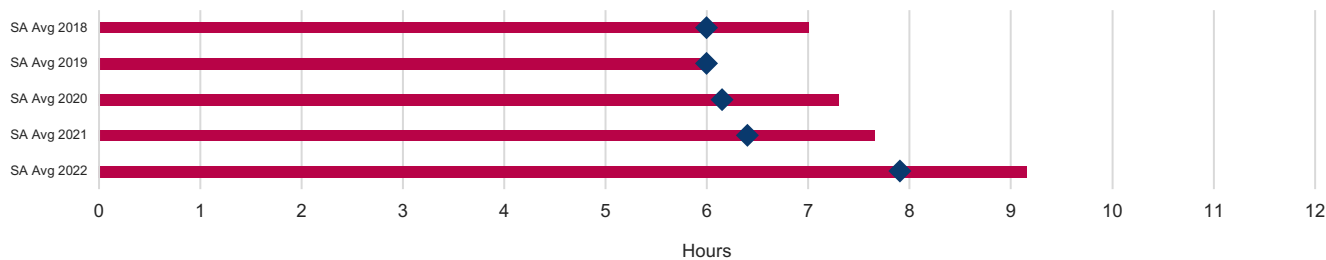


FIGURE 15 Victoria

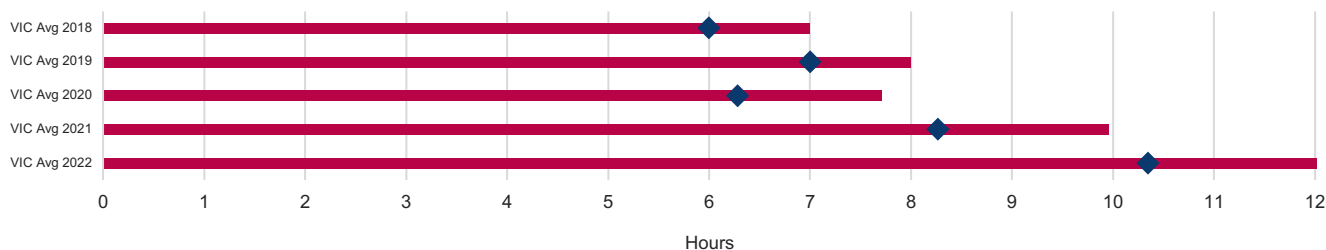


FIGURE 16 Tasmania

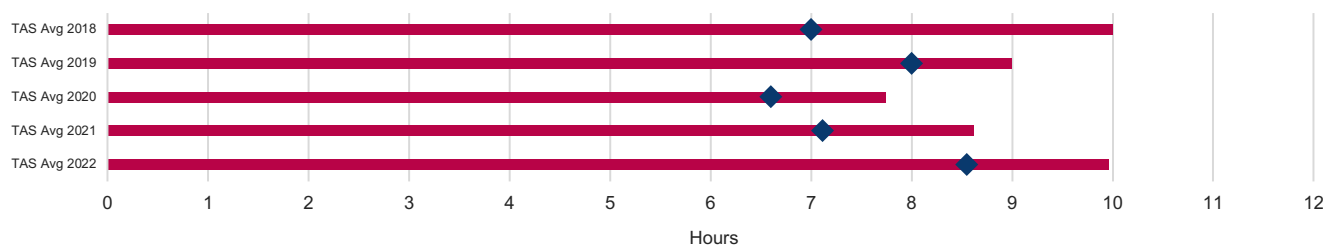
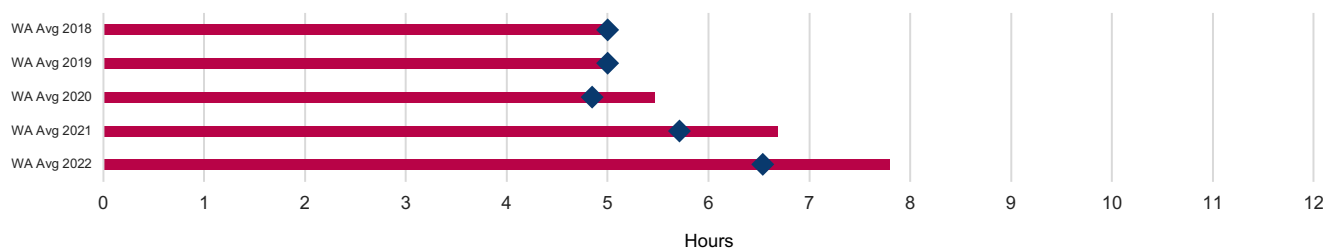


FIGURE 17 Western Australia



■ Average ◆ Median

FIGURE 18 Admission ward type

The proportion of patients admitted to a specific hip fracture or orthopaedic ward was 92% in New Zealand and 87% in Australia. Re-configuration of wards at some hospitals, in response to the COVID-19 pandemic, may have contributed to the proportion of hip fracture patients admitted to outlying wards.

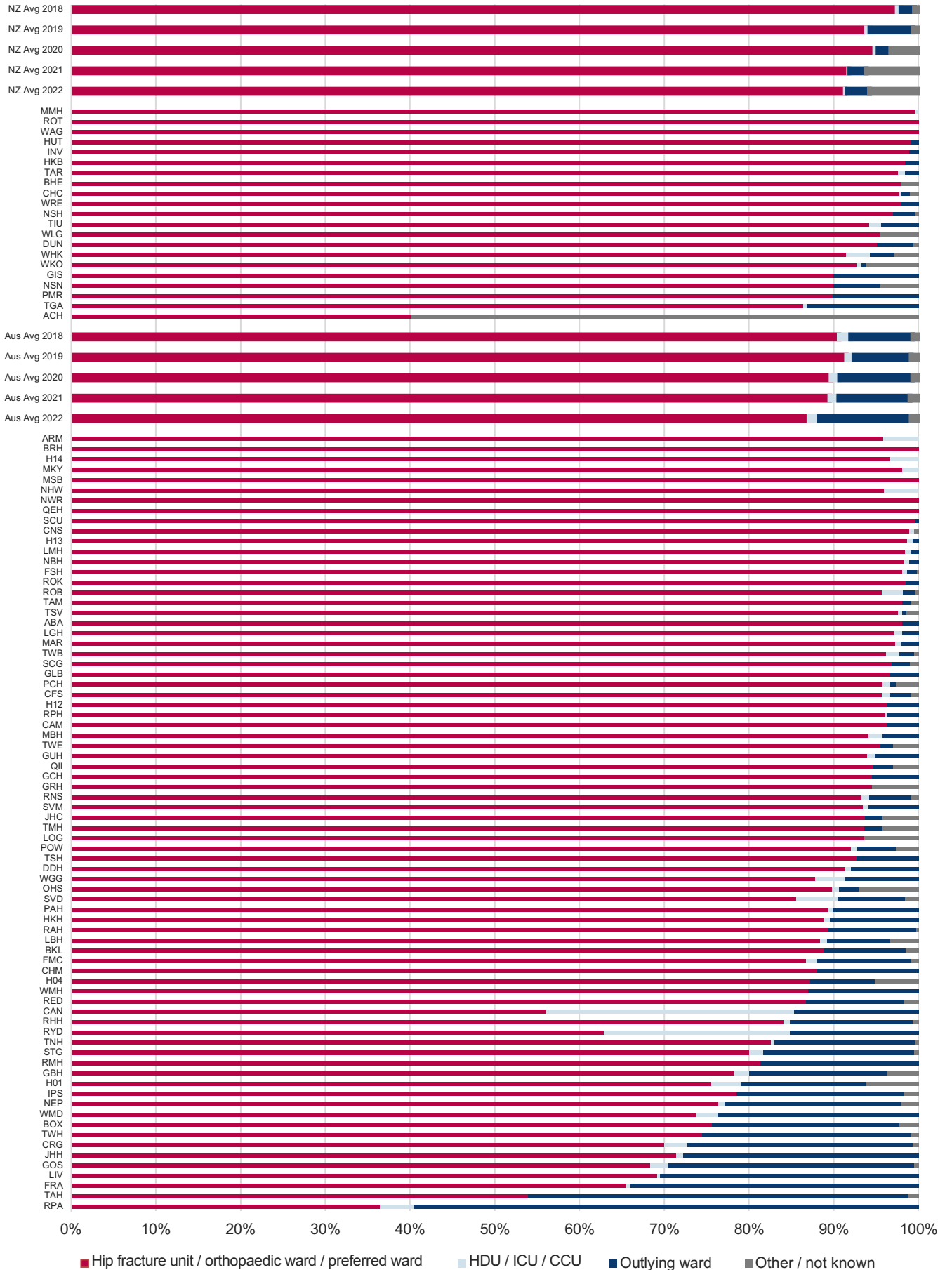


FIGURE 19 Preoperative medical assessment

Forty percent of patients in New Zealand and 58% of patients in Australia were seen by a geriatrician prior to surgery. General physicians, general practitioners or specialist nurses may undertake the preoperative medical assessment where a geriatric medicine service is not available.

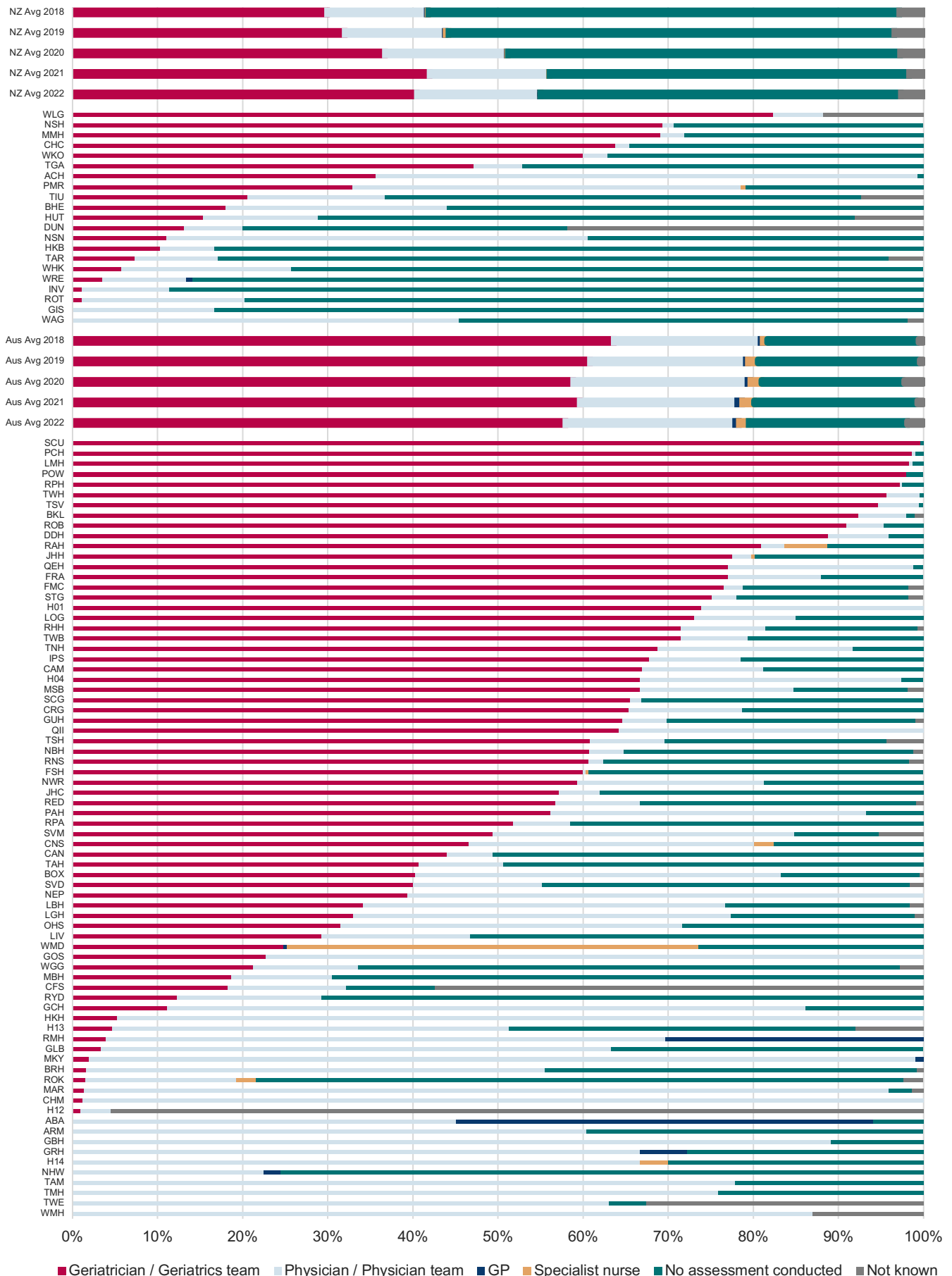
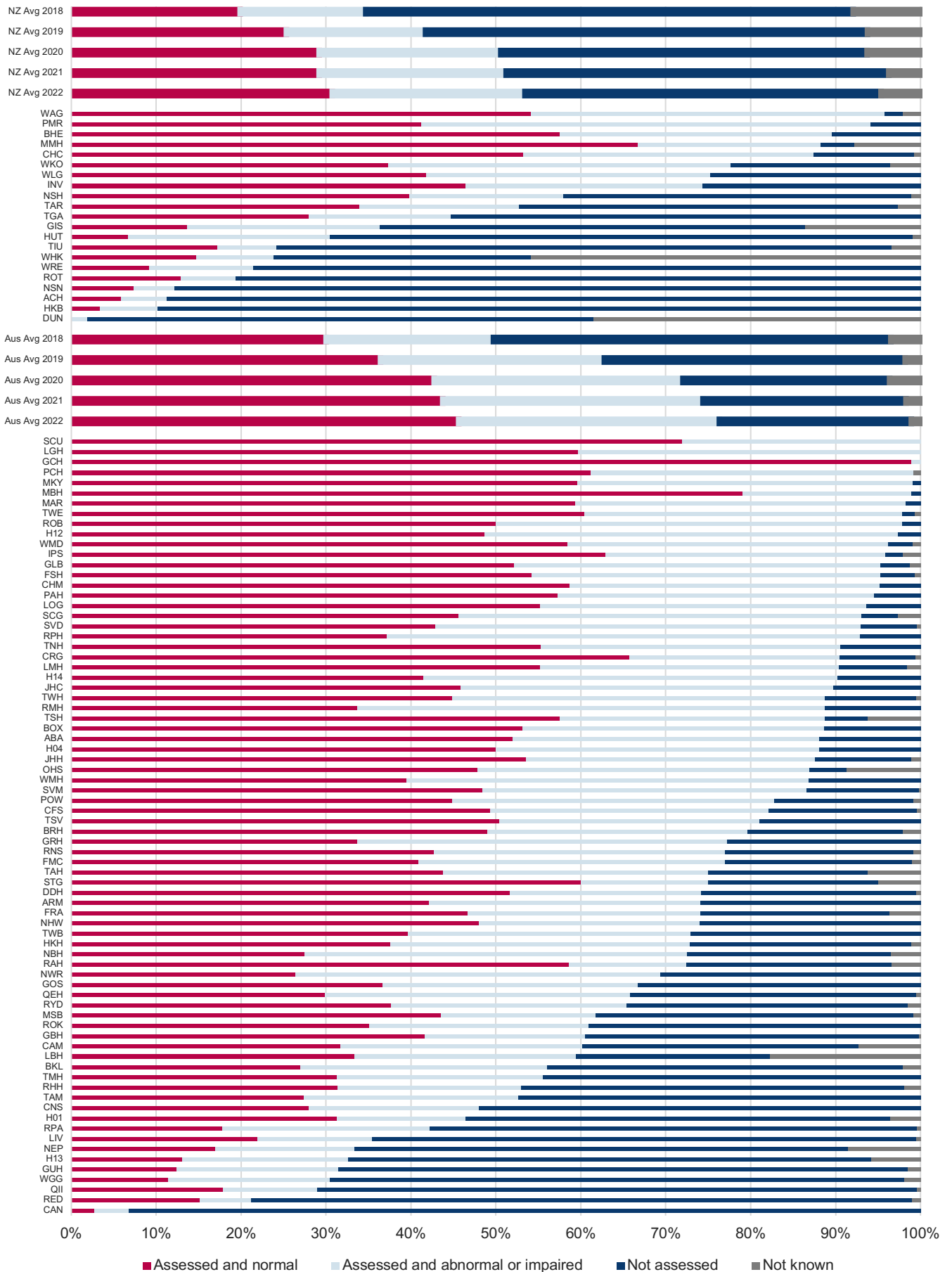


FIGURE 20 Preoperative cognitive assessment for people aged ≥65 years

Australia and New Zealand continue to show a year-on-year increase in preoperative assessment of cognition in hip fracture patients. In New Zealand, 53% of patients aged ≥65 years had their cognition assessed using a validated tool prior to surgery. Forty-two percent of those assessed had impaired or abnormal cognition. In Australia, 77% of patients ≥65 years had their preoperative cognition assessed. Forty percent of those assessed had impaired or abnormal cognition.



PREOPERATIVE COGNITIVE ASSESSMENT BY AUSTRALIAN STATE FOR PEOPLE AGED ≥65 YEARS

FIGURE 21 New South Wales

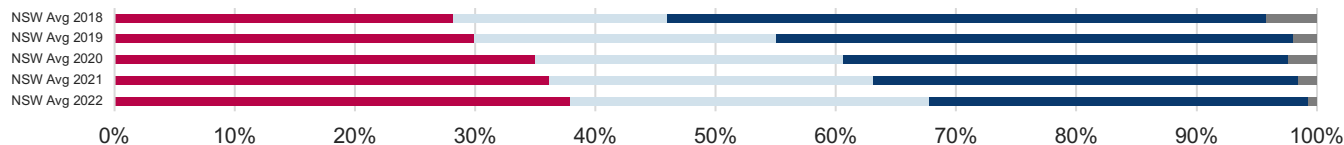


FIGURE 22 Queensland

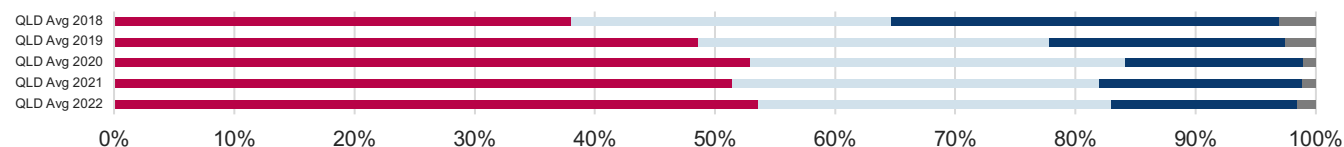


FIGURE 23 South Australia

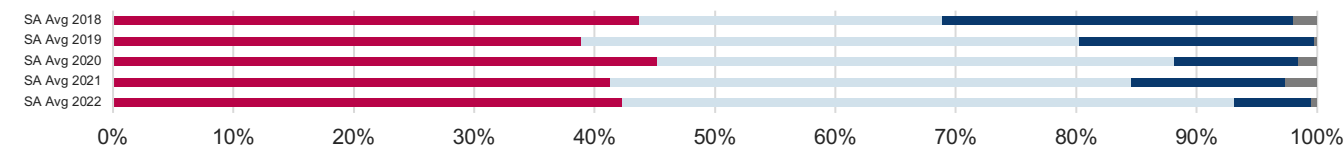


FIGURE 24 Tasmania

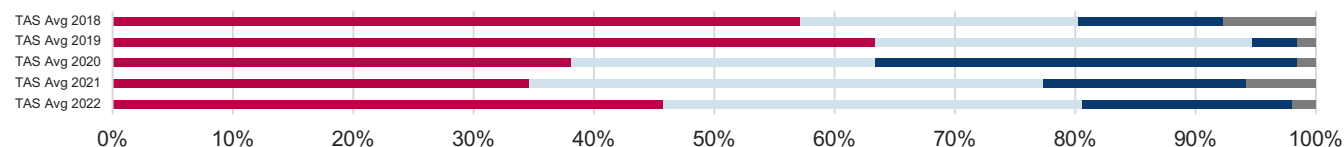


FIGURE 25 Victoria

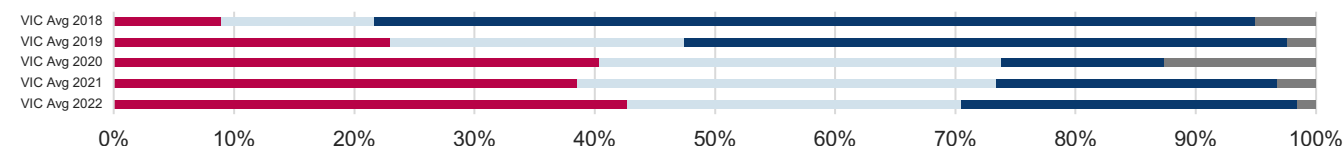
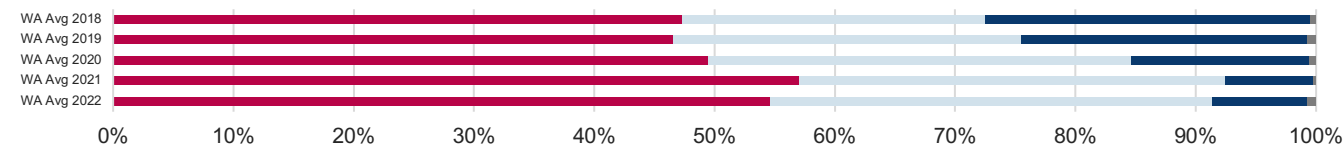


FIGURE 26 Western Australia



■ Assessed and normal ■ Assessed and abnormal or impaired ■ Not assessed ■ Not known

FIGURE 27
Clinical frailty known

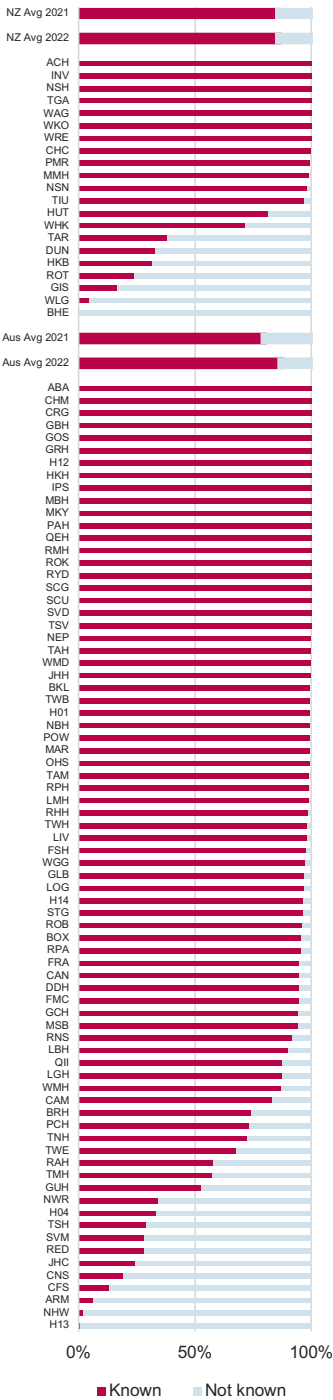
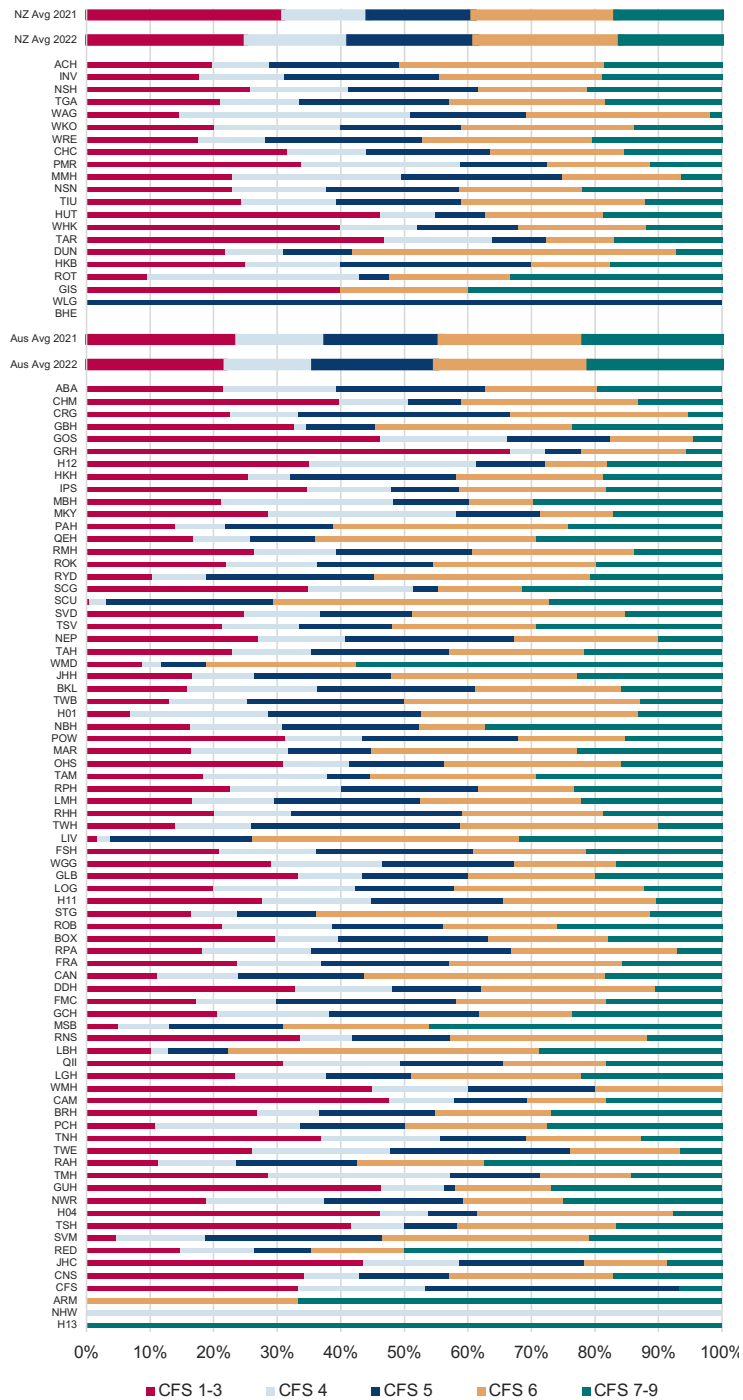


FIGURE 28
Clinical frailty scale



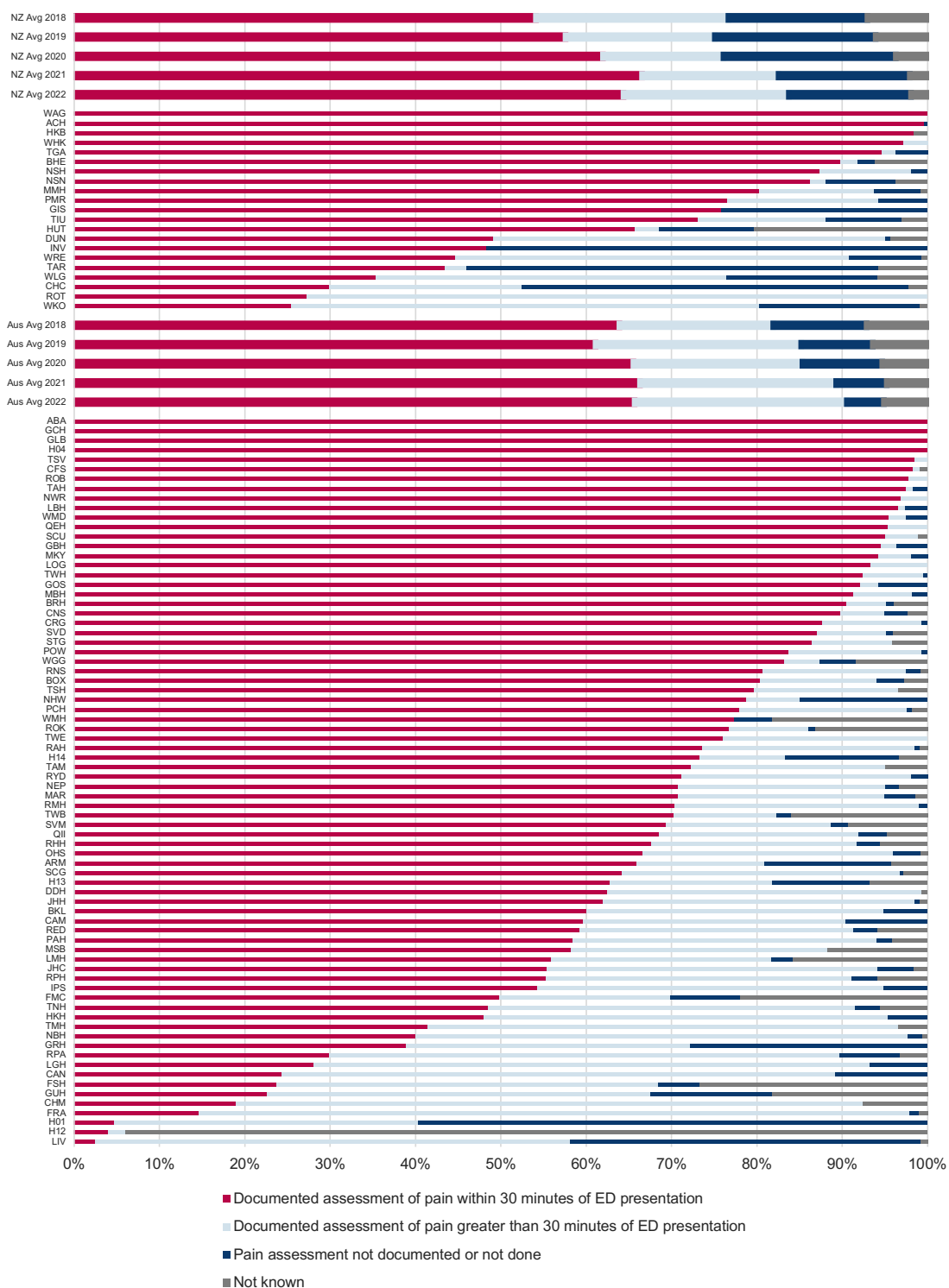
In 2022, the Clinical Frailty Scale (CFS) was known in 86% of hip fracture patients in New Zealand, and 87% in Australia (Figure 27). Figure 28 summarises the CFS results where CFS was known. The CFS is grouped into five categories:

- Robust (CFS 1-3)
- Vulnerable (CFS 4)
- Mildly frail (CFS 5)
- Moderately frail (CFS 6)
- Severely frail (CFS 7-9)



FIGURE 29 Pain assessment within 30 minutes of ED presentation

On average, 64% of New Zealand hip fracture patients and 66% of Australian hip fracture patients had a documented assessment of pain within 30 minutes of presentation.



PAIN ASSESSMENT WITHIN 30 MINUTES OF ED PRESENTATION BY AUSTRALIAN STATE

FIGURE 30 New South Wales

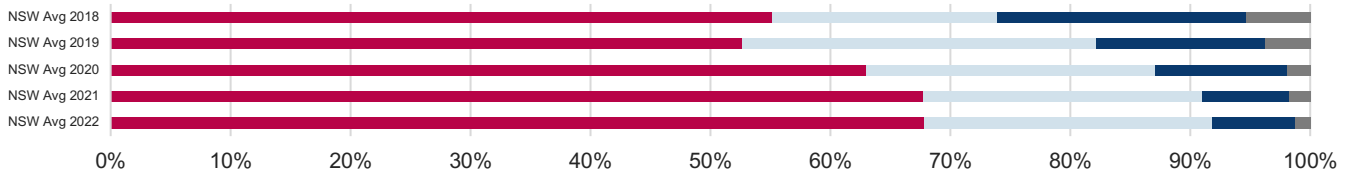


FIGURE 31 Queensland

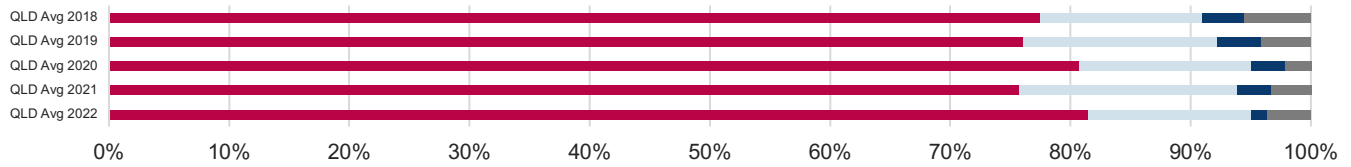


FIGURE 32 South Australia

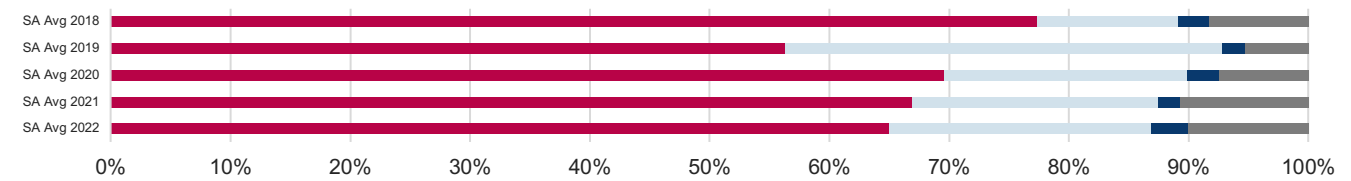


FIGURE 33 Tasmania

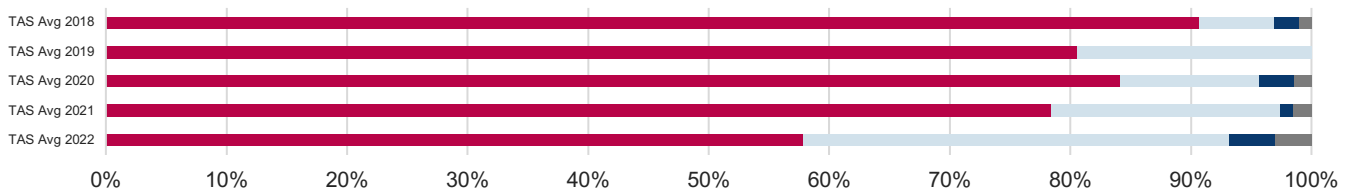


FIGURE 34 Victoria

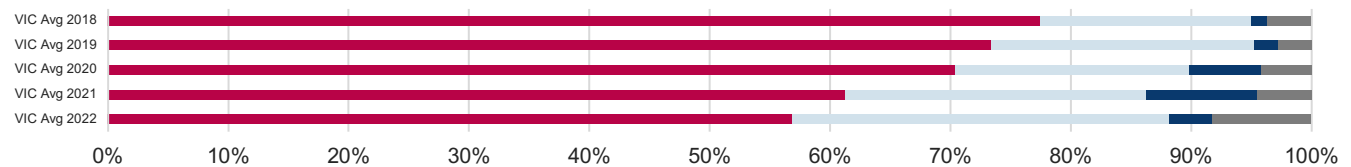
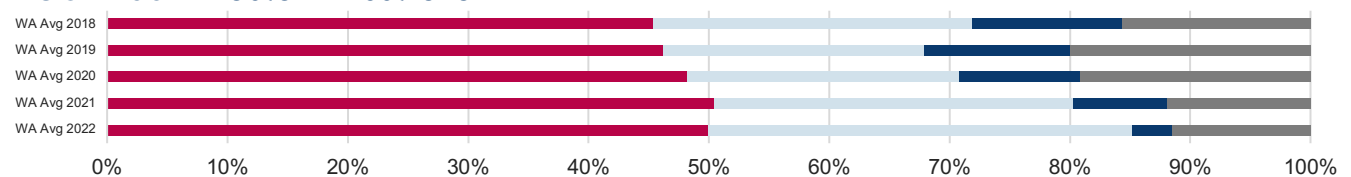


FIGURE 35 Western Australia



■ Documented assessment of pain within 30 minutes of ED presentation
 ■ Documented assessment of pain greater than 30 minutes of ED presentation
 ■ Pain assessment not documented or not done
 ■ Not known



QUEEN ELIZABETH HOSPITAL: NO PAIN – THAT’S THE AIM!

The Queen Elizabeth Hospital (QEH) ED has achieved impressive results in the management of fractured hips:

- › Median ED LOS 4.3 hours.
- › Pain assessment within 30 mins: 95%;
- › Analgesia given within 30 mins: 76%
- › Most nerve blocks at QEH are given before theatre

We have achieved this through a variety of strategies.

We use a hip fracture pathway that is accessed through the electronic medical record and can be immediately downloaded by more junior staff. This details the processes that need to be completed to facilitate transfer of the patient to the ward and provides a quick and easy reference for staff who may be unfamiliar with local processes.

We educate all consultants, registrars and some senior resident medical officers to administer femoral nerve blocks – this minimises the delay in providing comprehensive analgesia before ward transfer.

We also have a system whereby between 22:00 and 06:00, stable and uncomplicated NOF patients can be transferred to the ward without orthopaedic consult. The orthopaedic team are then informed of the admission at 0600 the following morning.

FIGURE 36 Pain management in the ED

Sixty-six percent of hip fracture patients in Australia and New Zealand received analgesia either in transit (by paramedics) or within 30 minutes of arrival at the ED.

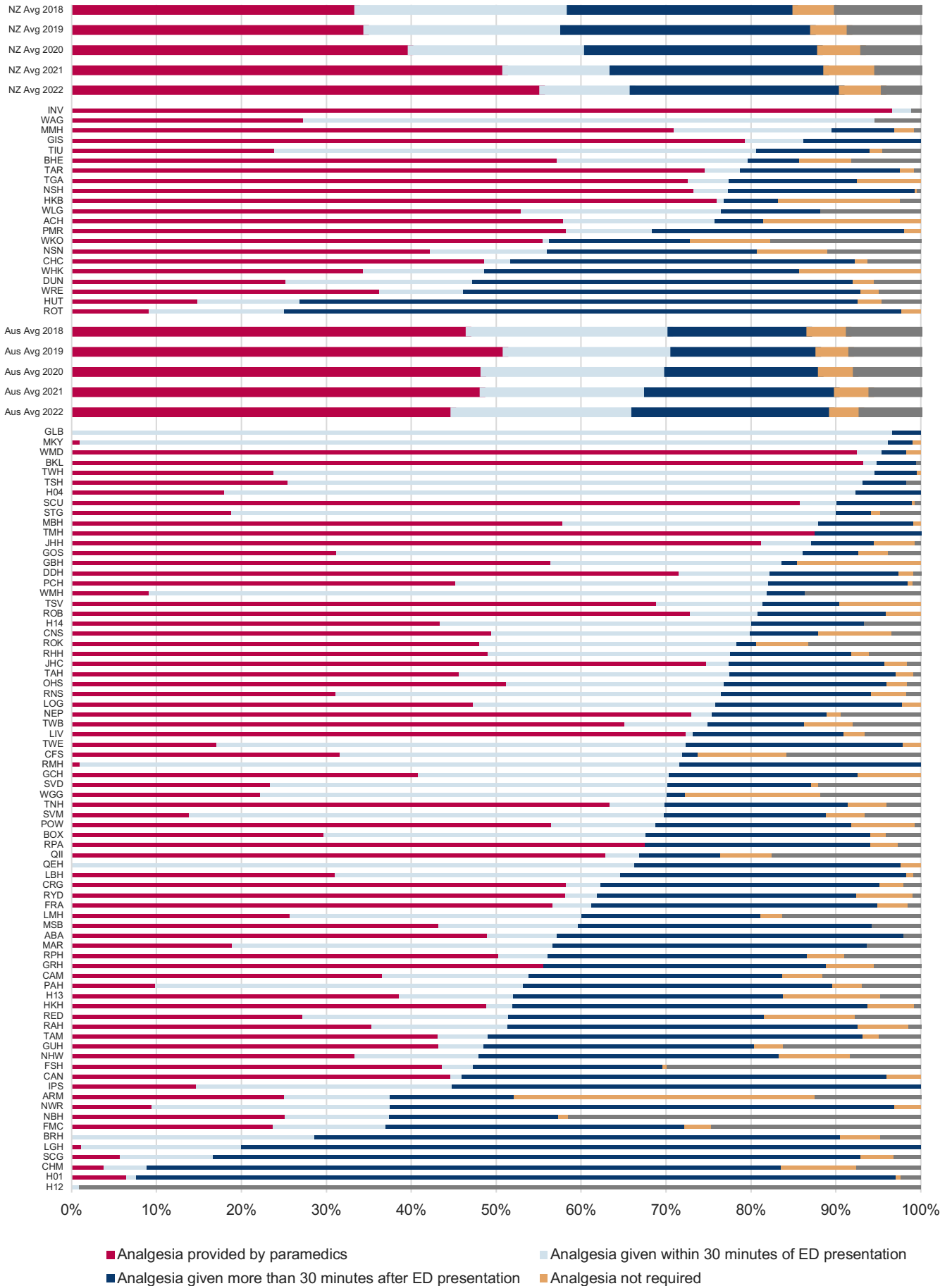
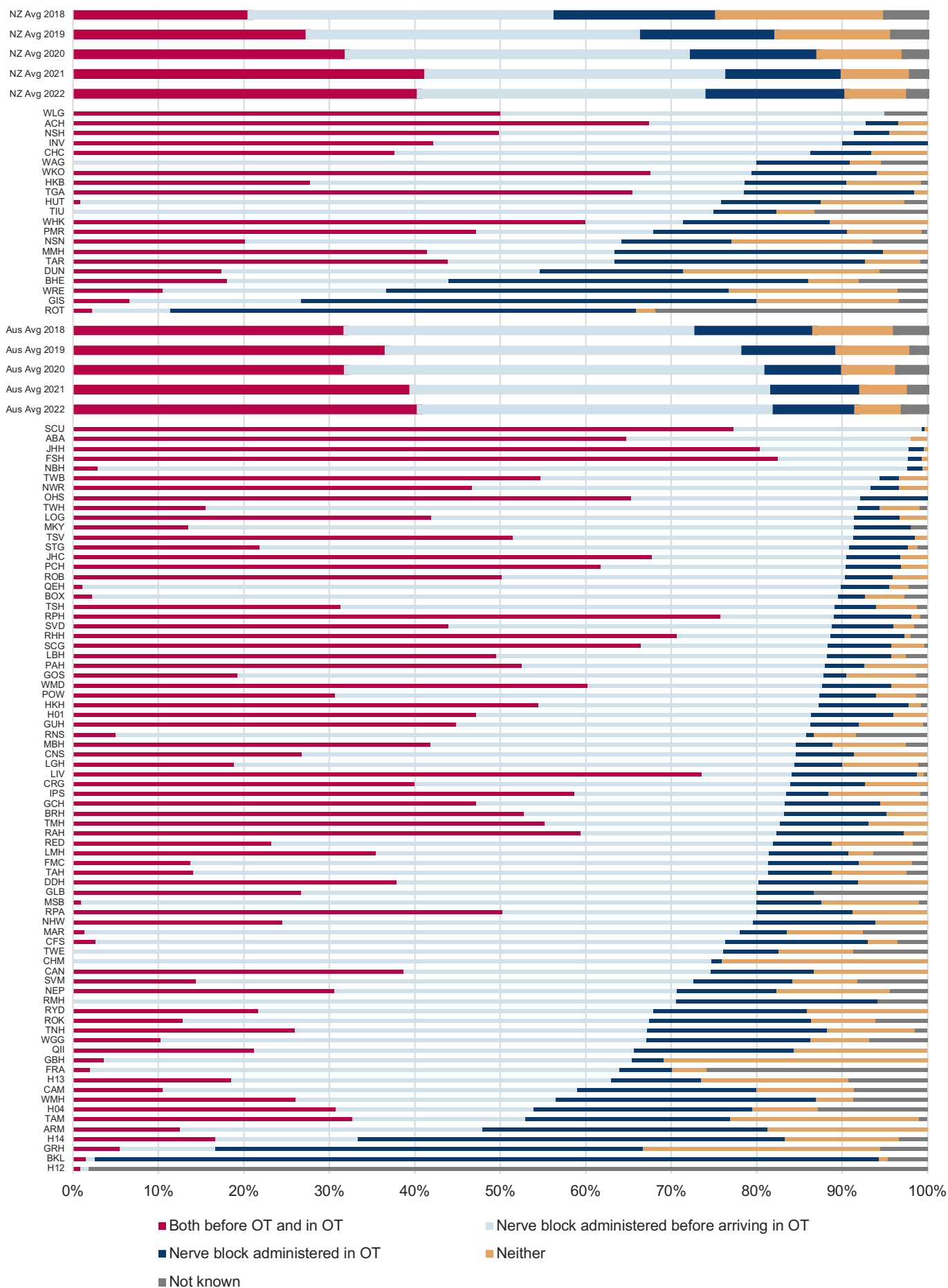


FIGURE 37 Use of nerve blocks

Seventy-four percent of patients in New Zealand, and 82% of patients in Australia received a nerve block before arriving in the operating theatre.



USE OF NERVE BLOCKS BY AUSTRALIAN STATE

FIGURE 38 New South Wales

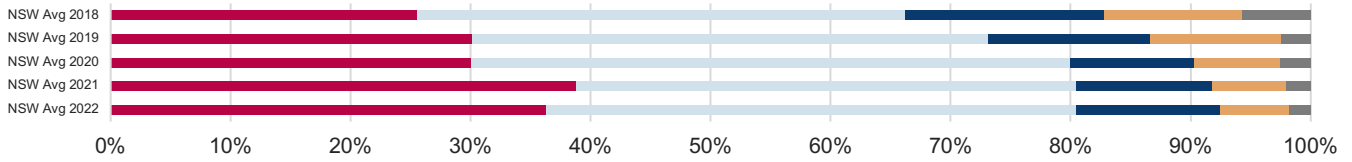


FIGURE 39 Queensland

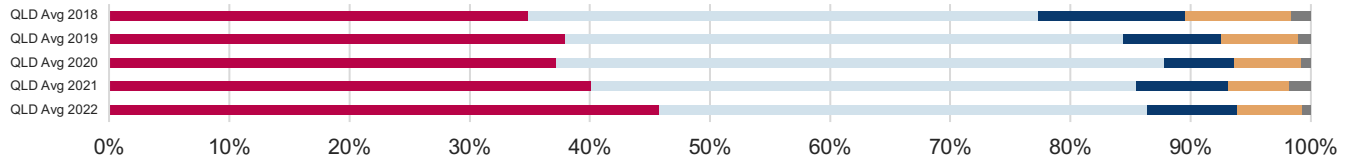


FIGURE 40 South Australia

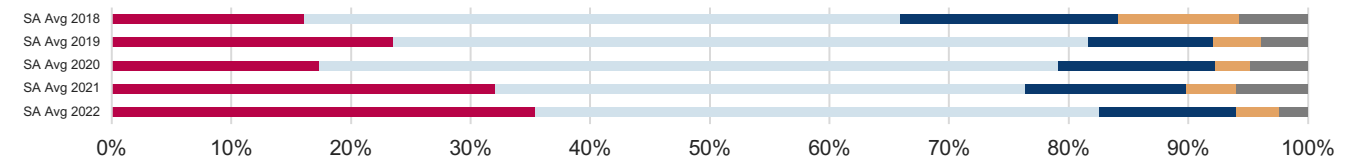


FIGURE 41 Tasmania

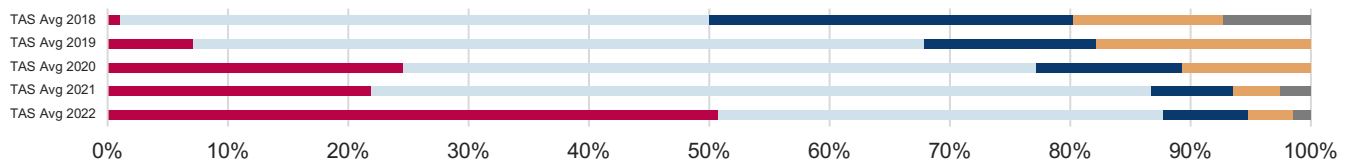


FIGURE 42 Victoria

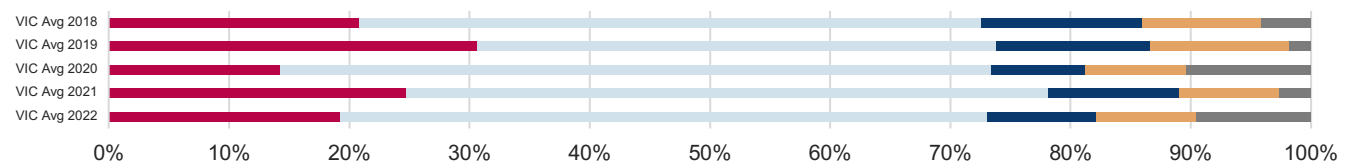
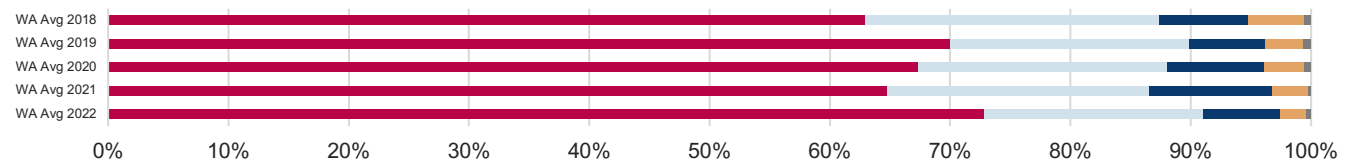


FIGURE 43 Western Australia



■ Both ■ Nerve block administered before arriving in OT ■ Nerve block administered in OT ■ Neither ■ Not known

SECTION 3: SURGERY AND OPERATIVE CARE

FIGURE 44

Treatment with surgery

Ninety-seven percent of patients in New Zealand and 98% in Australia underwent surgery for hip fracture. Nonoperative treatment may be a reasonable option in cases where surgery will not change the patient's outcome or for those with stable undisplaced fractures who are able to mobilise. A shared decision-making approach should be taken, considering the patient's preferences and goals of care.

Where a reason for no surgery was recorded, surgical fixation was not clinically indicated in 35% of patients in New Zealand and 13% in Australia. The patient was for palliation in 53% of nonoperative management in New Zealand and 68% in Australia. Twelve percent of records in New Zealand, and 19% in Australia were recorded as "Other reason" (Figures 45-47). The ANZHFR plans to look at outcomes for those people who do not have surgery.



FIGURE 45

Reason for no surgery

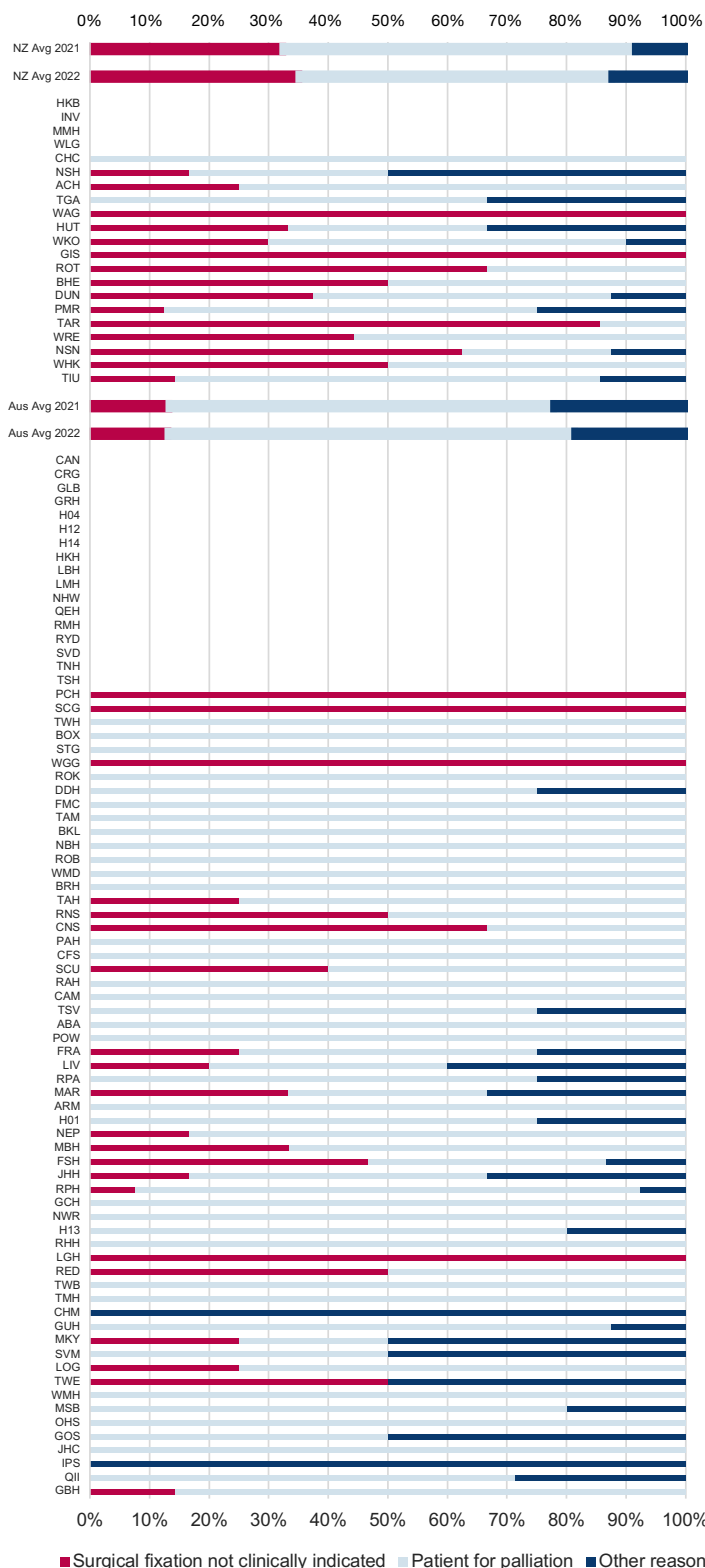




FIGURE 46 Reason for no surgery New Zealand 2022

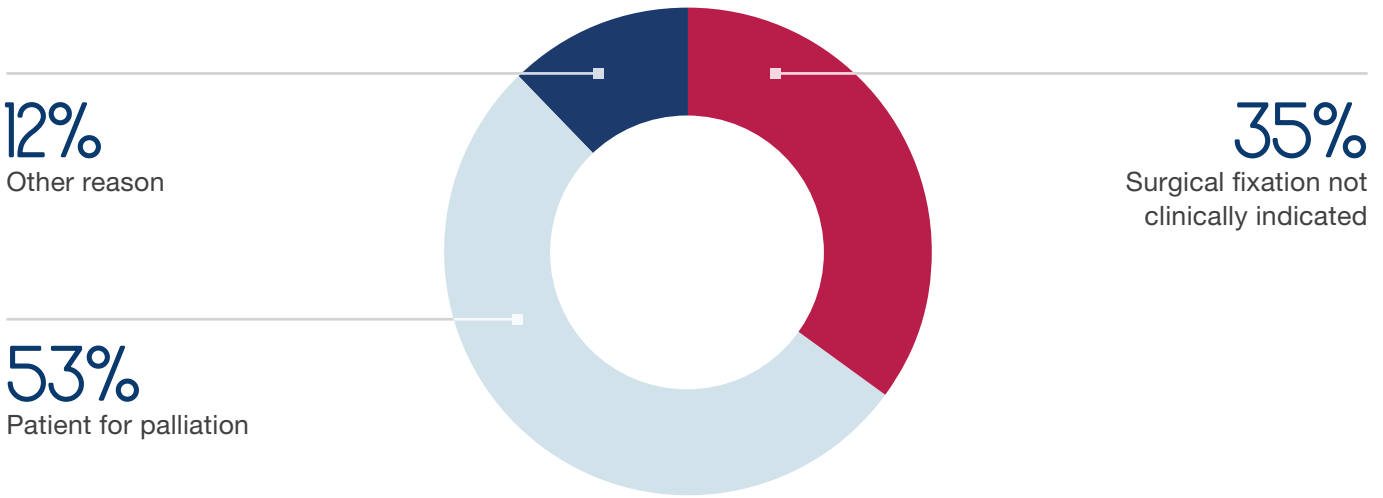


FIGURE 47 Reason for no surgery Australia 2022

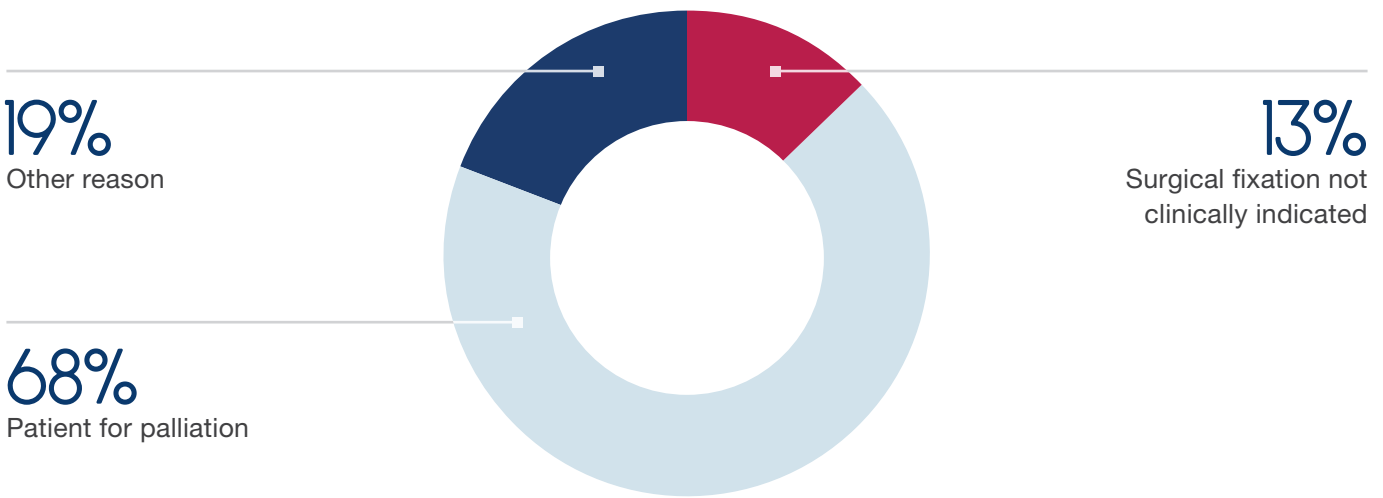


FIGURE 48 Consultant surgeon present and scrubbed during surgery

A consultant surgeon was present and scrubbed during surgery for 38% of cases in New Zealand and 72% of cases in Australia. The variation in the presence of consultant surgeons within Australia and New Zealand during hip fracture surgery is potentially associated with the complexity of surgery, the experience of the trainees and fellows, and hospital factors.

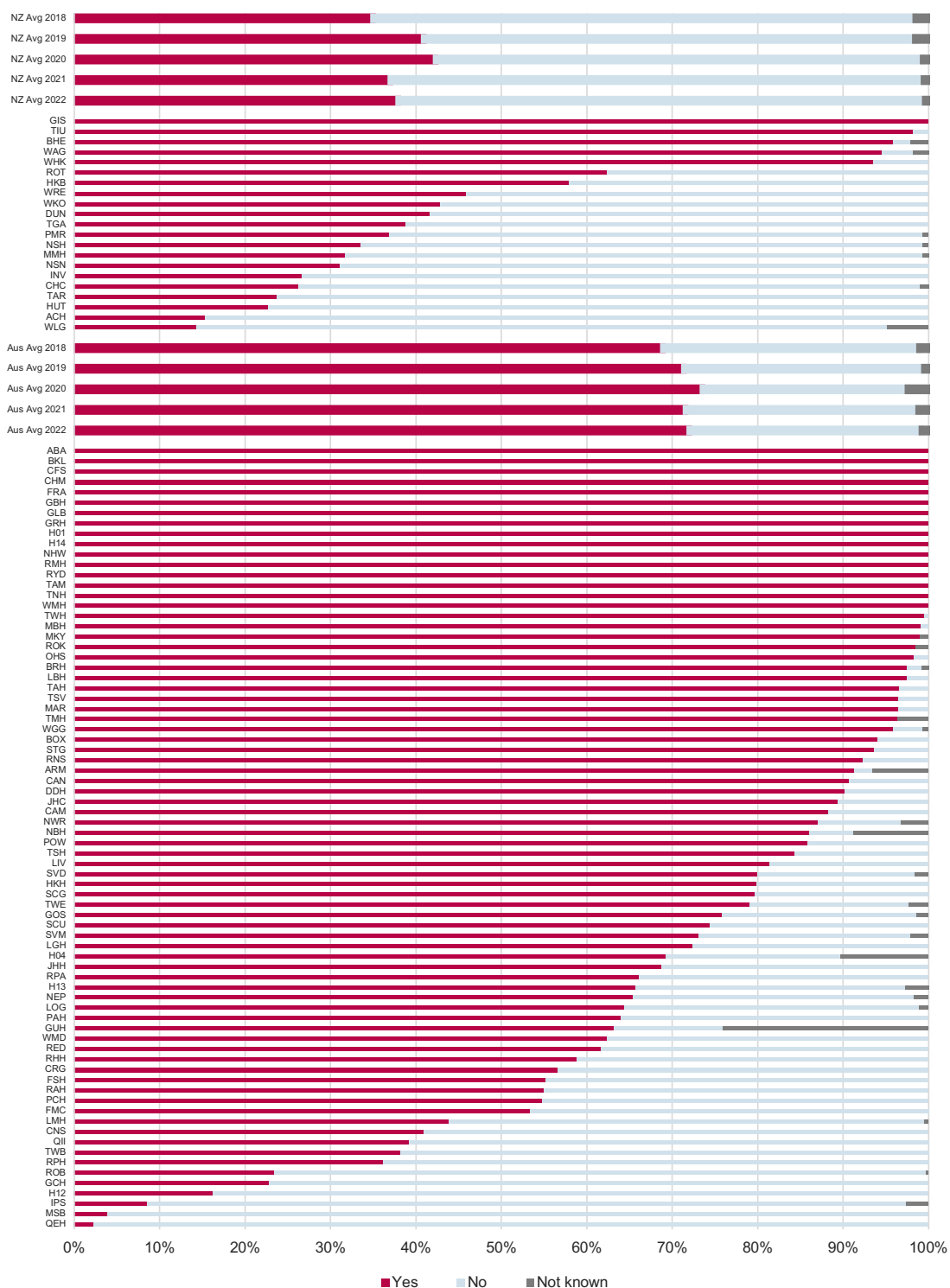


FIGURE 49 Average time to surgery excluding transferred patients

Calculation of time to surgery is the difference between the date and time of initial presentation and anaesthetic start time. Figure 49 excludes patients transferred from another hospital to the operating hospital. This year, the average time between presentation and surgery increased to 34 hours (median time to surgery 25 hours) in New Zealand. In Australia, the average time to surgery increased to 38 hours (median time to surgery 31 hours).

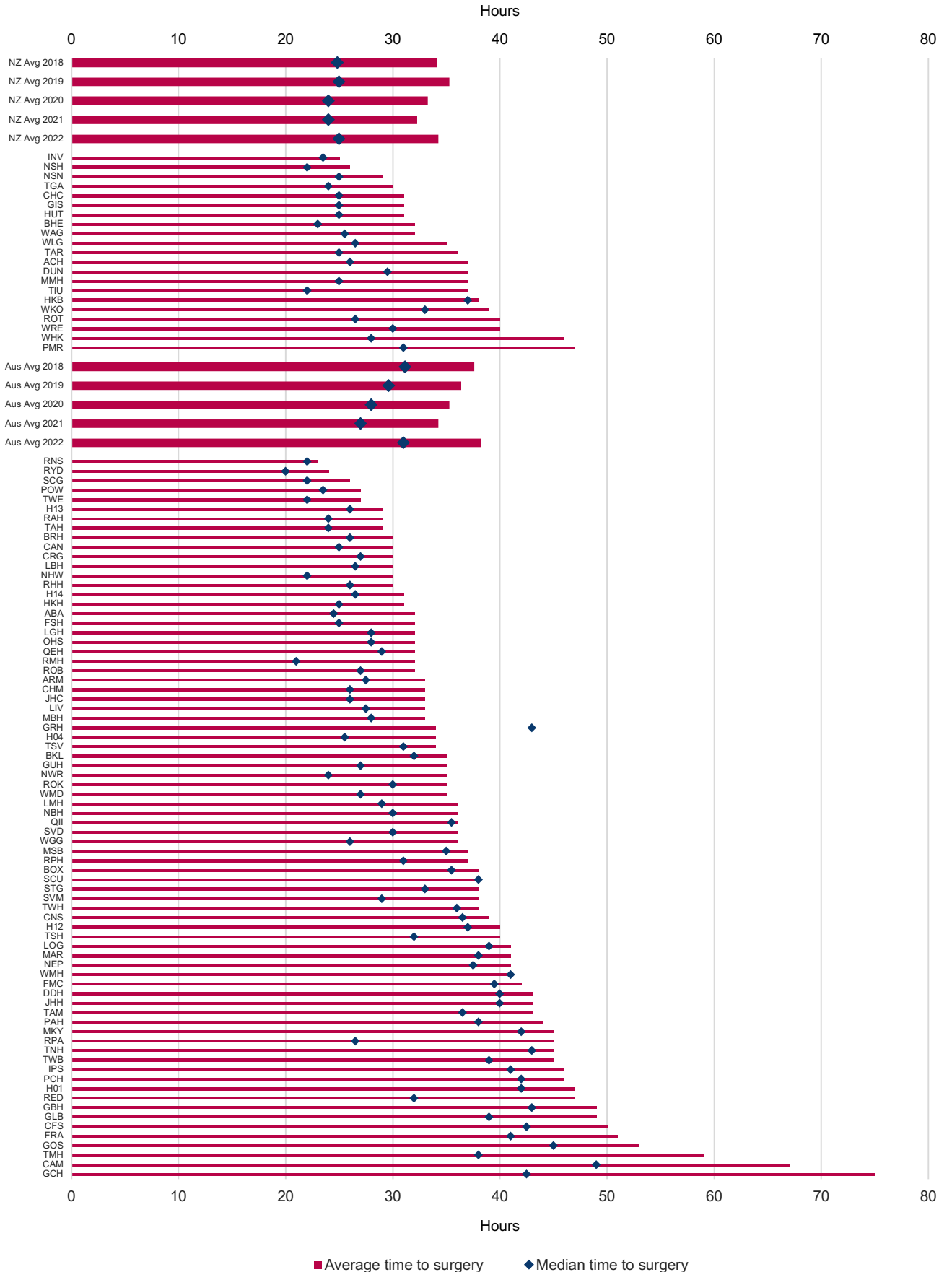
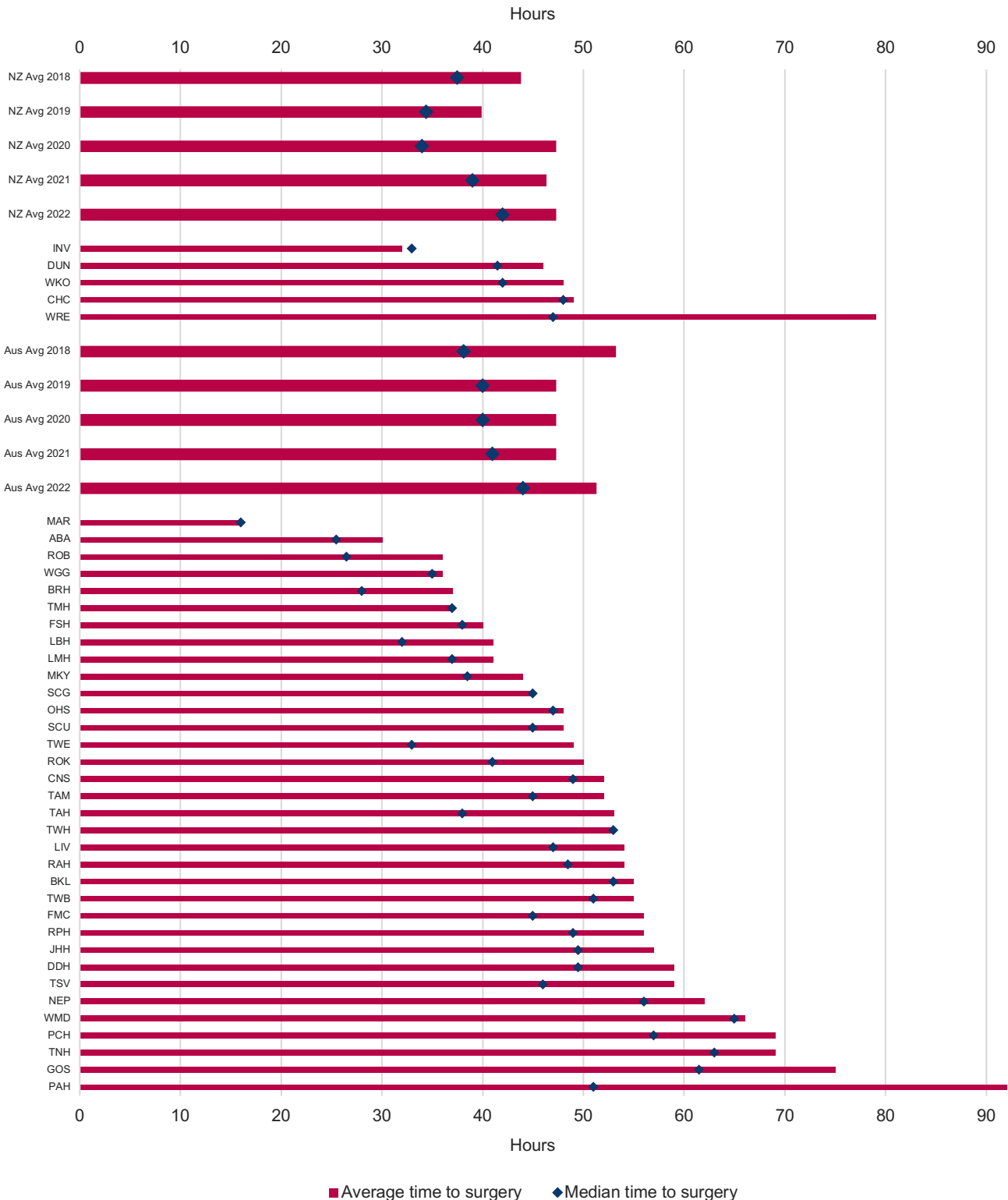


FIGURE 50 Average time to surgery for transferred patients only

Reporting time to surgery for transferred patients includes the time spent at the initial / presenting hospital. The average time to surgery for transferred patients was 47 hours in New Zealand (median time to surgery 42 hours). In Australia, the average time to surgery for transferred patients was 51 hours (median time to surgery 44 hours). Average time to surgery for transferred patients has remained relatively unchanged in New Zealand for the last three years, and increased in Australia. In Australia, there is also significant variability in the average time to surgery (16 – 92 hours). Some of this will reflect the geographical challenges of transferring people long distances but it is also likely that a lack of transfer protocols and prioritisation mean that people spend longer in a transferring hospital than is optimal.





Prompt hip fracture surgery reduces morbidity, aids functional recovery, and reduces length of stay.

This year, we highlight a variety of perspectives on what is driving the increase in surgical delay and potential system- and hospital-level improvement strategies.

Figures 51 and 52 include both transferred patients and patients admitted directly to the operating hospitals.

Figure 51 shows that 83% of patients in New Zealand and 76% of patients in Australia who underwent surgery were operated on within 48 hours of presentation to the first hospital. This represents a decrease compared to the last three years in both countries. There is considerable variation between sites, particularly in Australia where between 49% and 96% of patients received surgery within 48 hours.

Figure 52 provides useful information for hospitals and health services wishing to improve the proportion of patients treated within 48 hours as it highlights causes for surgical delay. The primary modifiable reasons for delay remain as access to theatres and deemed medically unfit.

FIGURE 51
Surgery within 48 hours

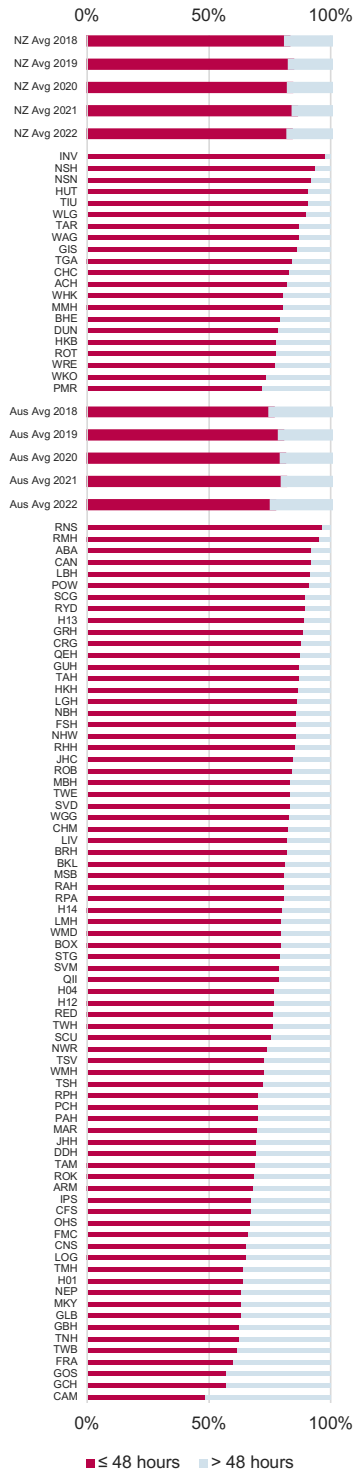
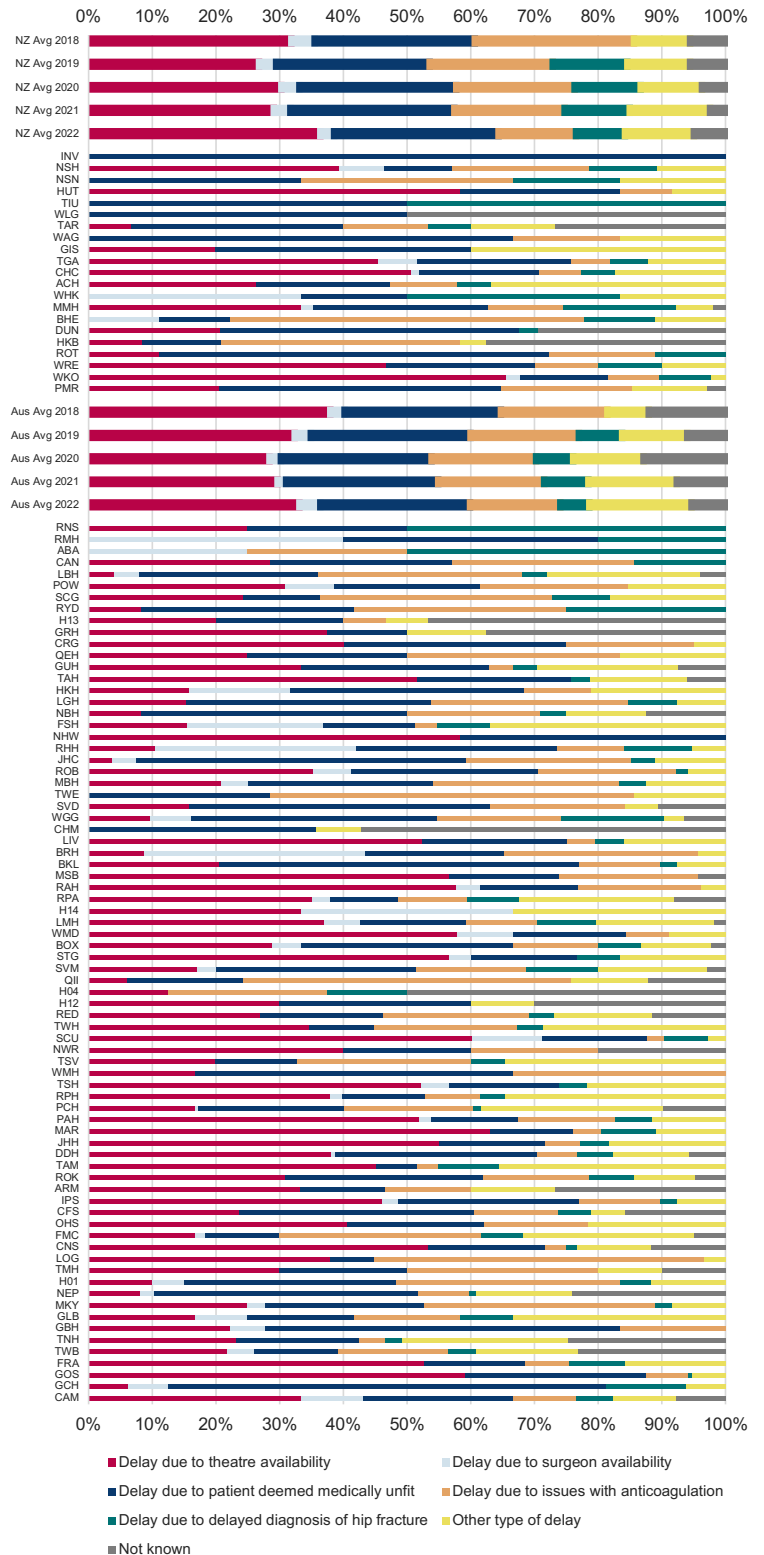


FIGURE 52
Reason for delay longer than 48 hours



SURGERY WITHIN 48 HOURS BY AUSTRALIAN STATE

FIGURE 53 New South Wales

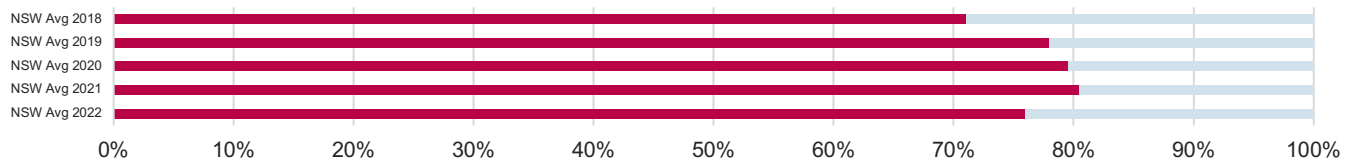


FIGURE 54 Queensland

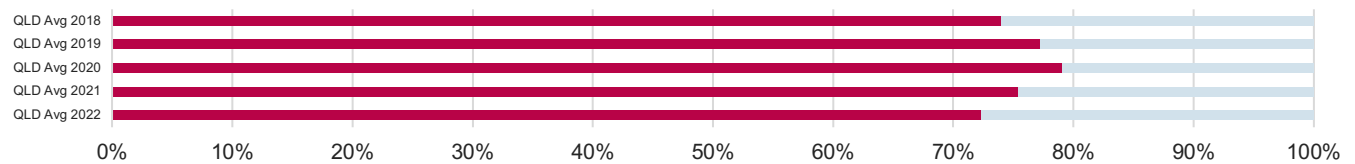


FIGURE 55 South Australia

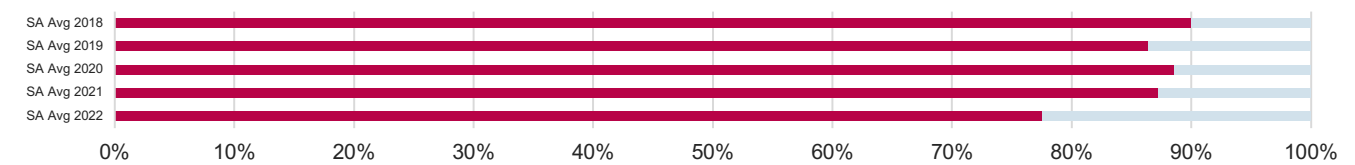


FIGURE 56 Tasmania

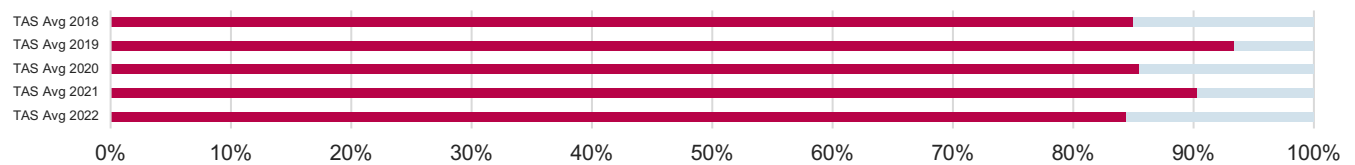


FIGURE 57 Victoria

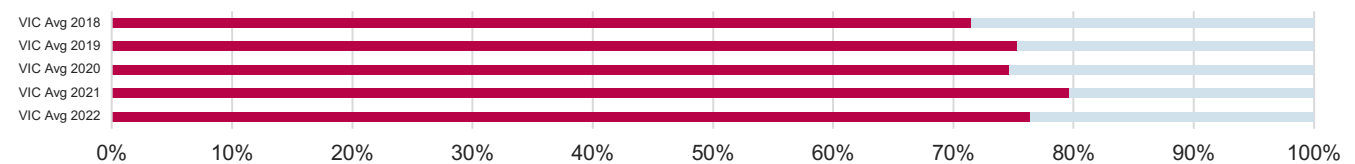
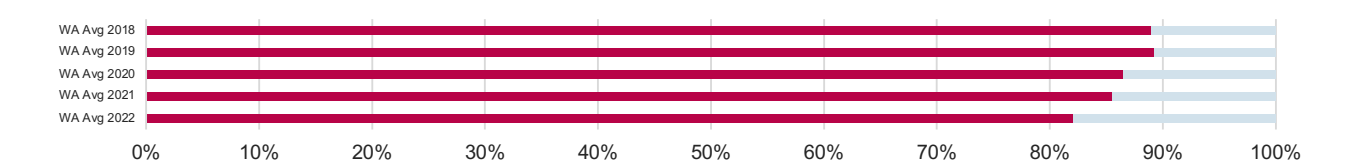


FIGURE 58 Western Australia



■ ≤ 48 hours ■ > 48 hours

FIGURE 59 Reason for delay > 48 hours for New Zealand 2022

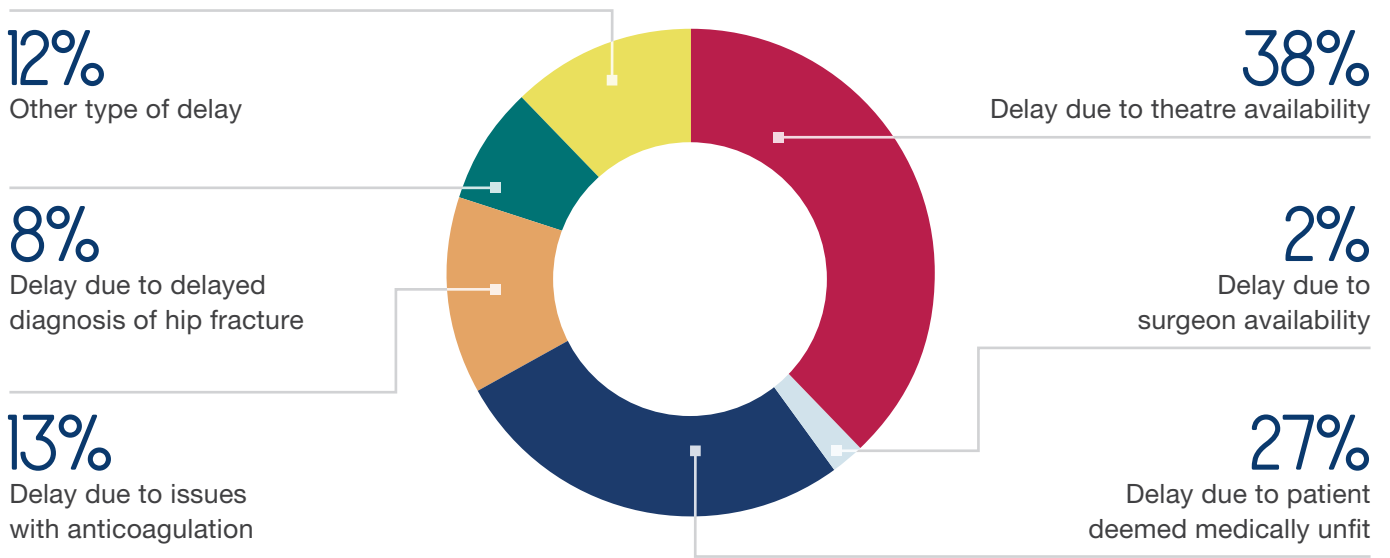
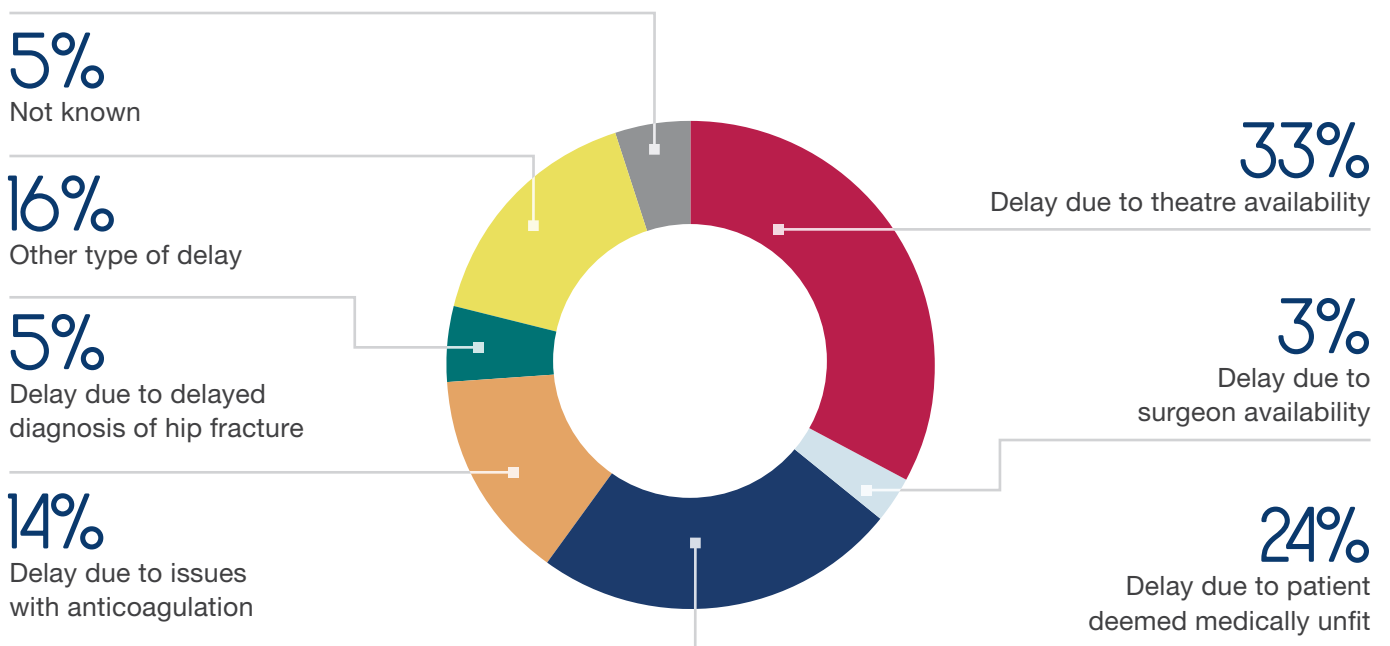


FIGURE 60 Reason for delay > 48 hours for Australia 2022





WHAT'S DRIVING THE INCREASING DELAY TO SURGERY?

What strategies might help meet the challenges?

THE AUSTRALIAN ORTHOPAEDIC ASSOCIATION (AOA)

The AOA is concerned by the increase in average time to surgery for non-transferred patients with neck of femur fractures in 2022, compared to previous years. While the increase is almost certainly multifactorial, potential contributors include an increase in trauma caseload in the public sector, workforce shortages affecting both public and private sectors, and increasing medical complexity of our elderly population.

The ANZHFR 2022 Annual Report has identified theatre availability as the most common reason for delays beyond 48 hours in Australian hospitals. Increased trauma caseload, large elective waiting lists following the COVID-19 pandemic, and ongoing workforce shortages may be implicated.

The AOA encourages hospitals and health services to actively address delays to theatre access for patients with neck of femur fractures. Multidisciplinary collaboration between orthopaedic, orthogeriatric, anaesthetic, and theatre management teams will be imperative to ensure our patients receive appropriate and timely care.

> CONTINUED NEXT PAGE

**MR MARK WRIGHT,
THE NEW ZEALAND ORTHOPAEDIC ASSOCIATION (NZOA)**

From the perspective of an Orthopaedic Surgeon working at Auckland City Hospital, the factors driving the increased time to surgery will include patient co-morbidities and the need for medical optimisation including managing coagulation and theatre availability.

The lack of theatre availability relates to the fact that hip fracture patients are on an acute list which includes many other patients with fractures e.g. ankle fractures and forearm fractures. On any given day, each service has to prioritise which patients are treated and in what order on the list. Some patients would take priority over hip fracture patients.

Orthopaedic surgeons in New Zealand would be aware of the benefits of treating hip fractures as soon as possible after admission, and would therefore prioritise these patients as best as possible. Hospital level strategies that could be implemented to reduce surgical delay after hip fracture would include specific lists for hip fractures. It would also include increasing the awareness within the service of the benefits to hip fracture patients related to early treatment, although this would not always negate the need to prioritise other acute injuries.

**DR FRAZER ANDERSON,
CONSULTANT IN GERIATRIC MEDICINE, DIRECTORATE OF
MEDICAL AND ELDER SERVICES, NORTHLAND, NZ**

Delay to surgery in patients with a hip fracture is driven by many of the same factors affecting other hospital services – high bed occupancy, staff shortages, pressure on theatre time and increasing patient frailty.

People with a hip fracture are often very frail with multiple medical problems. Including senior medical assessment as standard reduces the delays commonly seen in a referral-based model.

An integrated perioperative management team involving anaesthetists, geriatricians and surgeons offers proven benefits including shorter time to surgery and fewer complications. A team approach can pay for itself through reduced acute length of stay and quicker rehabilitation.

**DR SETH TARRANT,
CONSULTANT ORTHOPAEDIC SURGEON,
JOHN HUNTER HOSPITAL, NSW**

The latest ANZHFR demonstrates that time to theatre has markedly increased after several consecutive years of improvement. This is disappointing after concerted efforts to improve the quality of care, however, is reflective of the post-pandemic health care environment. At our institution, the overt factors leading to decreased theatre efficiencies have been bed availability in tandem with national nursing and anaesthetic workforce shortages. Currently, our institution's bed availability has not returned to pre-pandemic levels. Bed block has led to patients spending longer time in emergency departments before arriving on the ward. Increasing inter-hospital transfers combined with discharge blocks to rehab and aged care facilities, also driven by workforce shortages, have pushed our institution beyond capacity. Despite decreased elective operating, the ability to run adequate orthopaedic trauma theatres has been crippled. As a centre that accepts complex polytraumatised patients, our service has been forced to triage trauma in methods that were not previously necessitated. I believe the ANZHFR results reflect these pressures.

The major reason for delay is highlighted as theatre availability, a potentially reversible finding. However, whilst the physical operating rooms exist, staffing remains the critical dilemma. Hospital recruitment of nursing staff at our institution, drawing on both national and international pools, has been successful recently and may ameliorate some of the inability to staff orthopaedic trauma theatres. The shortage of anaesthetic cover is far more complex and is being felt far worse in rural centres.

The obvious panacea to workplace deficiencies is sustained recruitment and retention strategies. This is complex and may take years. In the short term, all clinicians looking after hip fractures must ensure timely assessment in adhering to ANZHFR guidelines. Due to bed block and prolonged emergency stay times, increased vigilance may be needed to identify patients expeditiously. Firm and timely plans are needed from acute orthogeriatric, anaesthetic, orthopaedic and subspecialist teams. Theatre time is critical, and it cannot be wasted. Any patient that materialises in an anaesthetic bay with weak perioperative plans will waste time and contribute to the expanding delays. Whilst we are currently not in medical austerity, it is critical that we are cognisant of our diminished resources and are inspired to be as efficient as possible. Hip fracture patients will be the ultimate beneficiaries.

**DR HANNAH SEYMOUR,
CONSULTANT GERIATRICIAN,
FIONA STANLEY HOSPITAL, WA**

The number of hip fracture patients is relatively stable; however, we have seen an increasing number of people with periprosthetic and distal femur fractures – they have the same urgency as those with a hip fracture. Patients unfortunately do not come in an even distribution. Peaks in demand make it difficult to always deliver early surgery, which we know benefits patients.

As the population ages, incremental increases in activity each year have meant that, without additional theatre capacity, achieving the target time to surgery is not always possible. This has been more difficult to deliver with workforce shortages in theatre and sickness rates higher than prior to the COVID-19 pandemic. There is continued pressure to achieve elective waitlist reductions, which makes utilising elective capacity when demand peaks impossible.

We are utilising the hip fracture registry data to demonstrate to our hospital leadership group the ongoing impact of sustained activity increases. This, along with other data from our hospital, is required to make the case for additional theatre capacity.



WA implemented a best practice payment for hip fracture care from 2012 to 2016. This was a small payment (\$200 per patient) which went to the hospital department to support ongoing improvements in care.

Time to surgery proved to be the key variable that led to the payment being achieved – surgery had to be performed within 36 hours to get the payment. At that time, prioritisation of hip fracture patients was not consistent and there was less consensus about the optimisation of patients preoperatively versus early surgery.

The best practice payment led to the development of local guidelines to address these issues. The payment was withdrawn in 2016 and although it is hard to be certain, that may have led to less senior executive oversight of time to surgery for hip fracture patients.

Would an incentive payment at a state or national level be a driver for improved care for our patients?

ROYAL NORTH SHORE HOSPITAL EXCELS IN PROVIDING PROMPT SURGERY

At Royal North Shore Hospital in 2022, 97% of patients had surgery within 48 hours and the hospital had the shortest average time to surgery in Australia (23 hours).

Royal North Shore Hospital's favourable time to theatre is due to a hospital-wide effort with invested clinicians and key performance indicators embedded in our culture. We face many of the challenges that all hospitals face, with limits on resources and theatre times.

The most important determinant has been an Orthopaedic service that has a consultant led surgical culture. This has meant that our surgeons are in the hospital operating, leading decisions and being active in advocacy for hip fracture patients and timing of surgery. There has been a long-standing effort given to prioritising early surgery and early collaborative geriatric medical care that preceded guidelines, and an adoption of care based on literature favouring more comprehensive care. The support of the geriatricians was instrumental in seeing patients quickly and "clearing" them for surgery, eliminating unnecessary pre-operative tests and reducing surgical cancellations. This contributed to a "can do" attitude with our anaesthetists.

Later two very welcomed things helped significantly. The first was the allocation of regular weekday orthopaedic trauma theatres, each controlled by the on-call surgeon as the main decision maker. This allowed the orthopaedic department's surgical philosophy to be implemented, and hip fracture patients to be truly prioritised. Later the ANZHFR and then NSW Health guidelines helped enormously to advocate to administrators. From these came a much more targeted intervention-based system of care across many health disciplines and allowed us to bring together a working group of enthusiastic interdisciplinary people and measurements of performance.

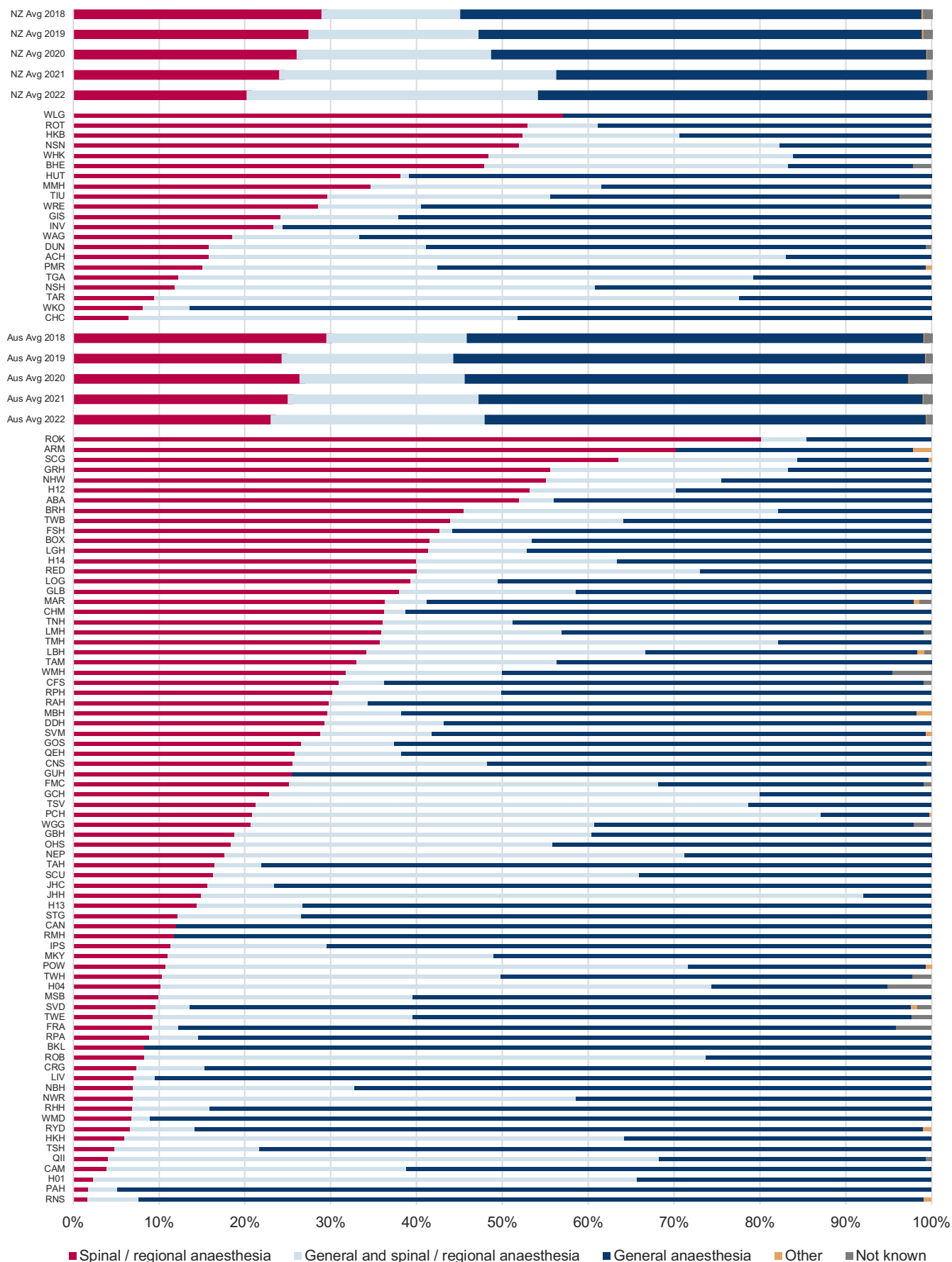
So, culture and pride continue to play a part. The surgical side is well supported by orthopaedic nursing, orthogeriatricians, anaesthetics and theatre leaders. We have people that want to do better in the future, and that is always a part of excellence in the present.

We can still do better. Our hospital is still under severe bed pressure, we do not have dedicated weekend orthopaedic trauma theatres. We could improve streamlining care to discharge pathways and early mobilisation, especially at weekends. At times the orthopaedic surgeons still feel that others decide surgical priority, and that capacity is insufficient. We must be vigilant at all times.



FIGURE 61 Type of anaesthesia

Overall patient outcomes are the same for spinal anaesthetic and general anaesthetic. In both Australia and New Zealand, the use of spinal anaesthetic, either in isolation or with a general anaesthetic, has increased over time. The ANZHFR plans to review its data dictionary definitions for type of anaesthesia to ensure a consistent approach to recording this variable.



HIP FRACTURE TYPES AND SURGERY

The types of hip fracture are classified by the location of the fracture. Classification of the type of hip fracture is important, as it determines the most appropriate management of the fracture. See Image 2 for the terms used to identify the zones of hip fracture.

Different fracture types are generally treated by different surgical techniques. The data presented on fracture type and surgical procedure suggests that some sites may not be accurately recording this information. Involving a member of the surgical team is encouraged to ensure that both classification of the fracture type and surgical procedure are accurate.

IMAGE 2: ZONES OF HIP FRACTURE

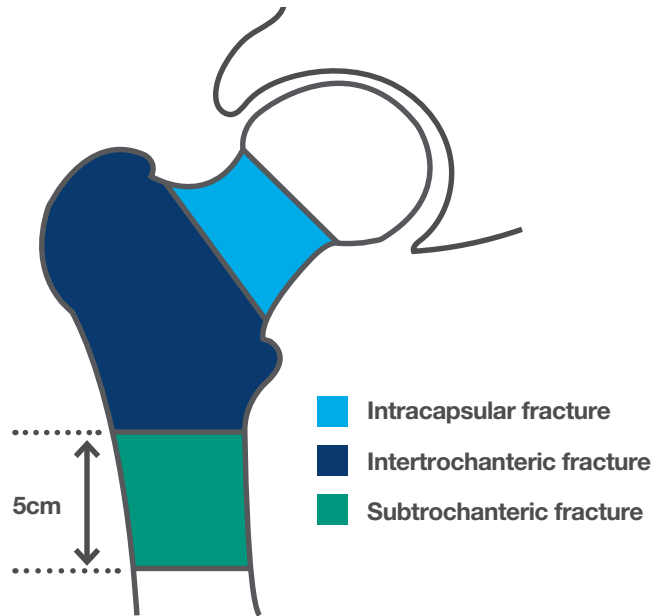


FIGURE 62 Fracture type

Sites with wide variation from the average may reflect low numbers of hip fracture cases or issues with the classification of the type of fracture. Involving a member of the surgical team is encouraged to ensure that both classification of the fracture type and surgical procedure are accurate.

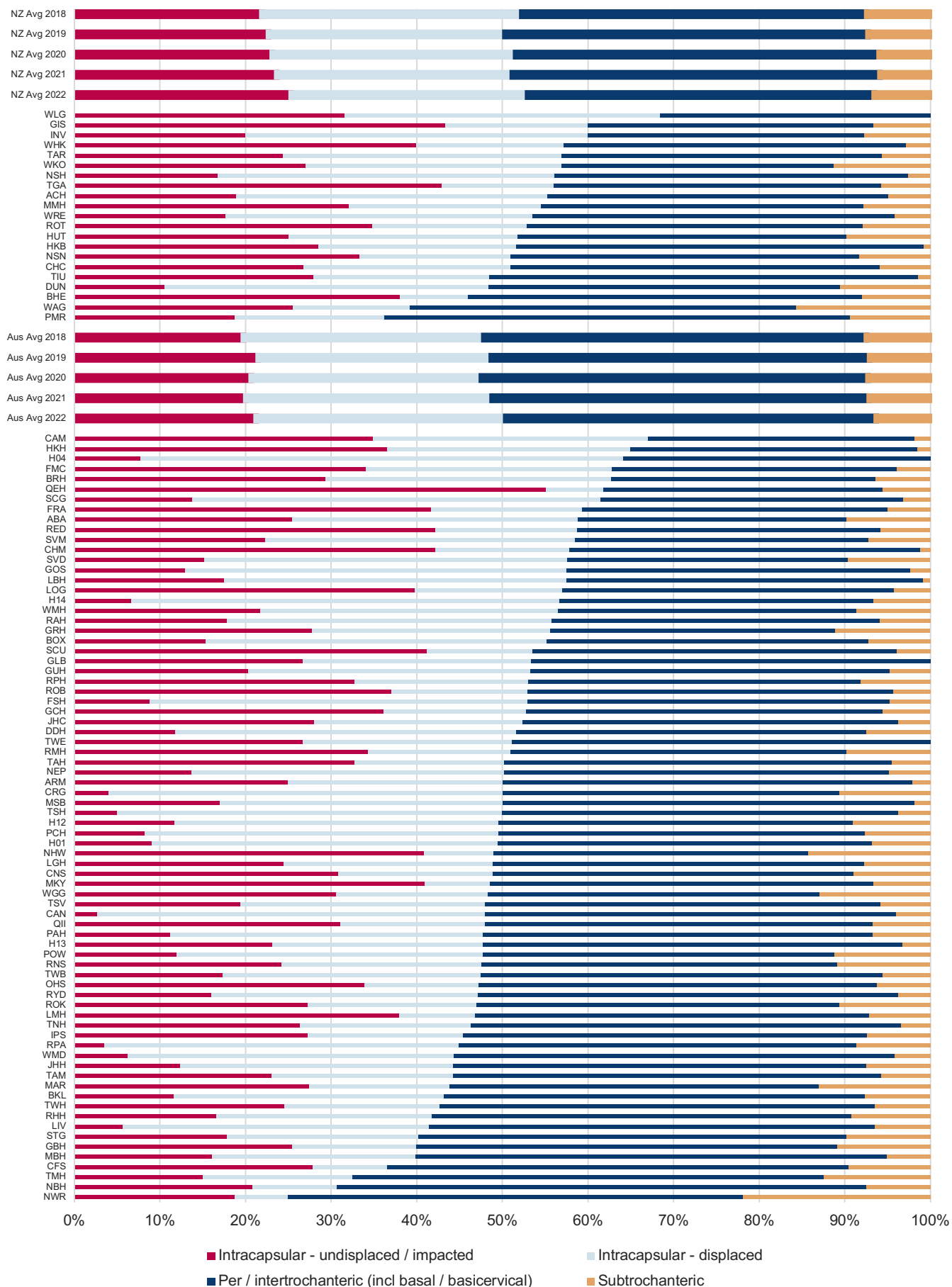


FIGURE 63

Procedure type for intracapsular undisplaced/impacted femoral neck fractures

Figures 63 and 64 show the proportion of intracapsular fractures (femoral neck or subcapital fractures) treated with various techniques, reported separately for undisplaced and displaced fractures. There has been an increase in hemiarthroplasty for treatment of undisplaced intracapsular fractures in both New Zealand and Australia.

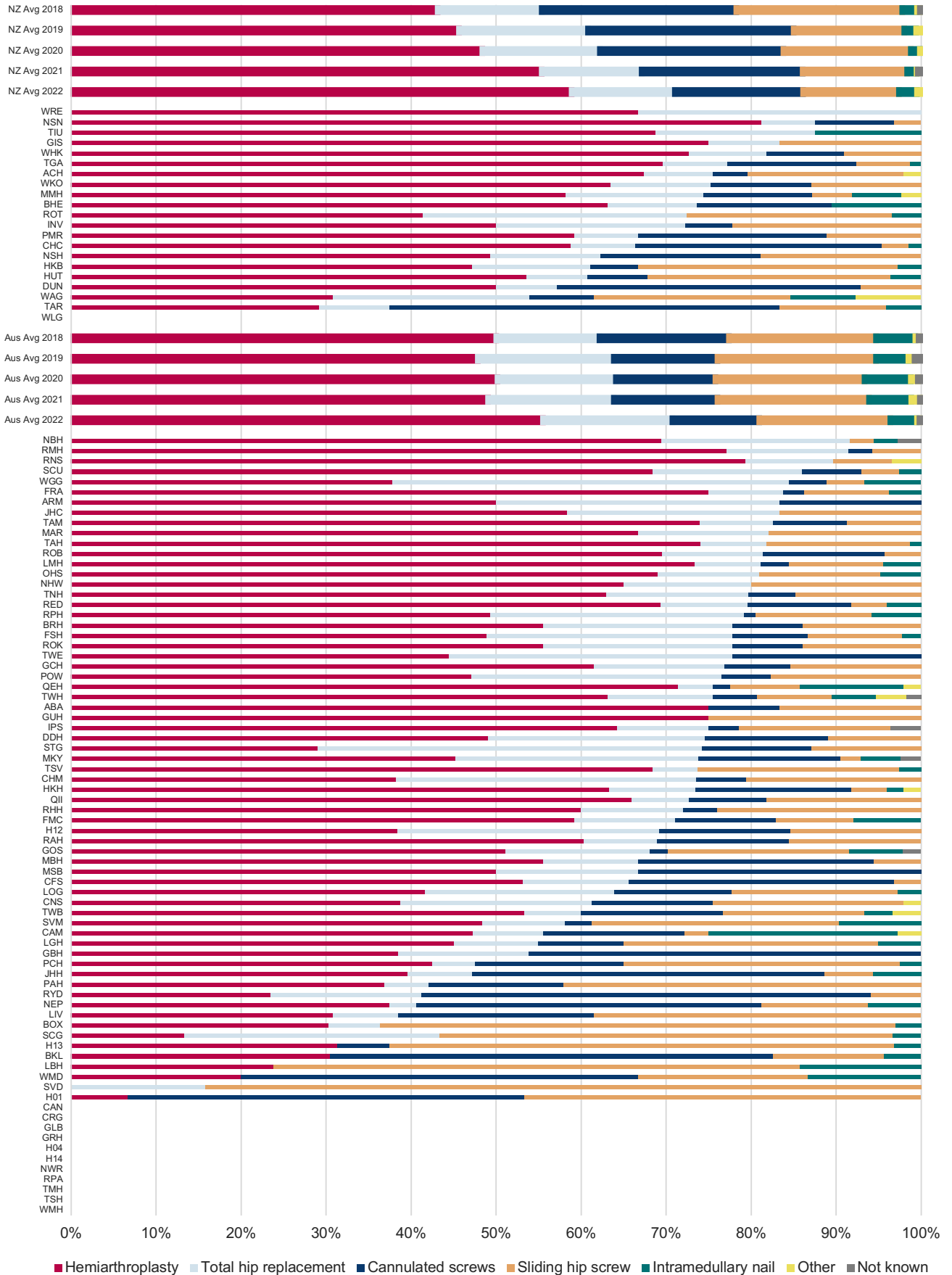


FIGURE 64

Procedure type for intracapsular displaced femoral neck fractures

Hemiarthroplasty remains the most common treatment for displaced femoral neck fractures.

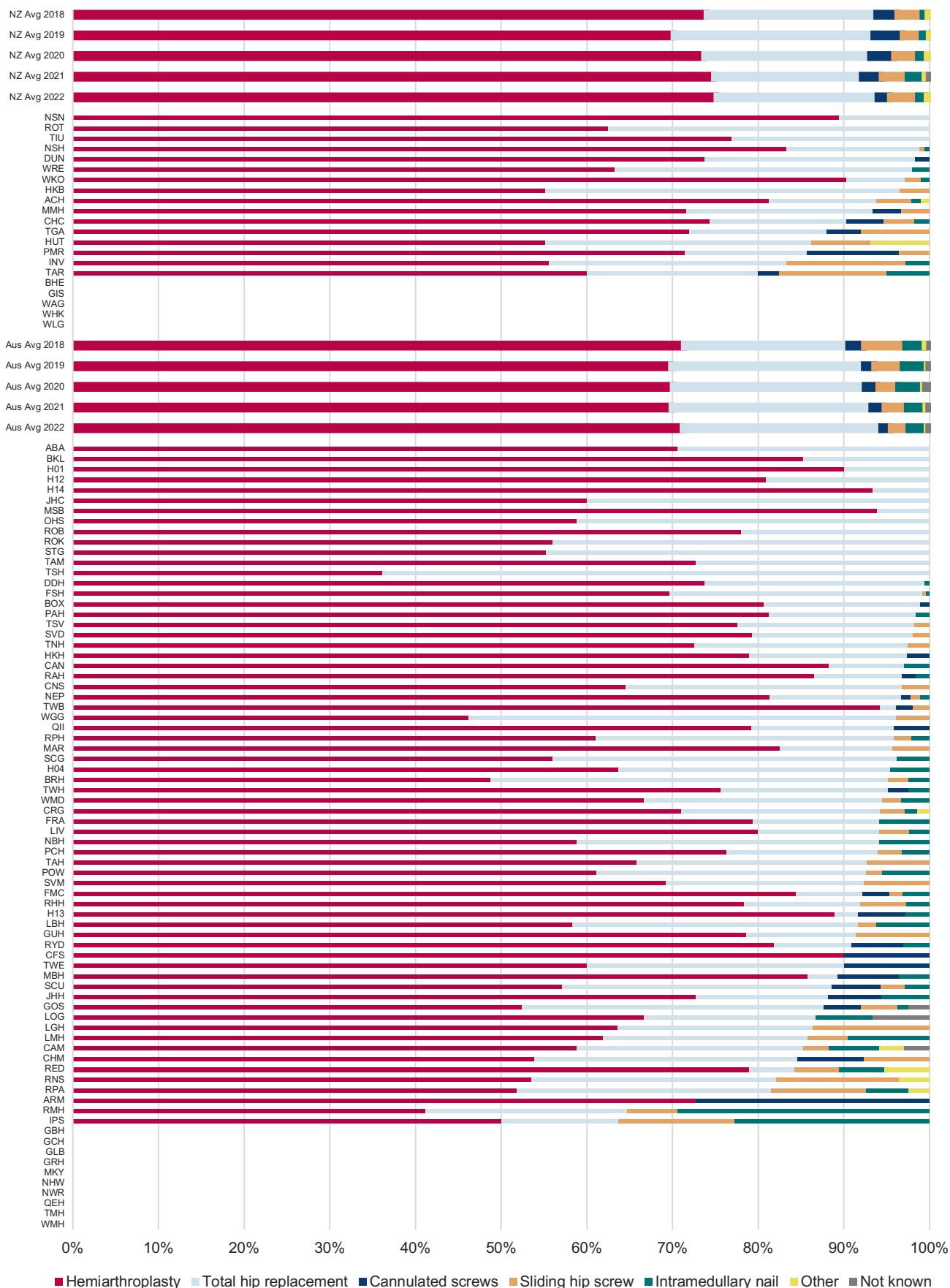


FIGURE 65

Procedure type for intertrochanteric fractures (including basal/basicervical)

There is variation in the use of the two most common types of implants used to treat intertrochanteric fractures, a sliding hip screw and an intramedullary nail. Change in practice over time has occurred in both New Zealand and Australia, with a trend towards more intramedullary devices. The recommendation for a sliding hip screw over a nail in the hip fracture guideline is largely one of cost.

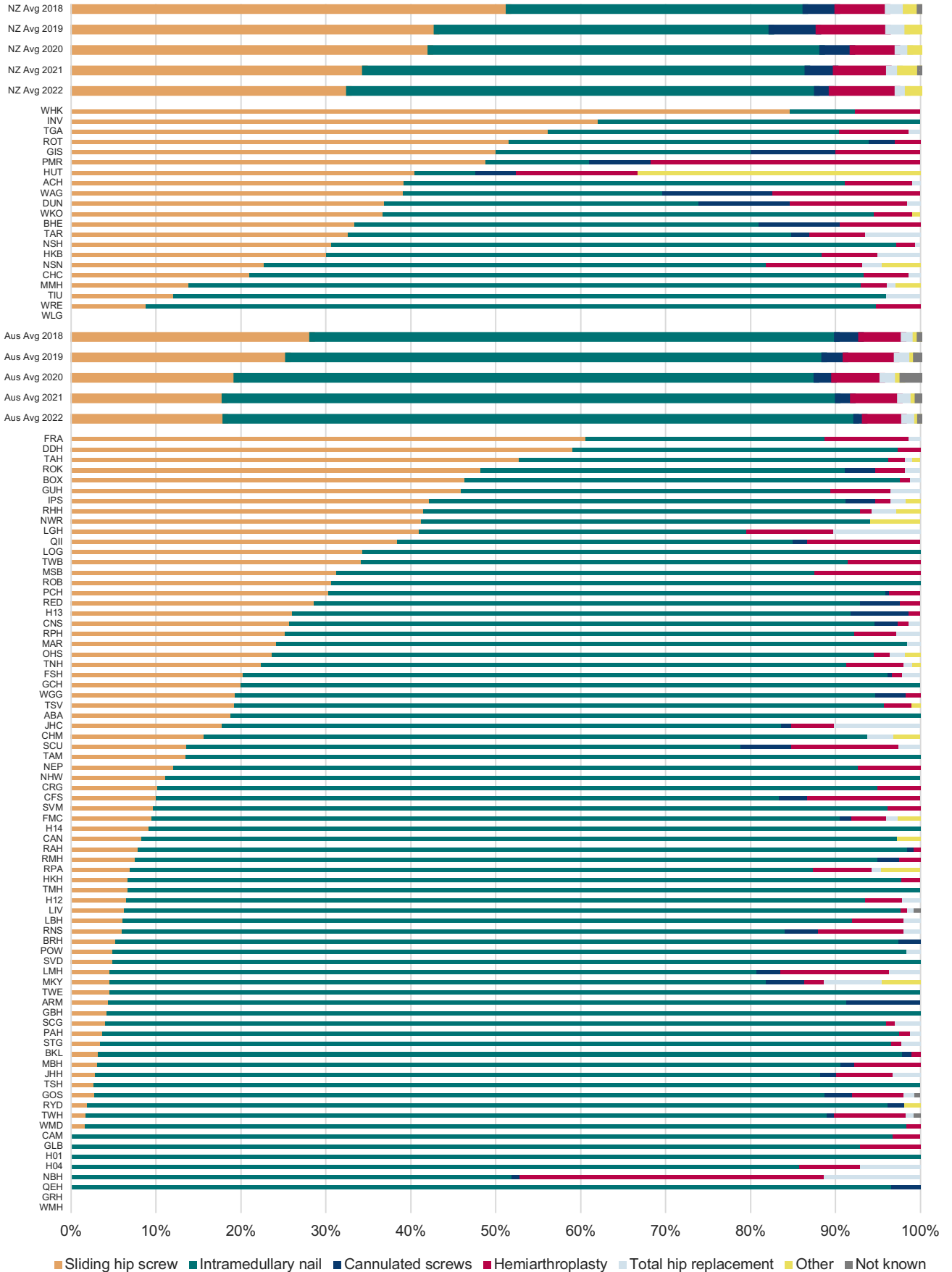


FIGURE 66

Procedure type for subtrochanteric fractures

Fixation with an intramedullary nail is recommended for subtrochanteric fractures. Given the limited treatment options for this type of fracture, the data suggests that some hospitals may need to do further work looking at classification of fracture type and surgical procedure.

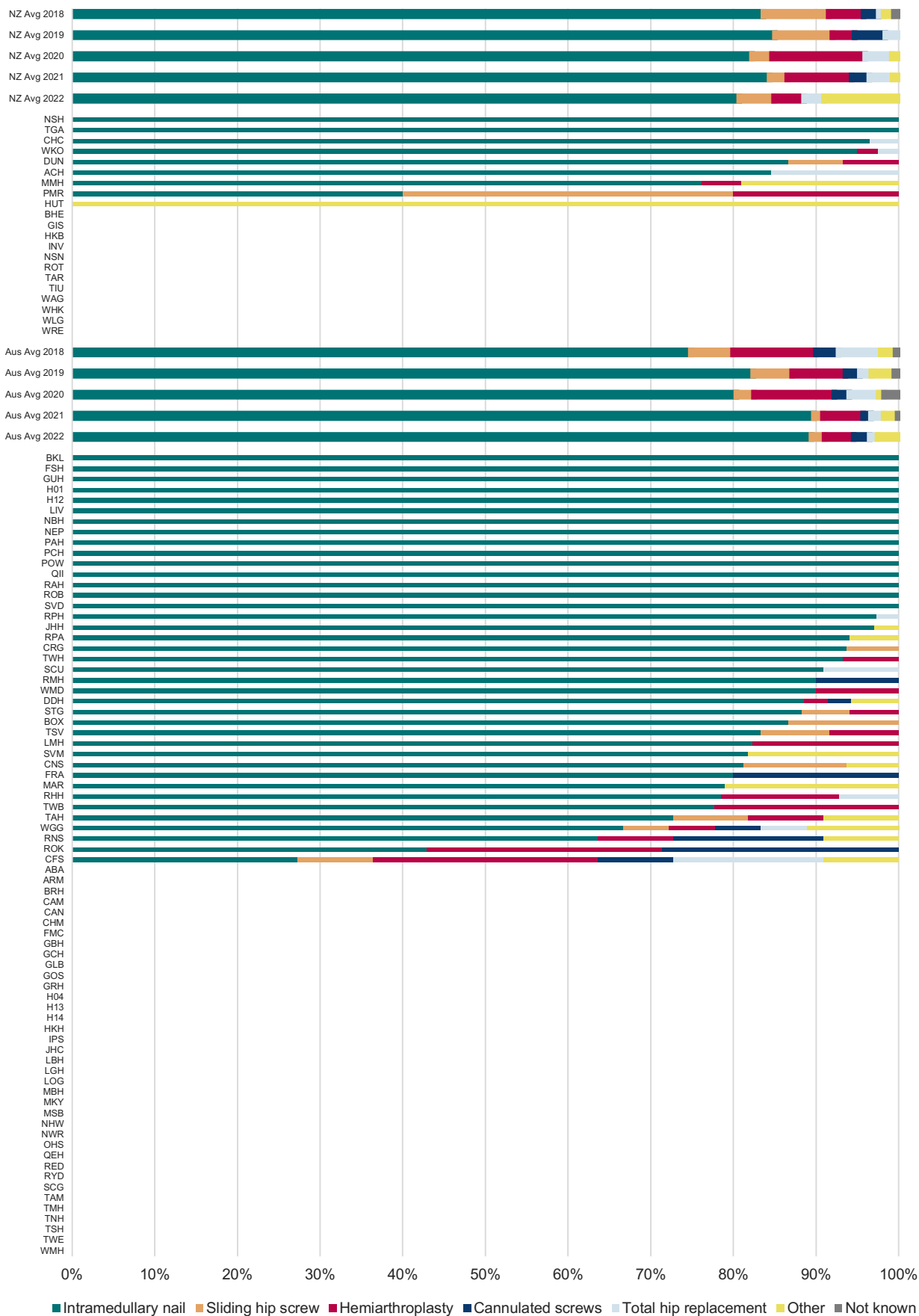


FIGURE 67 Hemiarthroplasty: use of cemented stem

The ANZ Guideline for Hip Fracture Care recommends the use of cemented stems for hip arthroplasty.

Figures 67 and 68 show the rates of cemented stem use reported by sites for both hemiarthroplasty and total hip arthroplasty.

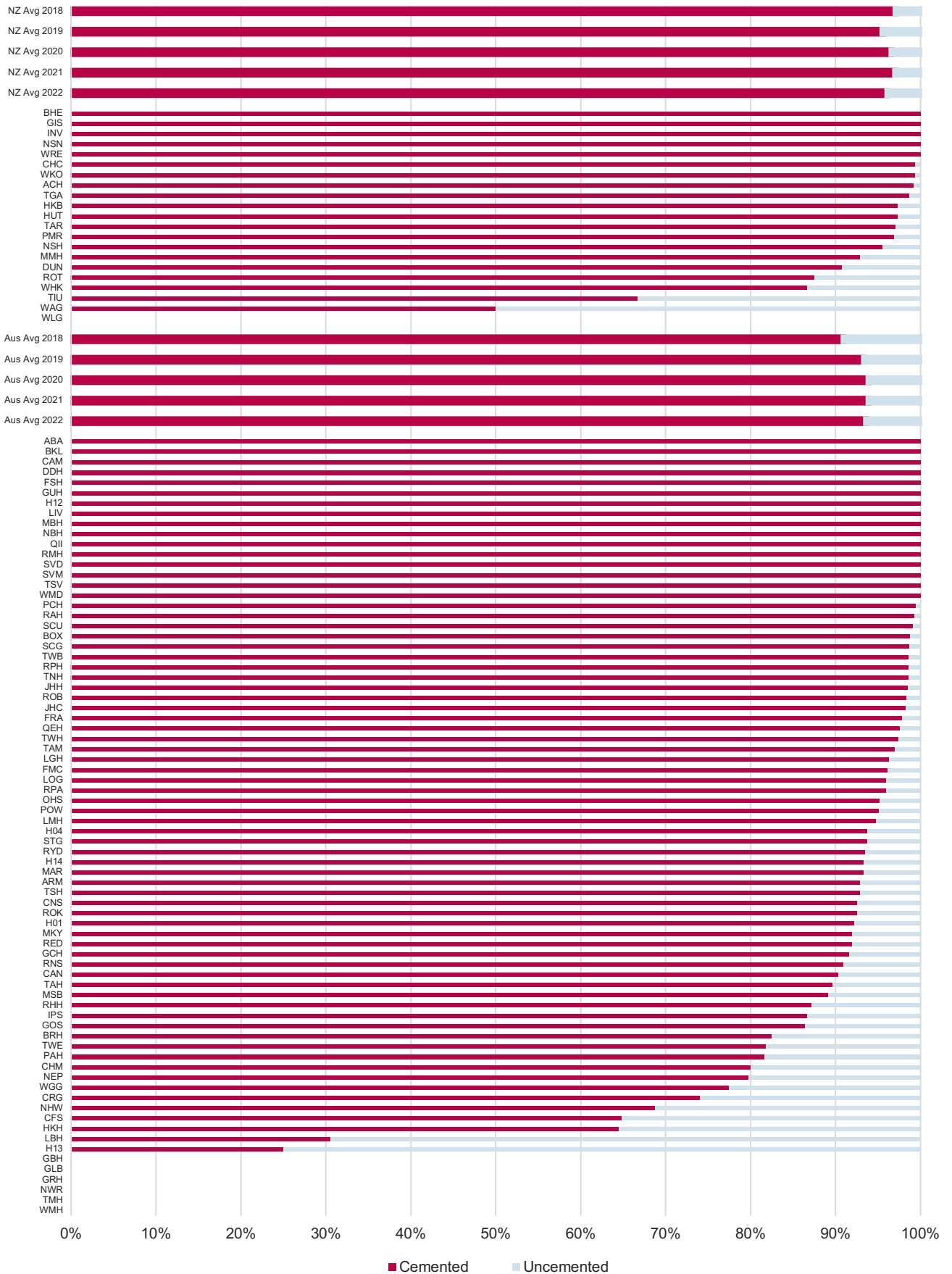
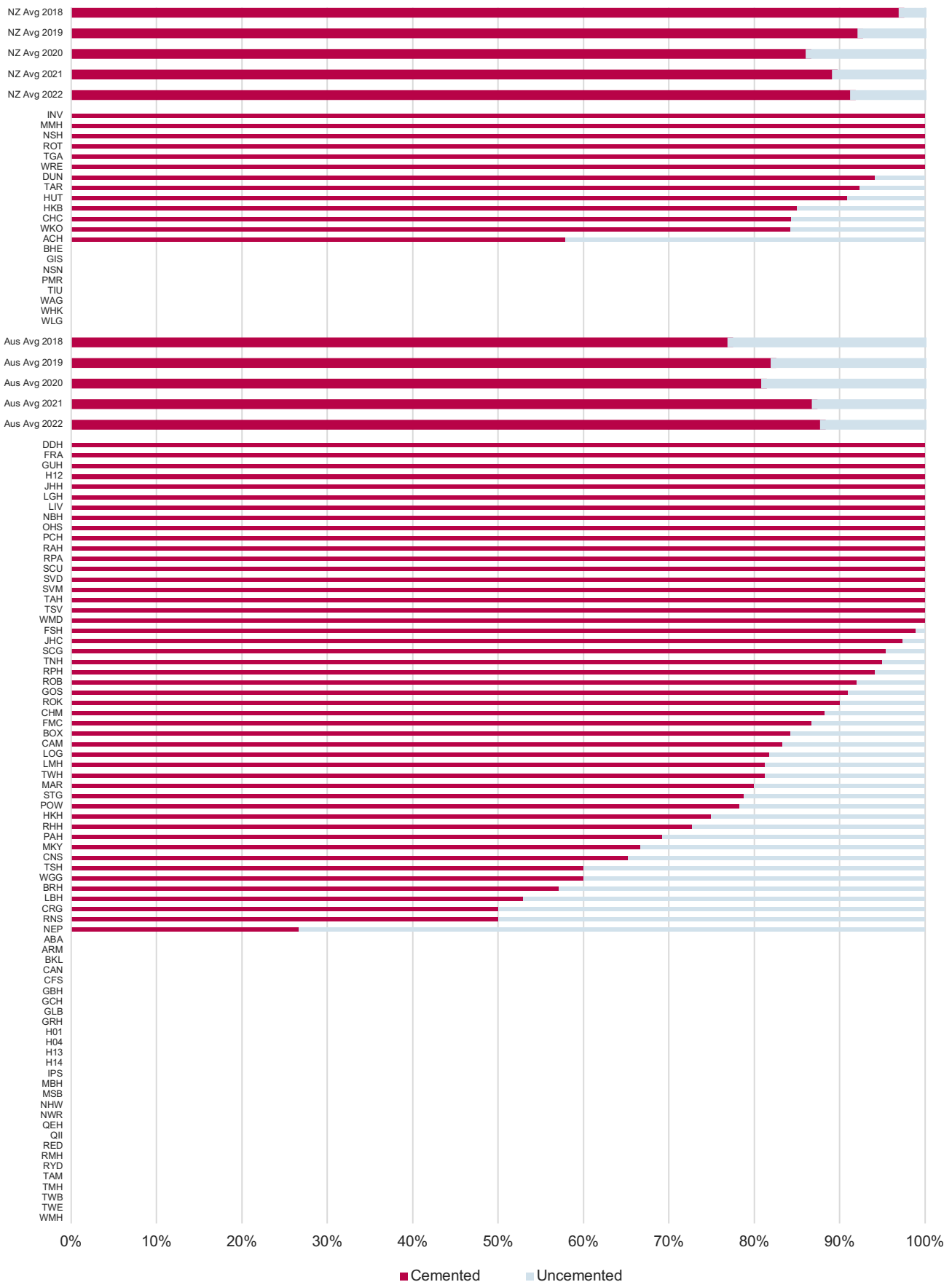


FIGURE 68 Total hip replacement: use of cemented stem



SECTION 4: POSTOPERATIVE CARE

FIGURE 69 Weight bearing status after surgery

Allowing immediate unrestricted weight bearing after surgery supports early rehabilitation and functional recovery. Figure 69 shows that 96% of patients in both New Zealand and Australia were permitted to weight bear without restriction after surgery. Some variation between hospitals remains evident.



WEIGHT BEARING STATUS AFTER SURGERY BY AUSTRALIAN STATE

FIGURE 70 New South Wales

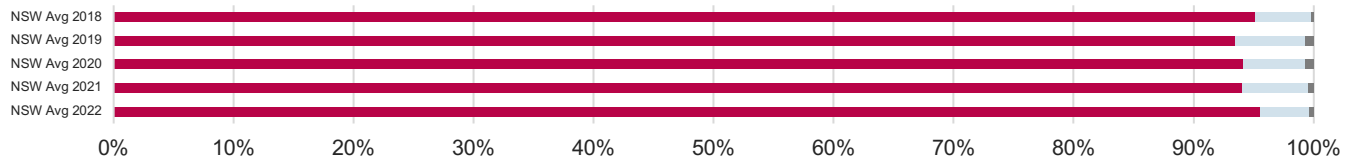


FIGURE 71 Queensland

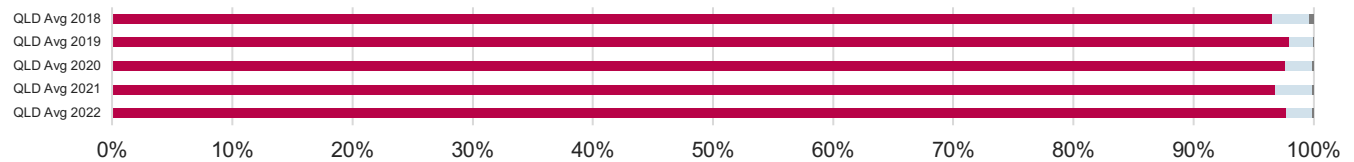


FIGURE 72 South Australia

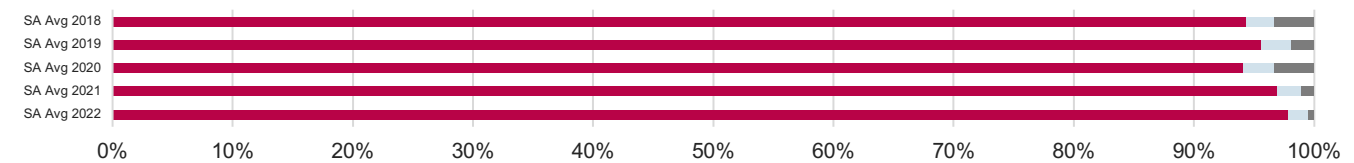


FIGURE 73 Tasmania

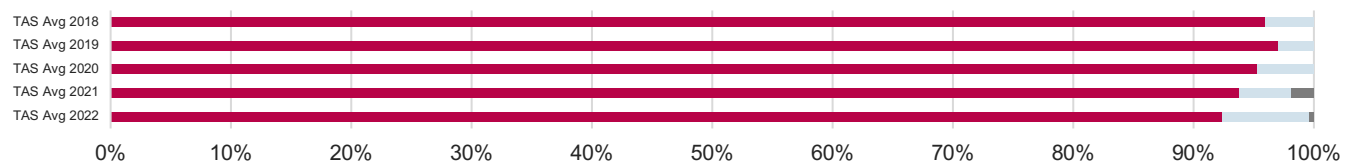


FIGURE 74 Victoria

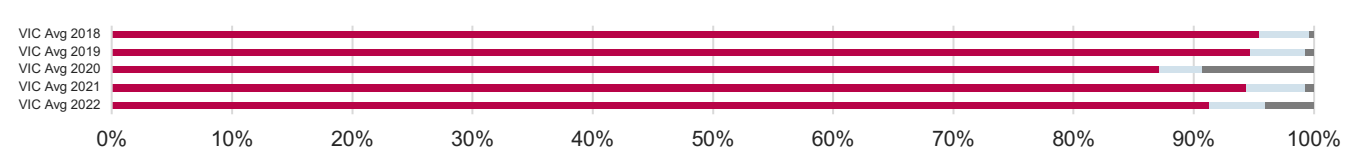
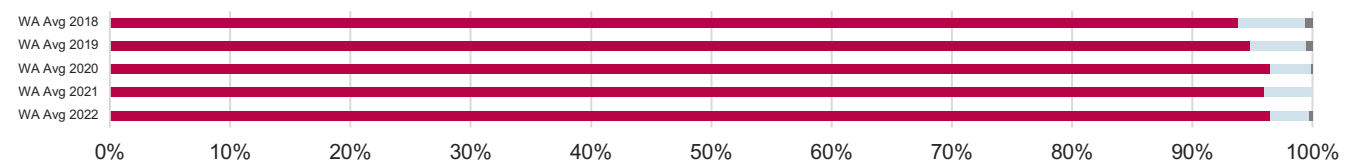


FIGURE 75 Western Australia

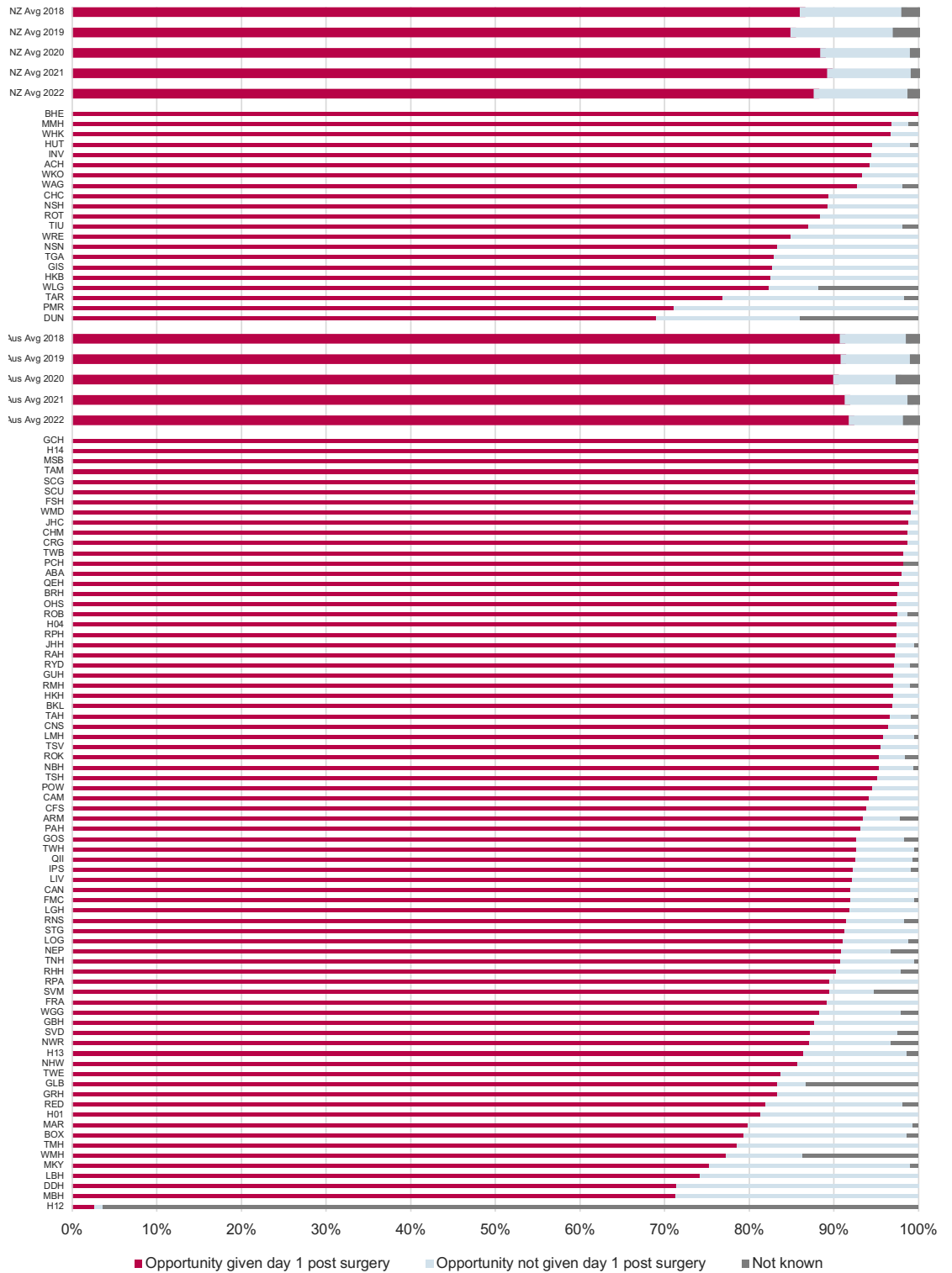


■ Unrestricted weight bearing ■ Restricted / non weight bearing ■ Not known



FIGURE 76 Opportunity for first day mobilisation

Eighty-eight percent of hip fracture patients in New Zealand and 92% in Australia were given the opportunity to mobilise the day after surgery.

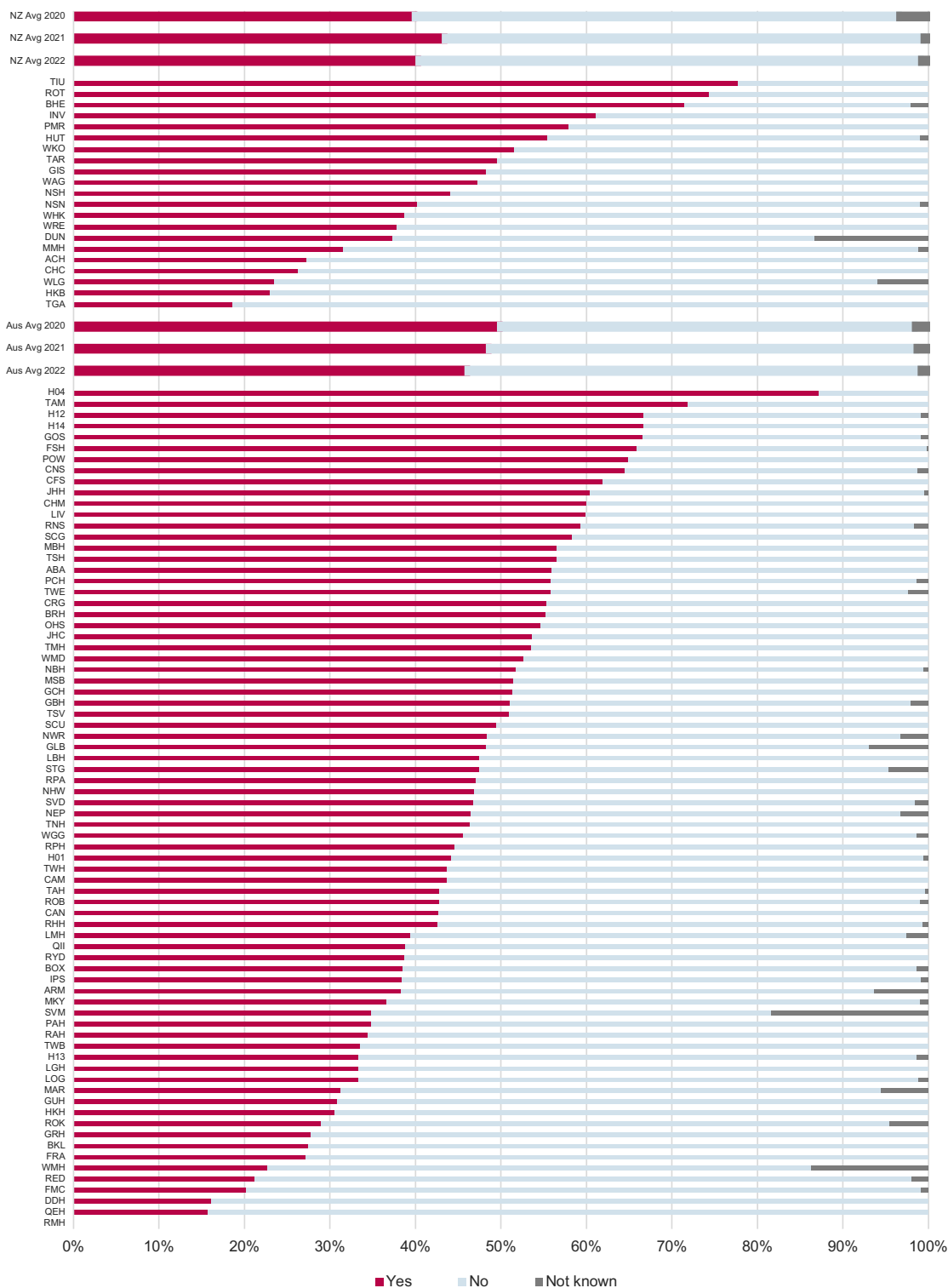




The Acute Rehabilitation Sprint Audit aimed to identify initial postoperative rehabilitation practices across Australia and New Zealand to better understand care in the acute setting. In 2022, 36 facilities across Australia and New Zealand completed the audit and provided information on 437 hip fracture patients. The results can be accessed from anzhfr.org/sprintaudits/. Work is ongoing to look at the association between frequency of acute rehabilitation, timing of commencement of acute rehabilitation, type of therapy received on day one and the impact on patient outcomes.

FIGURE 77 First day walking

Early mobilisation is associated with survival and recovery for patients after hip fracture¹. Forty percent of patients in New Zealand and 46% of patients in Australia achieved first day walking. This represents a reduction compared with the previous year in both countries.



1 Goubar, A., et al. (2021). "The 30-day survival and recovery after hip fracture by timing of mobilization and dementia: a UK database study." Bone Joint J 103-B(7): 1317-1324.

JOHN HUNTER HOSPITAL MOVES ON EARLY MOBILISATION

John Hunter Hospital (JHH) in Newcastle is the largest volume trauma centre in NSW and provides care to over 450 hip fracture patients per year. The JHH values the real time ANZHFR data and utilises this to monitor performance to ensure best patient care. In November 2021, JHH physiotherapy, orthogeriatrics and orthopaedic services reviewed ANZHFR first day walking data and acknowledged opportunities for improvement in the management of hip fracture patients. The JHH had 22% of patients achieve first day walking as per the 2021 ANZHFR annual report.

Independent of the ANZHFR report, researchers from the Injury and Trauma Research Program of the Hunter Medical Research Institute identified that first postoperative day walking is a more important predictor of optimal outcome than the weight bearing status².

Our less than optimal performance and local evidence on the importance of this first day mobilisation created the conducive environment for quality improvement.

We established a steering committee (including a physiotherapist, the orthopaedic clinical nurse consultant and an orthogeriatric consultant) and completed an audit of the clinical records of those patients not achieving first day walking, as recorded in the ANZHFR. This audit identified the need for improved and accurate clinical documentation to safeguard data collection and ensure first day walking is at the forefront of the patient's postoperative journey.

A physiotherapy 'Champion' was appointed to coordinate and implement a targeted education program supporting physiotherapy to improve opportunities provided for first day walking. Education regarding early mobilisation is now regularly delivered through in-services, safety



Rachelle Rex (Physiotherapist), Joan Jones (Patient) and Ramya Kunnath (Orthopaedic clinical nurse consultant).

huddles and clinical supervision sessions. We also focussed on improving specific documentation by physiotherapists, which makes data collection easier and more accurate.

With the support of enthusiastic nursing staff and the wider multidisciplinary team, early mobility is now incorporated into all aspects of the patients' care, including meal times and personal hygiene tasks.

We are proud to see objective improvements in the number of patients that are walking on their first day postoperatively, with 60% of patients achieving first day walking in 2022. We are committed to improving the outcomes for these patients, now and into the future.

2 Tarrant, S. M., et al. (2022). "The influence of weight-bearing status on post-operative mobility and outcomes in geriatric hip fracture." *Eur J Trauma Emerg Surg* 48(5): 4093-4103.

FIRST DAY WALKING BY AUSTRALIAN STATE

FIGURE 78 New South Wales

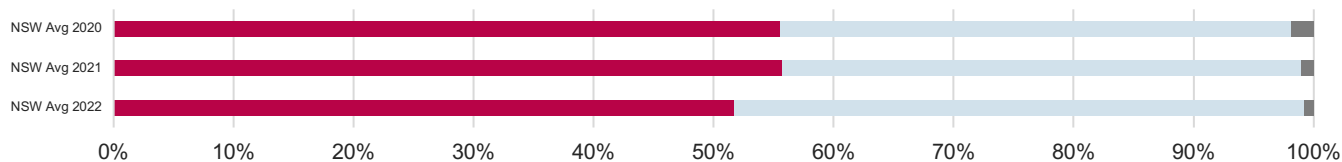


FIGURE 79 Queensland

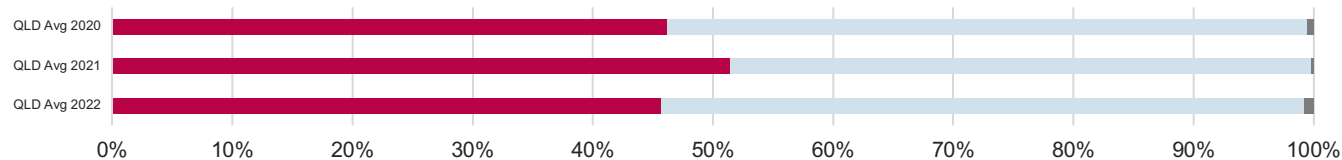


FIGURE 80 South Australia

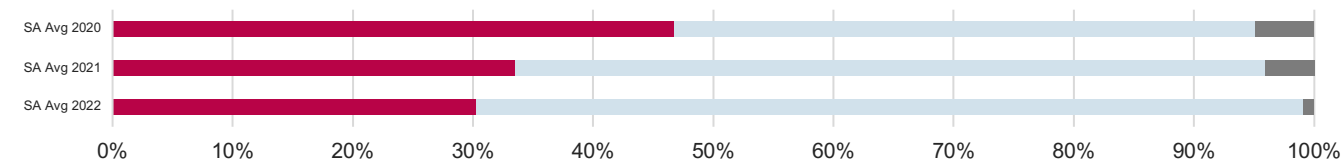


FIGURE 81 Tasmania

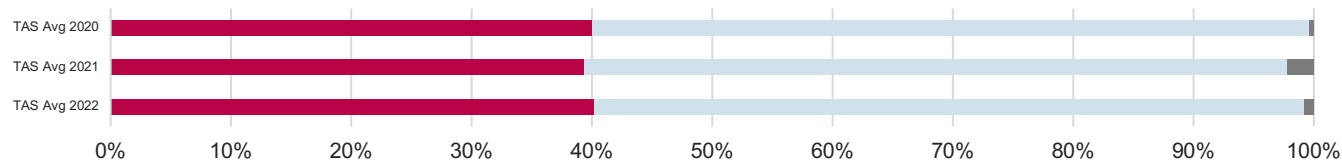


FIGURE 82 Victoria

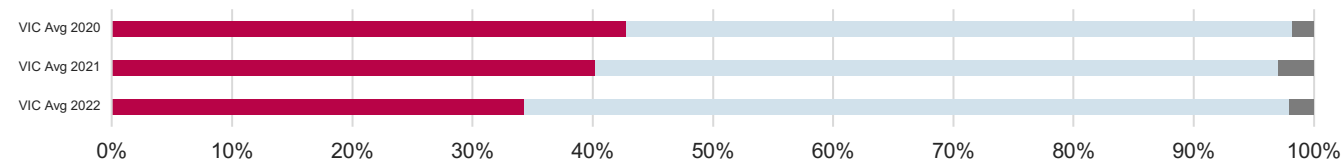
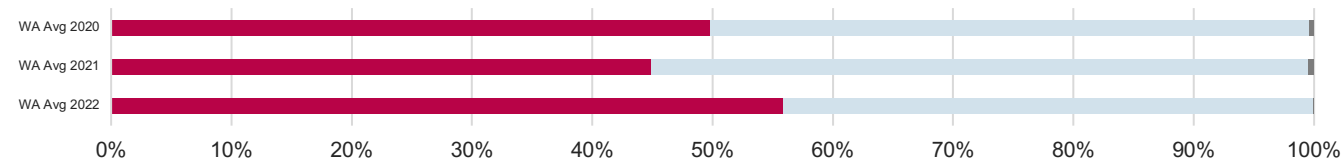


FIGURE 83 Western Australia



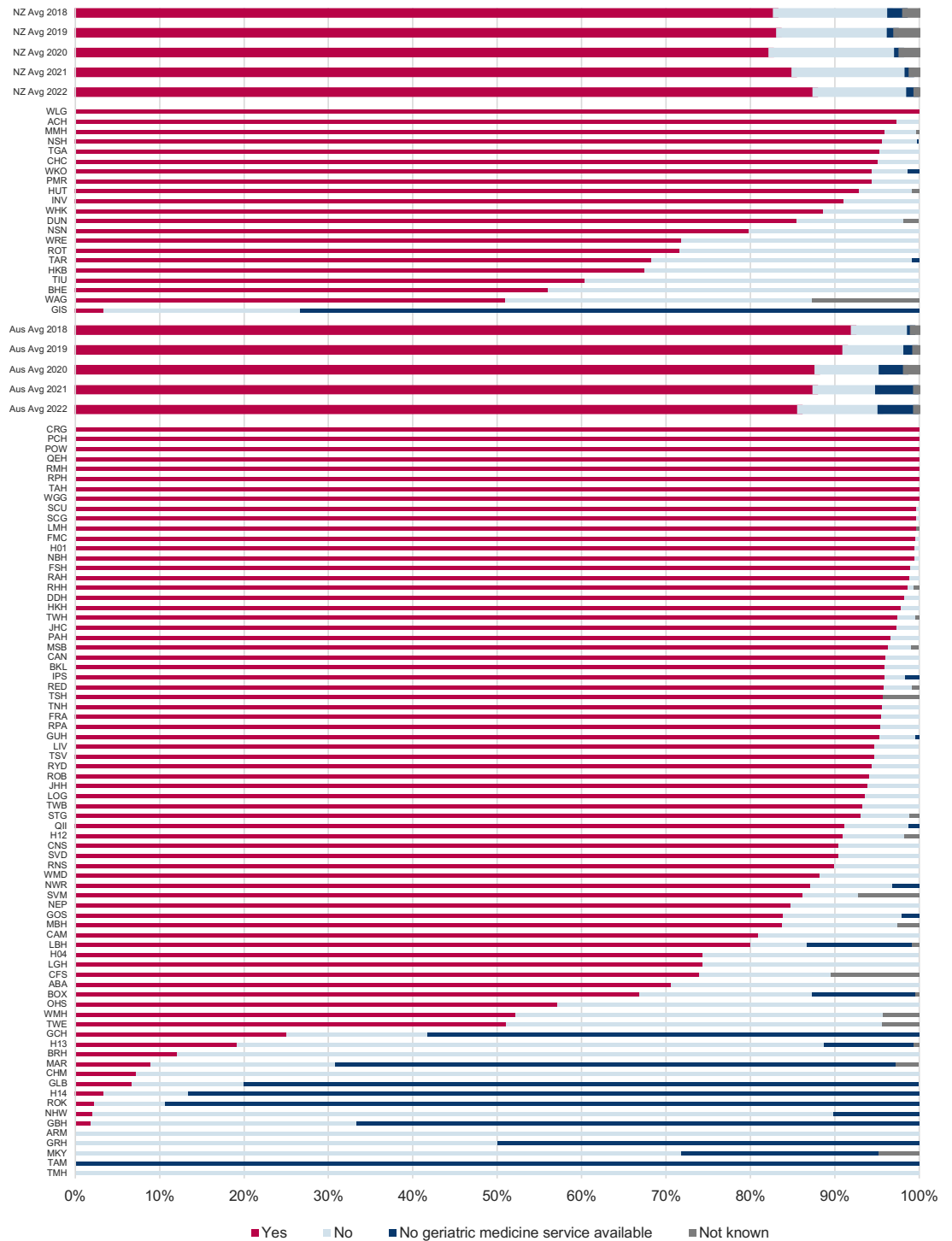
■ Yes ■ No ■ Not known



FIGURE 84 Assessed by geriatric medicine during acute admission

In New Zealand, 88% of hip fracture patients saw a geriatrician during their acute hospital stay, representing an increase over time. In Australia, the proportion of patients seen by a geriatrician has decreased over the last five years, some of which may be attributable to service reconfiguration during the COVID-19 pandemic.

In 2022, 86% of patients in Australia saw a geriatrician during their acute hospital stay.



ASSESSED BY GERIATRIC MEDICINE DURING ACUTE ADMISSION BY AUSTRALIAN STATE

FIGURE 85 New South Wales

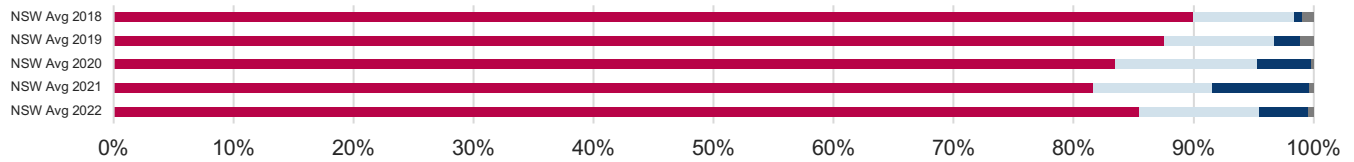


FIGURE 86 Queensland

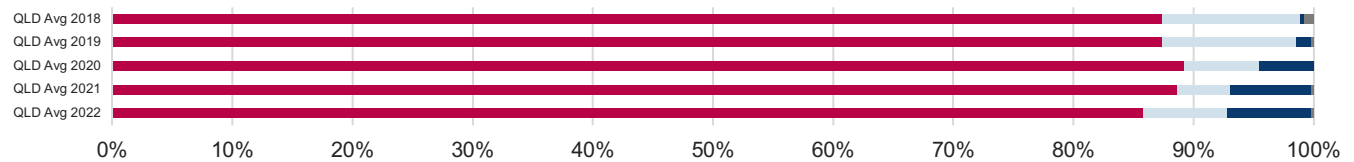


FIGURE 87 South Australia

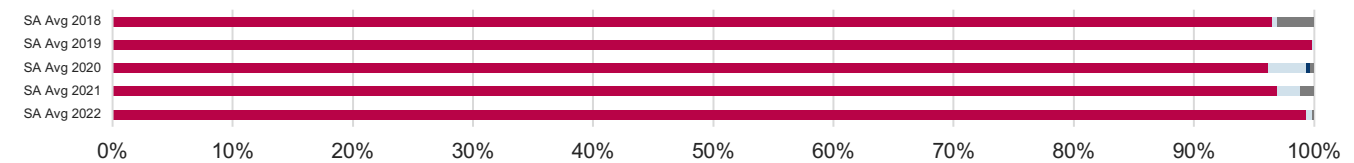


FIGURE 88 Tasmania

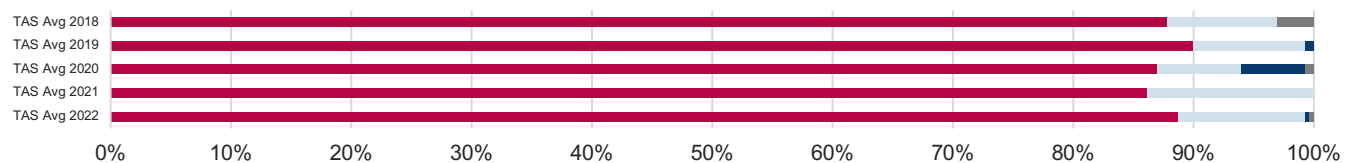


FIGURE 89 Victoria

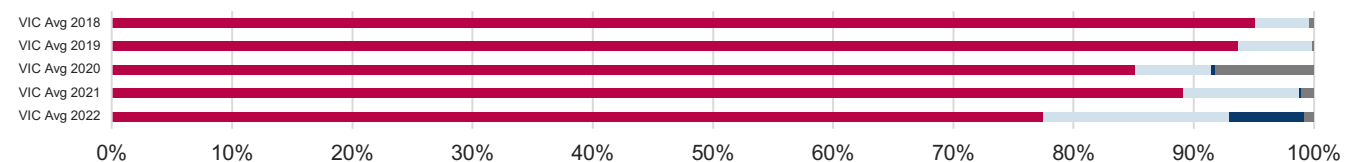
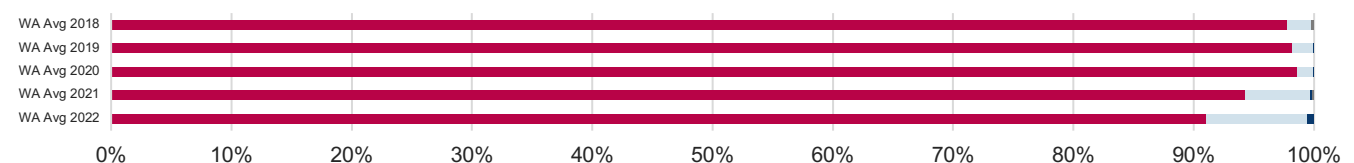


FIGURE 90 Western Australia



■ Yes ■ No ■ No geriatric medicine service available ■ Not known

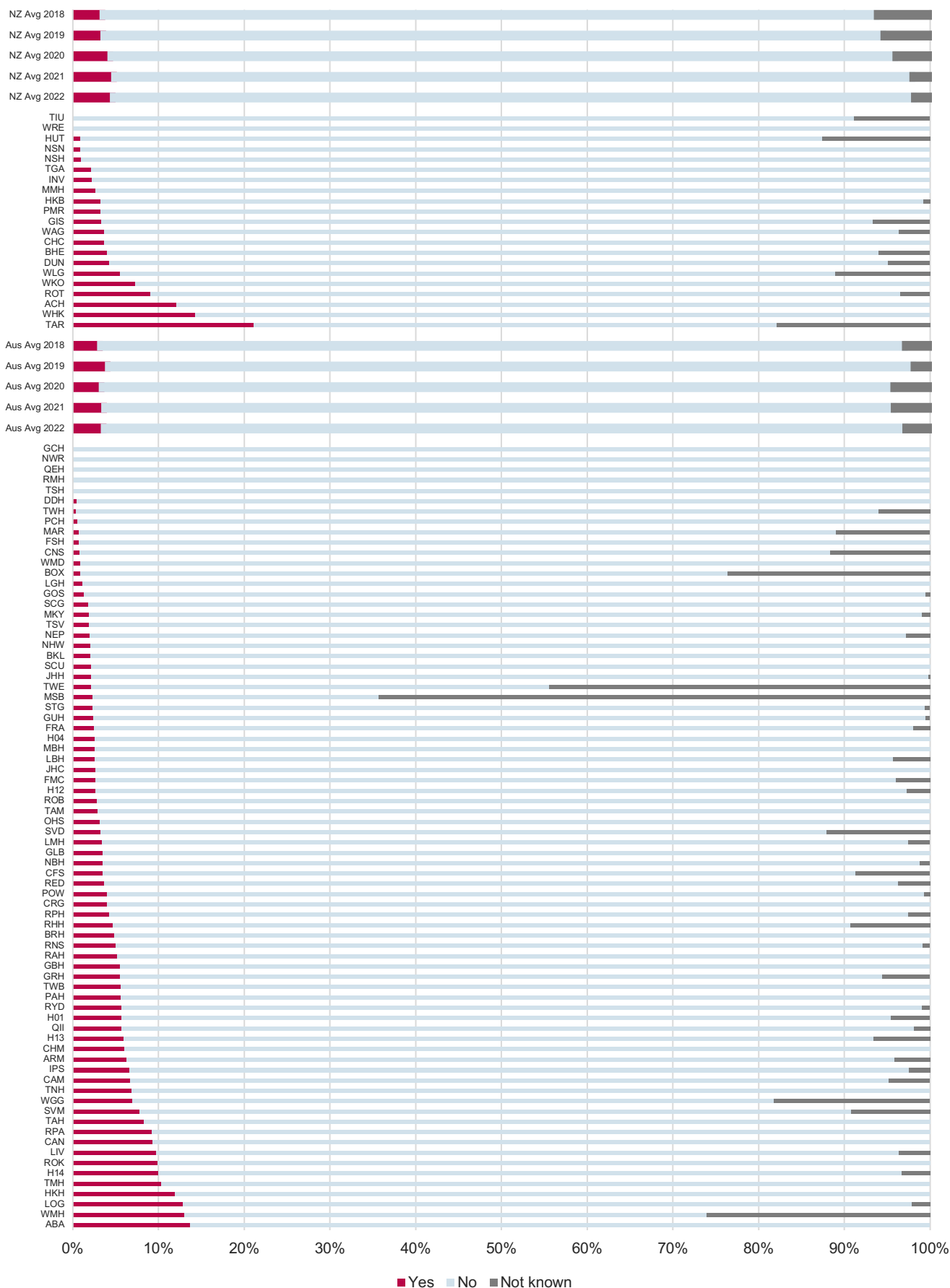
FIGURE 9I Time to geriatric assessment

In New Zealand, average time to geriatric assessment was 2 days (median time to assessment 2 days). In Australia, average time to geriatric assessment was 1 day (median time to assessment 1 day). This represents a reduction in average time to geriatric assessment in both countries. Patient acuity likely influences time to assessment, with patients who are unwell being seen earlier.



FIGURE 92 Hospital acquired pressure injuries of the skin

A pressure injury of the skin is a potentially preventable complication of hip fracture care. It is associated with delayed functional recovery and an increased length of stay. Five percent of patients in New Zealand and 4% in Australia were documented as acquiring stage 2 or greater pressure injury of the skin during their acute hospital stay.



HOSPITAL ACQUIRED PRESSURE INJURIES OF THE SKIN BY AUSTRALIAN STATE

FIGURE 93 New South Wales

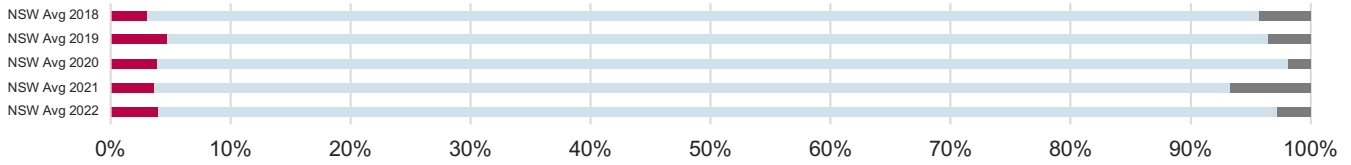


FIGURE 94 Queensland

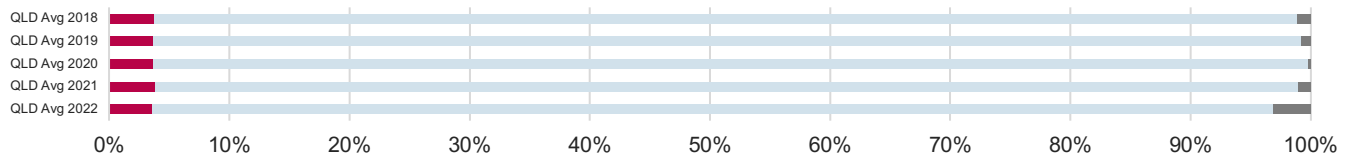


FIGURE 95 South Australia

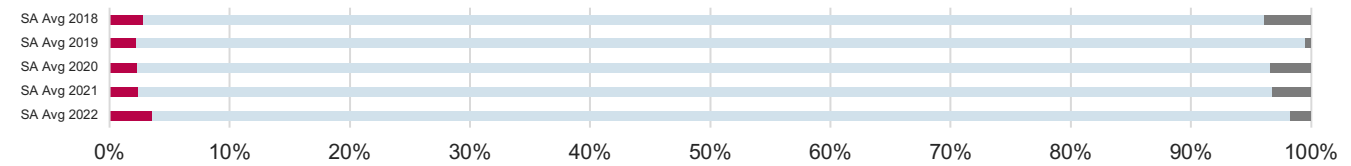


FIGURE 96 Tasmania

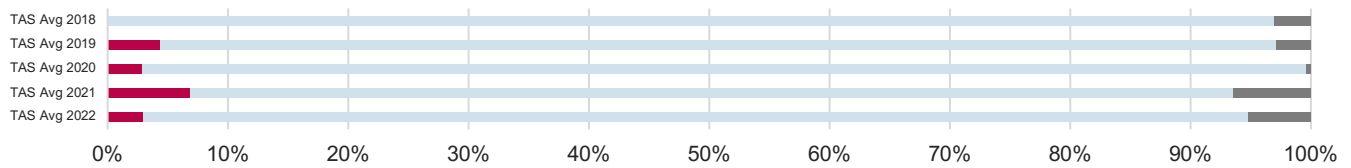


FIGURE 97 Victoria

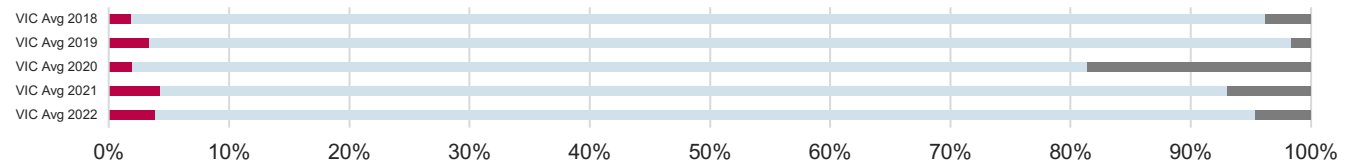
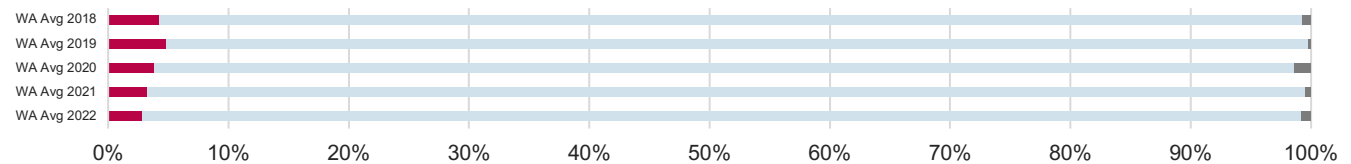


FIGURE 98 Western Australia

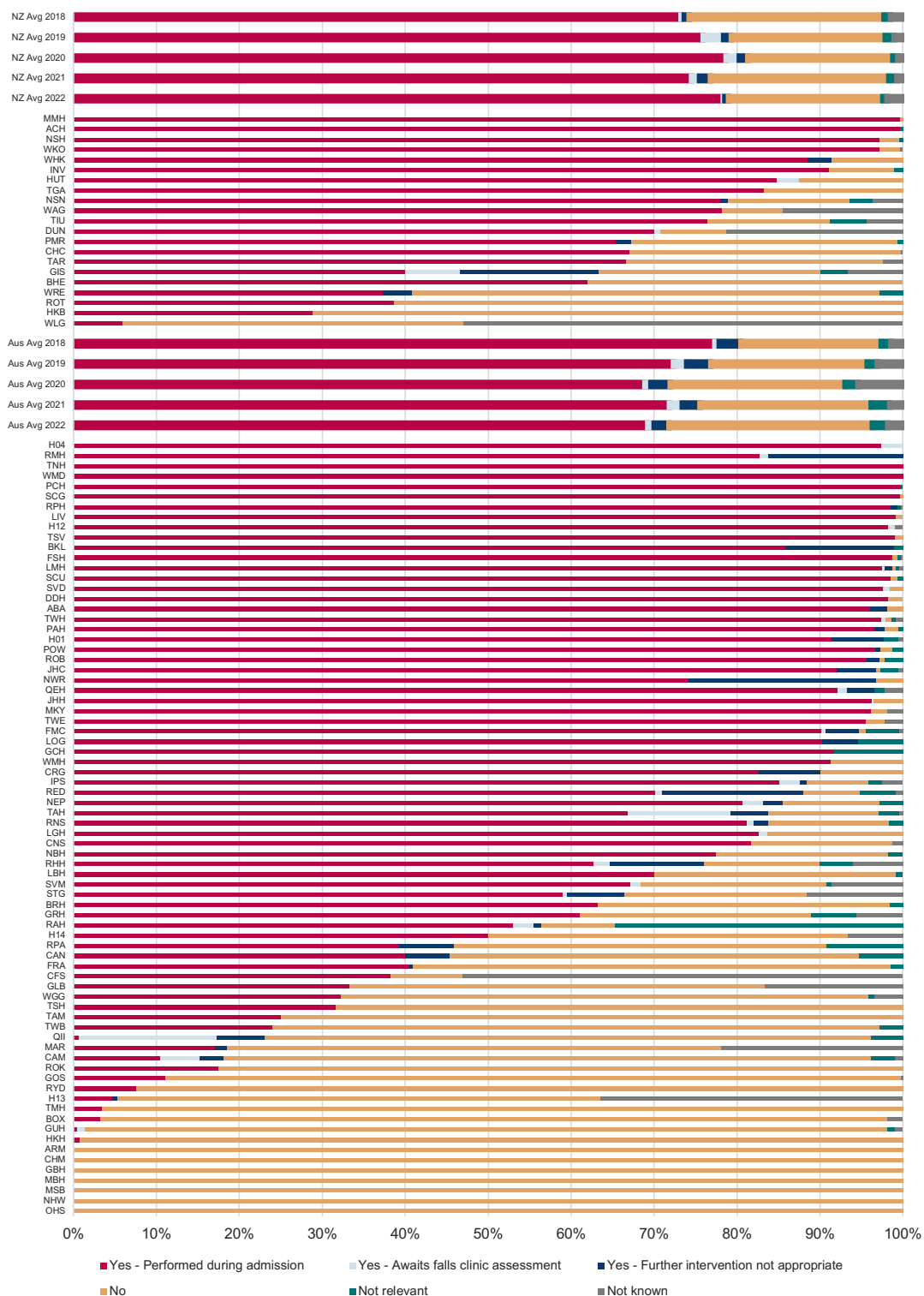


■ Yes ■ No ■ Not known



FIGURE 99 Specialist falls assessment

In 2022, 78% of patients in New Zealand and 69% of patients in Australia were reported to have undergone a specialist falls assessment during their hospital admission.



SPECIALIST FALLS ASSESSMENT BY AUSTRALIAN STATE

FIGURE 100 New South Wales

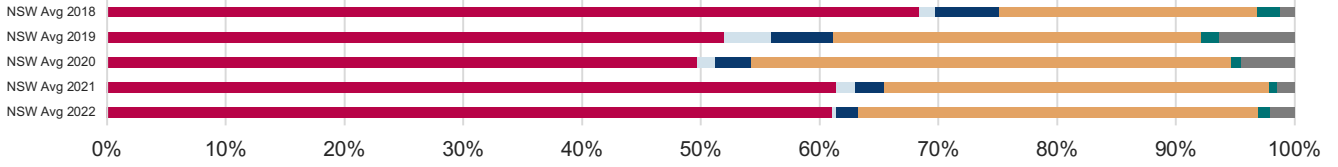


FIGURE 101 Queensland



FIGURE 102 South Australia

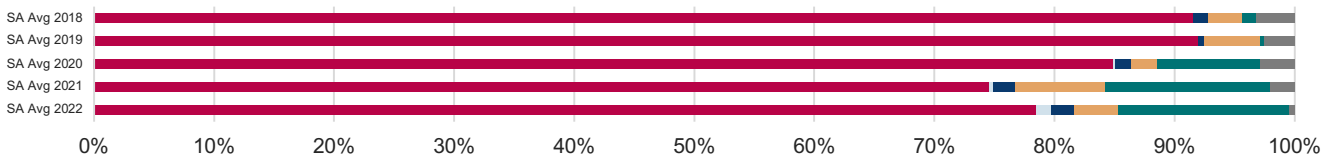


FIGURE 103 Tasmania

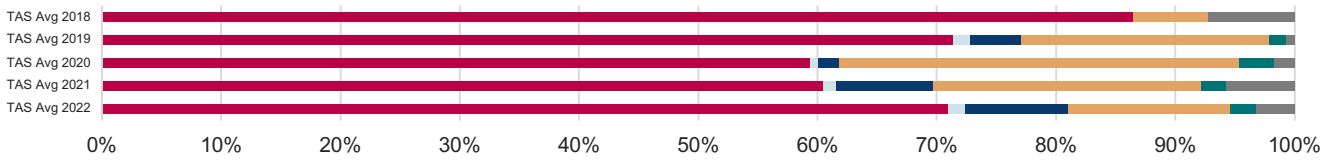


FIGURE 104 Victoria

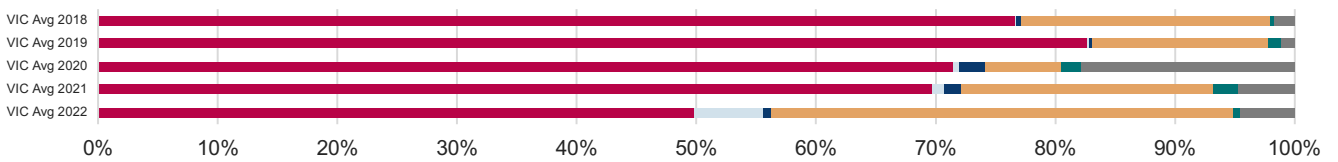
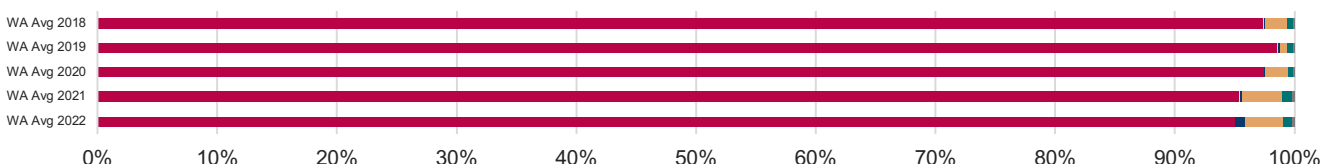


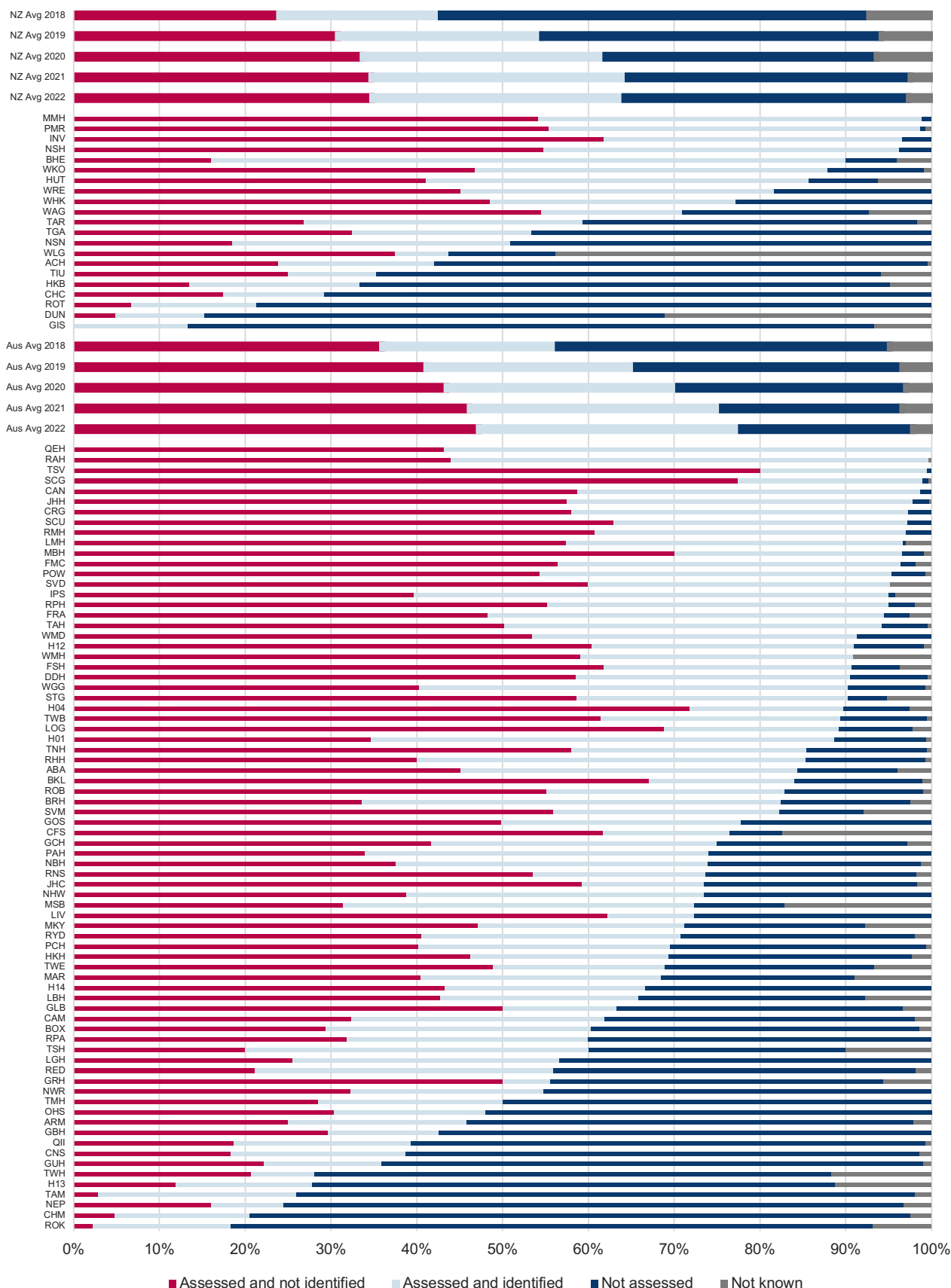
FIGURE 105 Western Australia



■ Performed during admission
 ■ Awaits falls clinic assessment
 ■ Further intervention not appropriate
 ■ No
 ■ Not relevant
 ■ Not known

FIGURE 106 Assessment of delirium

The assessment of delirium continues to improve each year. In New Zealand, 64% of patients had an assessment for delirium and 46% of those assessed were identified as experiencing delirium during the acute hospital stay. In Australia, 78% of patients had an assessment for delirium and 39% of those assessed were identified as experiencing delirium. One third of patients in New Zealand and one fifth of patients in Australia were not assessed for delirium, suggesting delirium may be under reported.



IMPROVING NUTRITION CARE AFTER HIP FRACTURE

Hi, I'm Jack. I'm an advanced accredited practising dietitian, Principal Research Fellow at The Prince Charles Hospital, and the Dietitians Australia representative on the ANZHFR Steering Group.

For the first 15 years of my career as a dietitian, I observed first-hand that nutrition care in hip fracture was routinely undervalued and overlooked, resulting in profound adverse patient and healthcare outcomes. Over the last decade, together with our local hip fracture unit, members of the ANZHFR, and many interprofessional colleagues globally, we have been working hard to change this. We have produced data and research highlighting the importance of nutrition care in hip fracture. And we have tenaciously persisted in bringing nutrition to the table, so to speak.

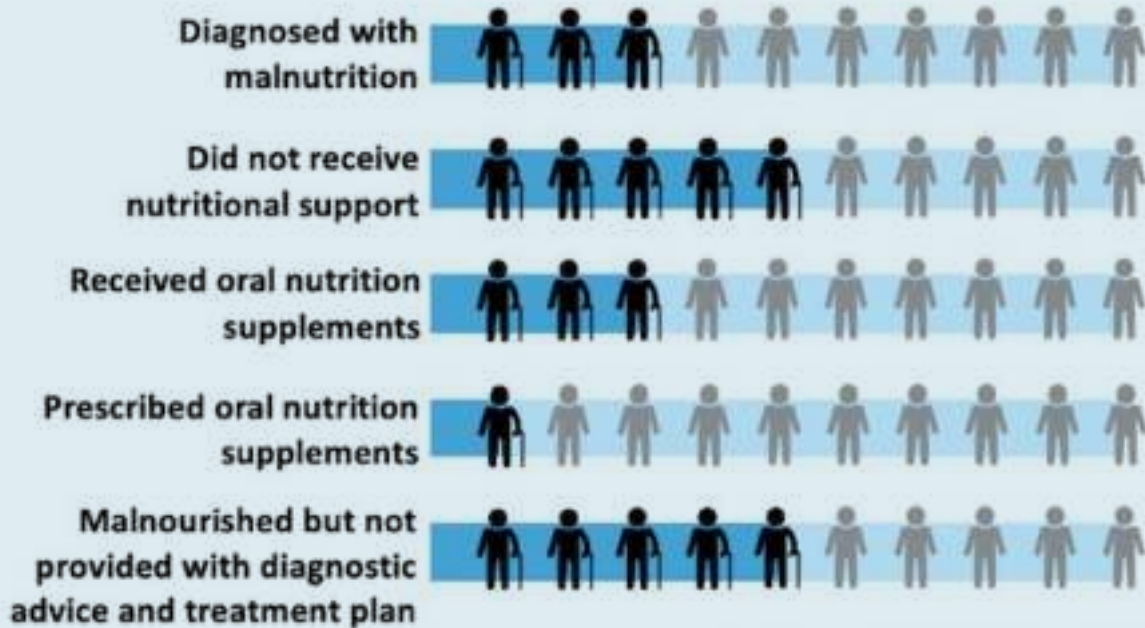


We have shown that malnutrition is associated with harmful inpatient falls and is a stronger predictor of patient and healthcare outcomes than time to surgery, type of surgery, ASA grade or Charlson Comorbidity Index. We have busted the myth that it's ok for overweight or obese older adults with hip fracture patients to lose a bit of weight after surgery, because a Diagnosis of Overweight or Obese Malnutrition really does spell doom when it comes to delayed mobility, delirium, and 12-month mortality. We have also shown that it is more cost-effective to assess and treat everyone from admission rather than waiting to see if patients become malnourished, especially given that malnutrition is one of the costliest comorbidities in hip fracture and the one most likely to prolong length of stay.

We have developed models of care that engage patients, interdisciplinary treating team members, and policy makers to deliver sustainable improvements in nutrition care, locally and globally. These show that multidisciplinary, multimodal nutrition care can improve nutrition care processes, patient experience, and outcomes.

However, the results from the ANZHFR sprint audit were eye-opening. Despite all our hard work, there are still many improvement opportunities for the provision of best practice nutrition care.

In 450 patients admitted with hip fracture across 30 hospitals in Australia and New Zealand:



For more information, go to anzhfr.org/sprintaudits

But there are also many positives. We have included clinical malnutrition assessment in the core ANZHFR dataset. Nutrition care is embedded in the Australian and New Zealand Guideline for Hip Fracture Care, the ACSQHC National Standards (Comprehensive Care) and we have now successfully introduced nutrition quality indicators into the revised version of the ACSQHC Hip Fracture Clinical Care Standard.

We have seen improvements in malnutrition assessment, with 56% of patient in New Zealand and 72% of patients in Australia receiving a clinical malnutrition assessment after hip fracture (Figure 107). This has increased from a baseline of 44% in New Zealand and 65% in Australia in 2019.

Over the next few years, we will leverage the Registry, engaged nutrition experts, champions, and exemplar sites to support hospitals across Australia and New Zealand to tackle the gaps we have found in hospital-based nutrition care when compared with best practice guidelines and standards.

Congratulations to the ANZHFR and participating hospitals for taking up the challenge to improve nutrition care for all patients admitted with hip fracture across Australia and New Zealand.

FIGURE 107 Clinical malnutrition assessment

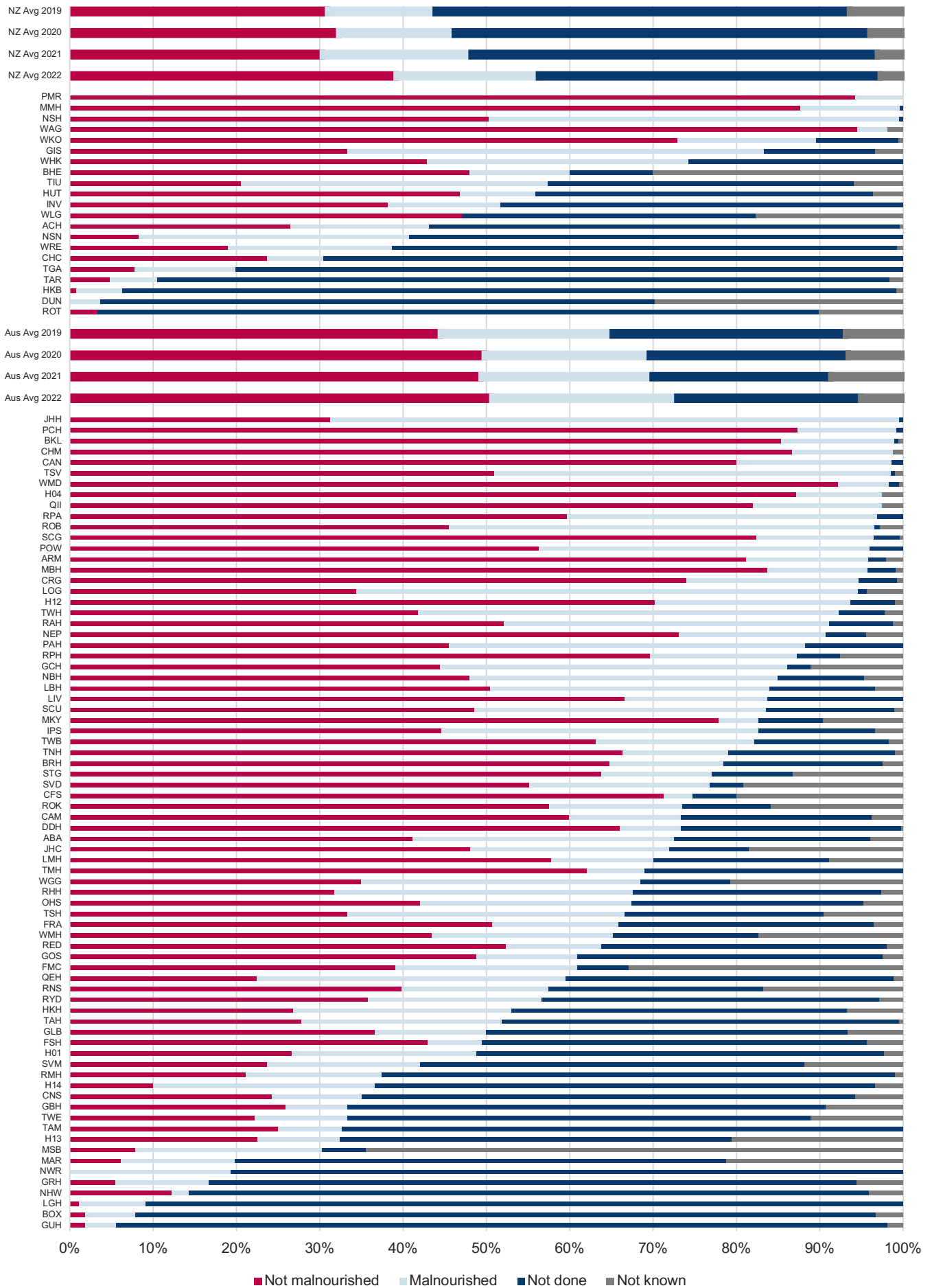


FIGURE 108

Average length of stay (LOS) in acute ward

The median LOS in the acute ward in New Zealand was 8 days and 49% of patients were transferred to rehabilitation. In Australia, the median length of stay in the acute ward was 8 days and 42% were transferred to rehabilitation. There has been a decrease in the proportion of patients transferred to rehabilitation.

FIGURE 109

Discharge to rehabilitation

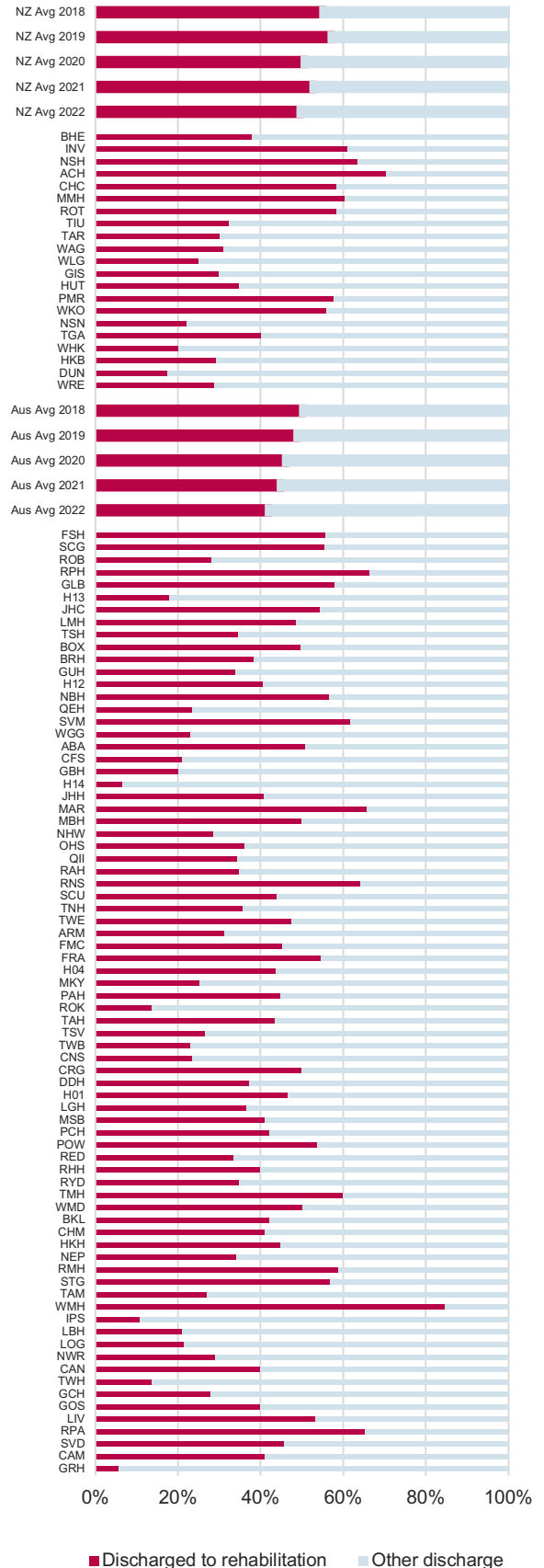
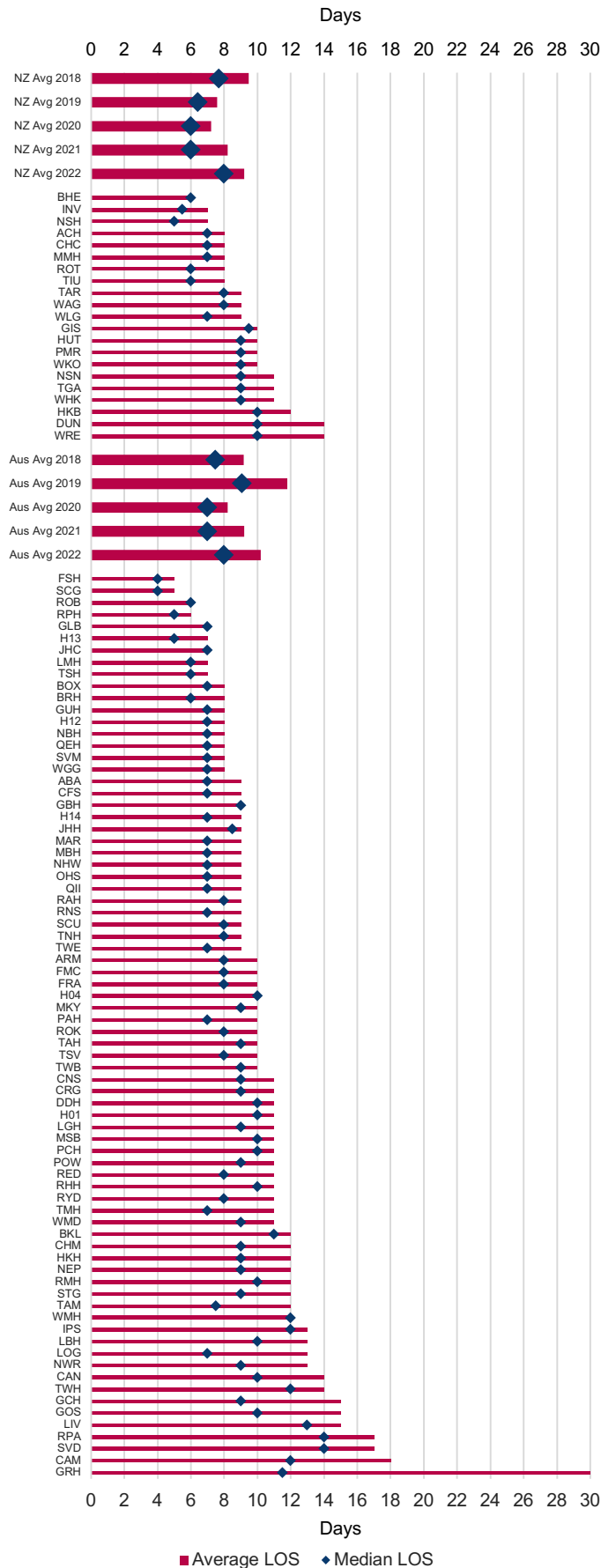


FIGURE 110 Average LOS in hospital system

For the first time, average LOS in hospital is reported. The average LOS in hospital was 20 days in New Zealand and 22 days in Australia. The median LOS in hospital was 17 days in New Zealand and 13 days in Australia. Variation between hospitals is evident and may reflect availability of rehabilitation services and the ability to collect final hospital system discharge date.

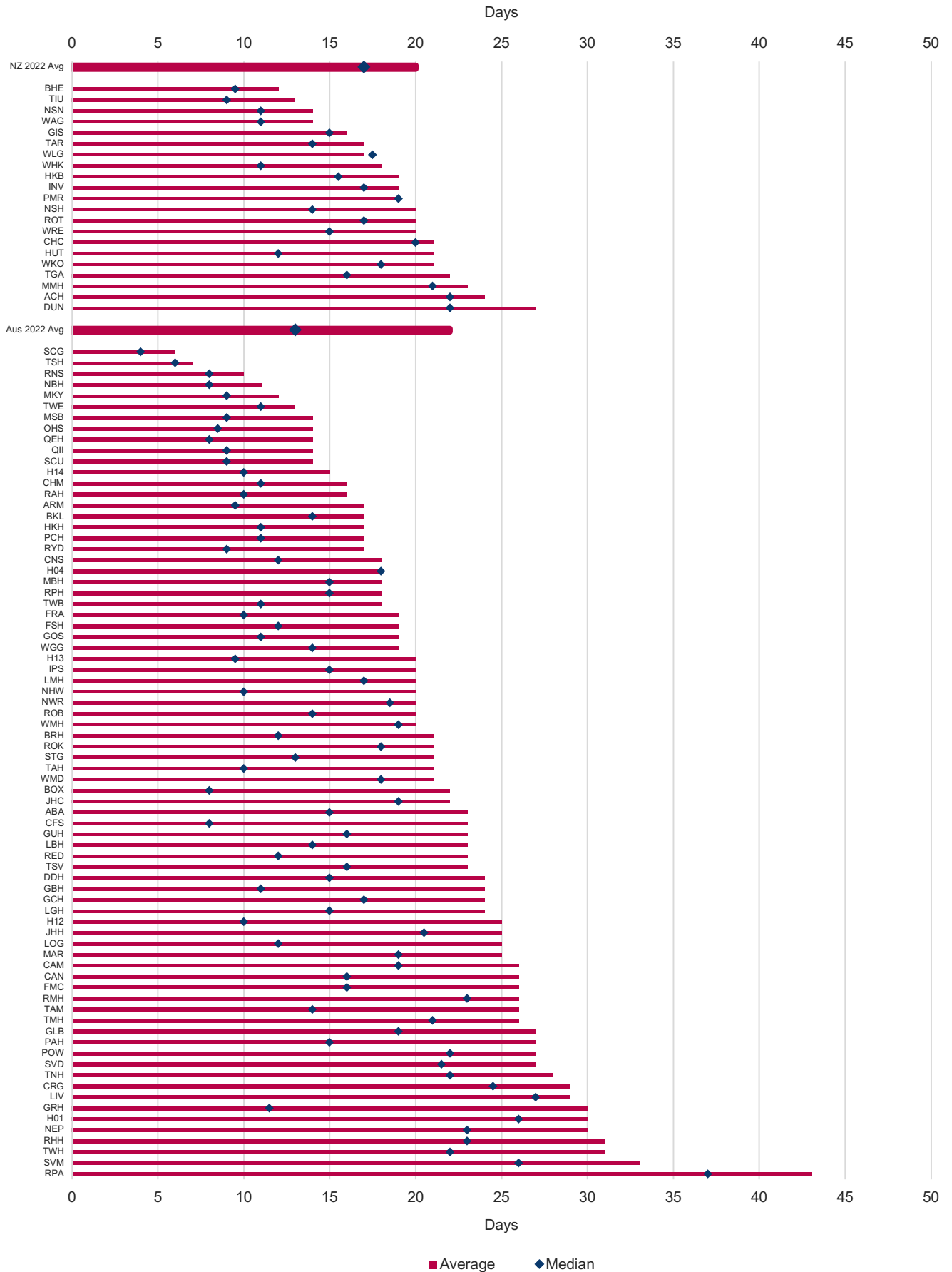


FIGURE III Discharge destination from acute ward

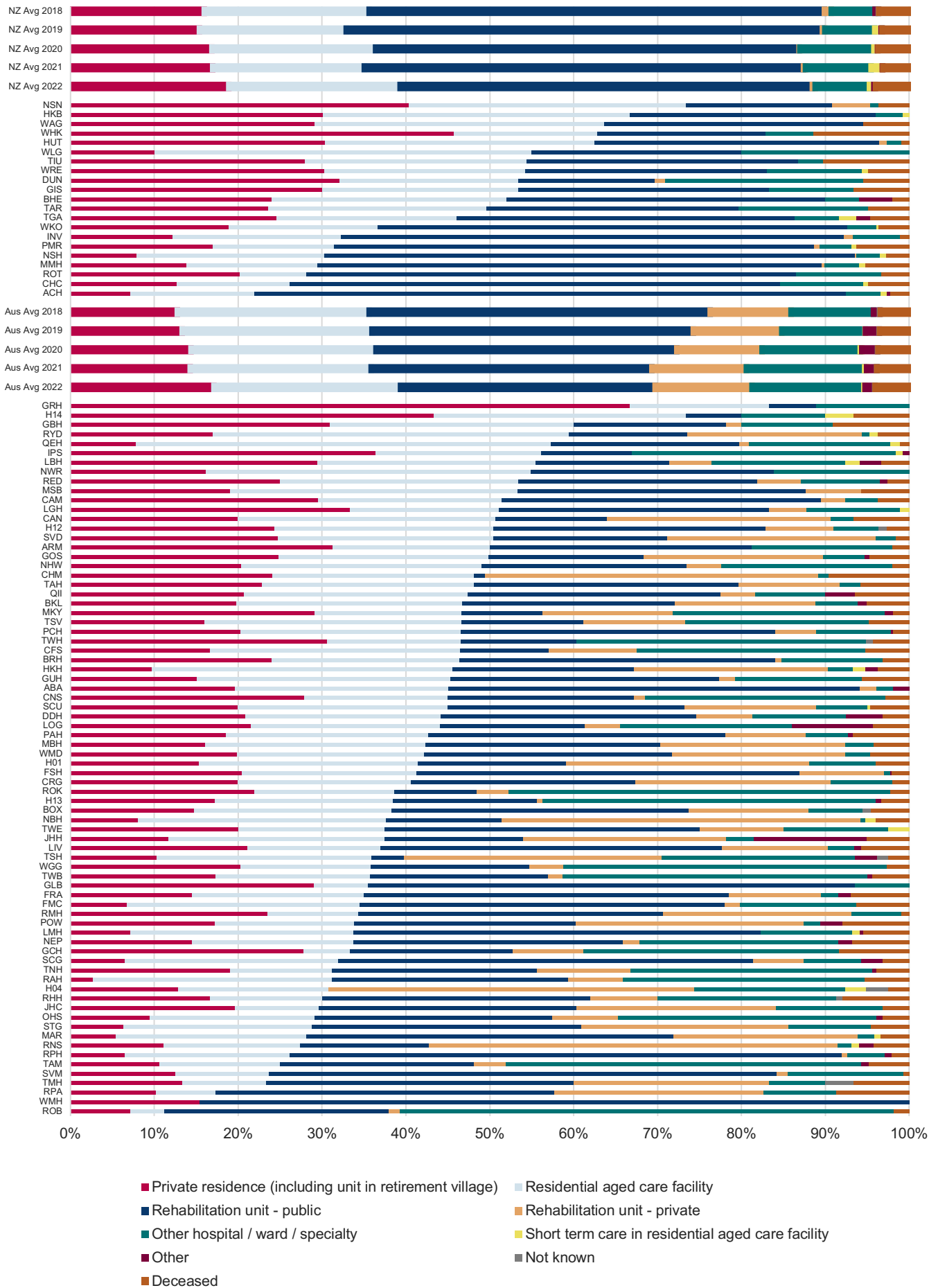
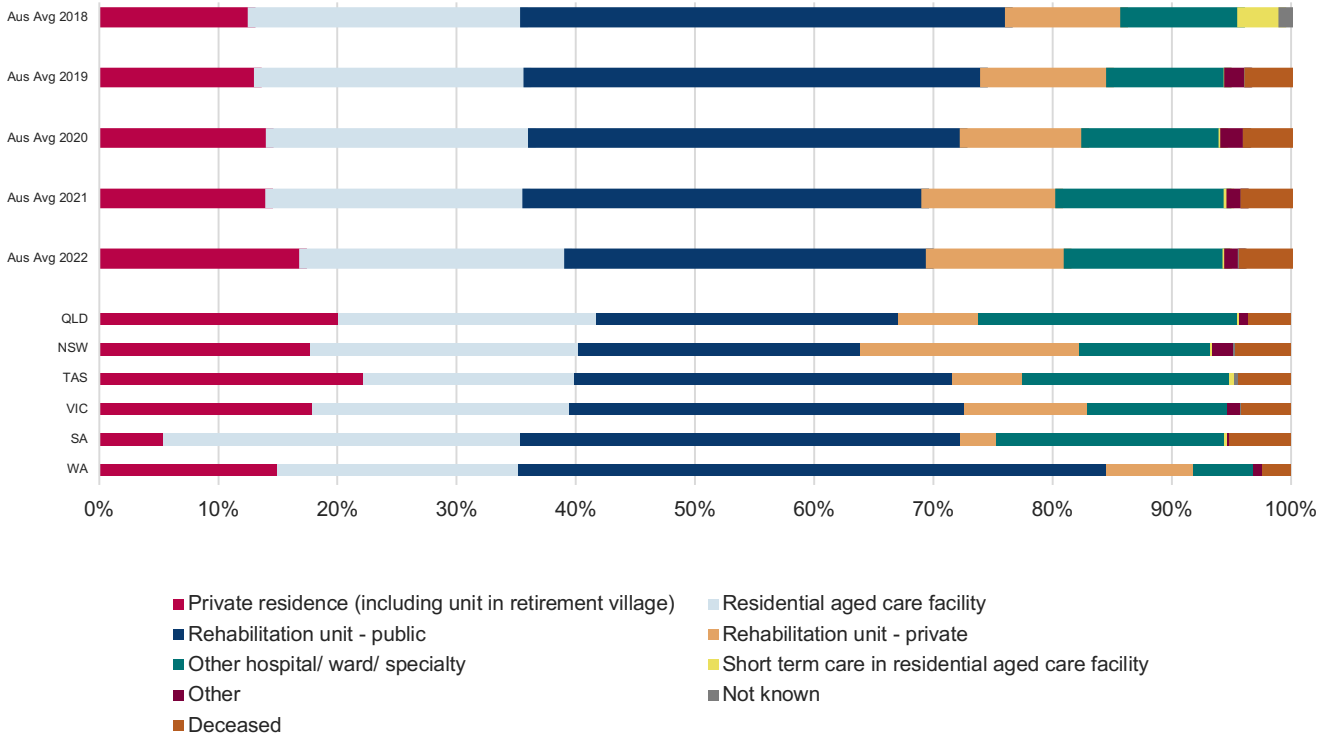




FIGURE 112 Discharge destination from acute ward by Australian state



ROYAL PERTH HOSPITAL OPTIMISES TRANSITION BACK TO RESIDENTIAL AGED CARE AFTER HIP FRACTURE



Dr Tara Kok, Geriatrician, working in Co-HIVE

Royal Perth Hospital has implemented an innovative model to follow-up all hip fracture patients who are discharged back to a Residential Aged Care Facility (RACF) within 24 hours, via telehealth. This is to optimise the sometimes challenging transition back to the RACF.

The Community – Health Care in a Virtual Environment (Co-HIVE) team comprises of specialist clinicians, including consultant geriatricians, palliative care physicians, older adult psychiatrists and clinical nurses. This service currently receives block funding from WA Health.

Clinical reviews are conducted virtually by a geriatrician via HealthDirect videolink. If WiFi/data connectivity is unavailable, the Co-HIVE may offer a telephone service in lieu of a HealthDirect videocall, if clinically appropriate. We work closely with Residential Care Line, who are able to review in person if needed and also work closely with GP's and Nurse Practitioners in RACFs who are able to review the consumers in person. We also have the option to arrange for face to face follow up in the Royal Perth Hospital Ambulatory Unit if needed.

The main areas that we find have improved are access to analgesia on return to RACF, encouraging mobility/sitting out of bed, early access to palliative care if needed and reassurance to staff/family that the patient will be followed up quickly after hospital admission.

We have had positive feedback from consumers, their families, RACF staff and GP's particularly when there have been complex medical issues on admission or throughout the hospital stay.

I am working with our perioperative team to develop a RACF discharge pathway so we can try to standardise our follow up.

Dr Sophie Reynolds, Geriatrician

Co-HIVE Aged Care

FIGURE 113

Residents of aged care facilities discharged to rehabilitation (public or private)

In New Zealand, 29% of people from residential care were transferred to rehabilitation after their acute episode of care. This contrasts to 8% in Australia. The proportion of aged care residents who are transferred to rehabilitation continues to decrease year-on-year in Australia, the reasons for which are unclear. The ANZHFR plans to explore the impact on the patient’s outcomes and functional recovery longer-term.

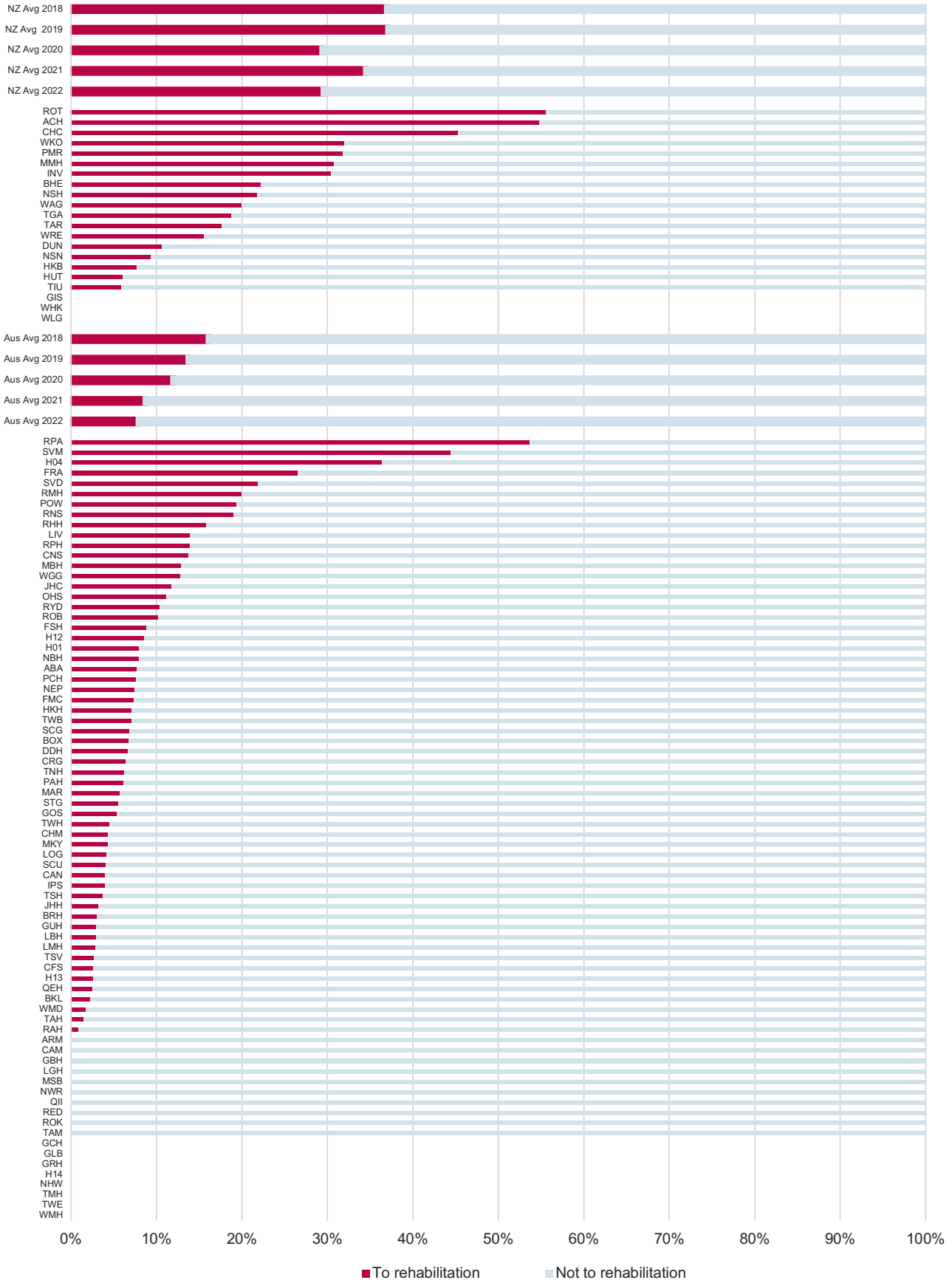


FIGURE 114 Access to rehabilitation (public or private) for patients from private residence with preadmission impaired cognition

In New Zealand, 68% of people with pre-existing cognitive impairment, who lived in a private residence prior to their injury, were transferred to rehabilitation. In Australia, 54% went to rehabilitation. Significant variation in practice is evident. There continues to be a decrease in the proportion of people with cognitive impairment accessing inpatient rehabilitation. The impact on the patient's outcomes and functional recovery longer-term warrants exploration.

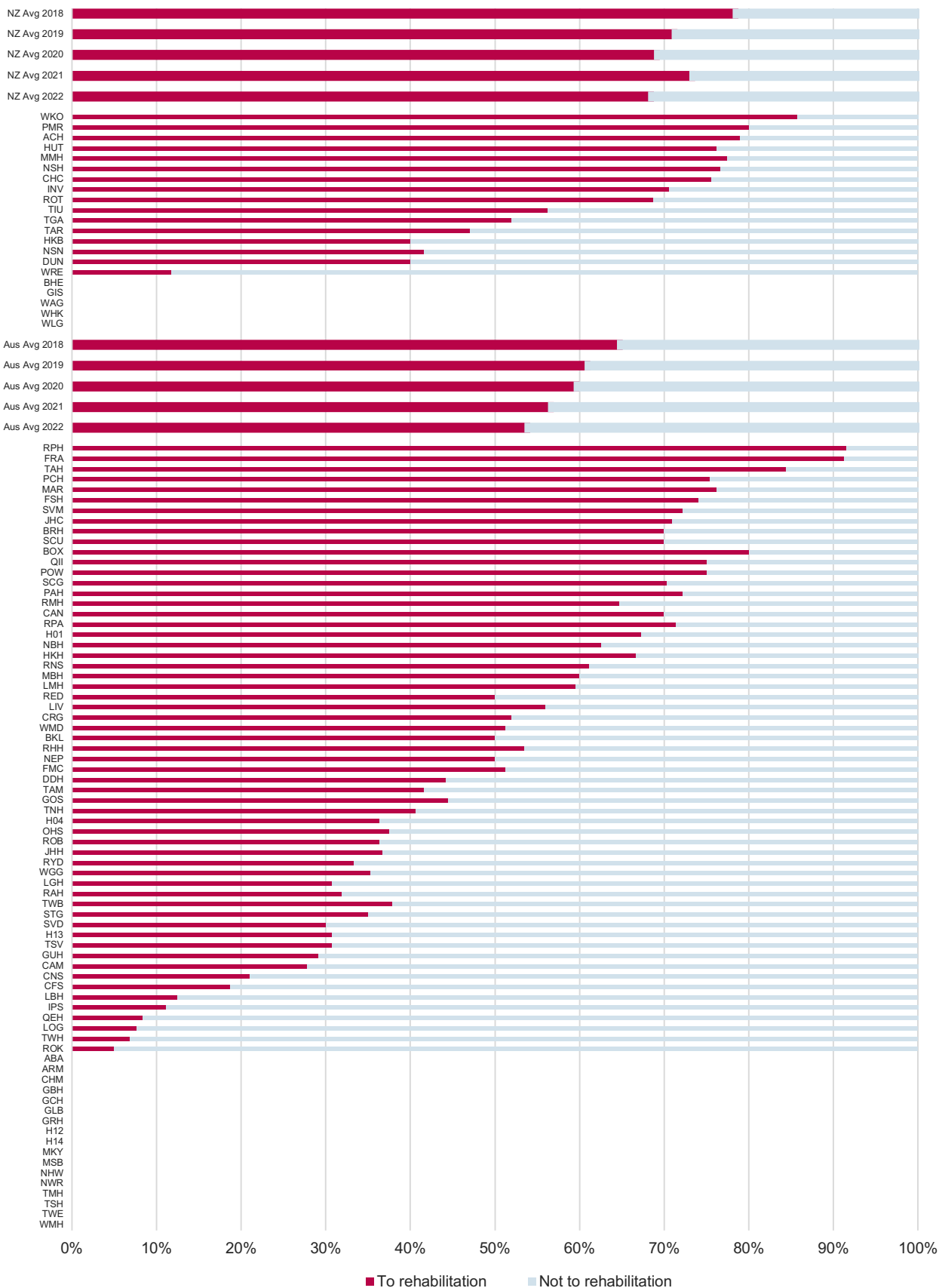


FIGURE 115 Bone protection medication on admission

Ten percent of hip fracture patients in New Zealand and 13% in Australia were on active treatment for osteoporosis on admission, demonstrating a small increase over time in both countries.

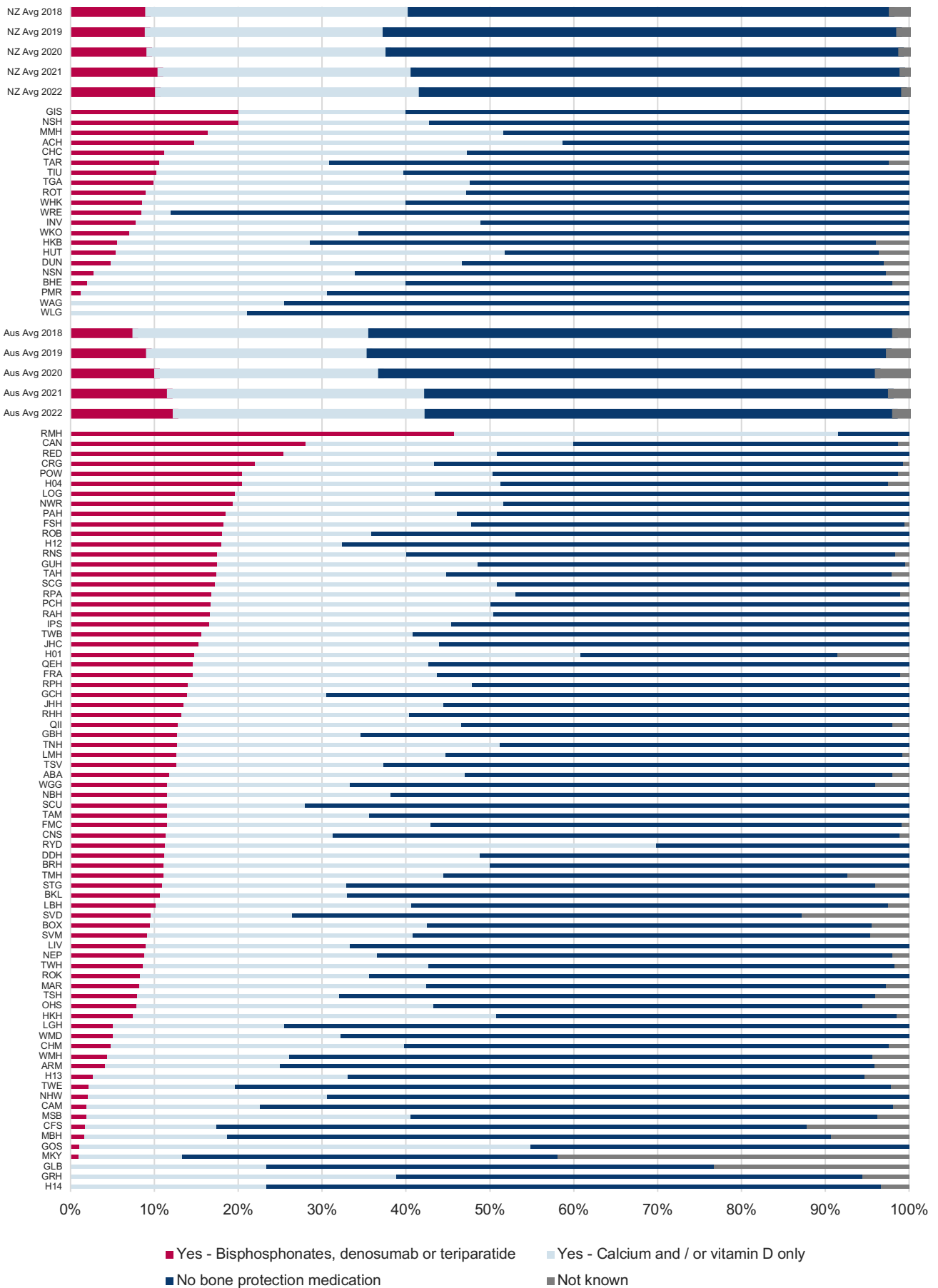
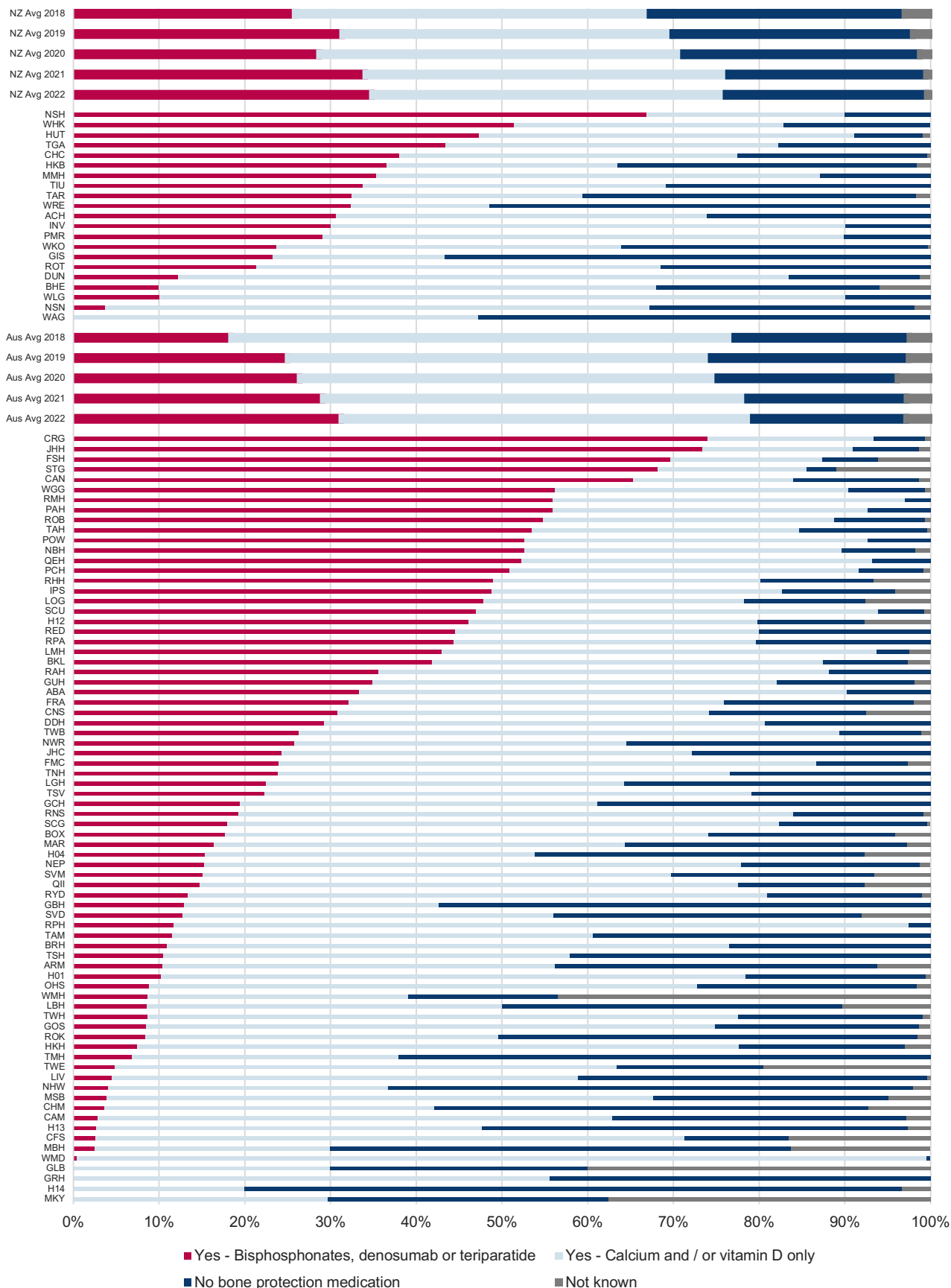


FIGURE 116 Bone protection medication on discharge

There continues to be an improvement in the proportion of people leaving hospital on a bisphosphonate, denosumab or teriparatide. Figure 116 shows that in New Zealand, 35% of hip fracture patients left hospital on bone protection medicine. In Australia, 31% of patients left hospital on a bisphosphonate, denosumab or teriparatide.





Dr Esra Venecourt-Jackson, Geriatrician;
Tracy Wilson, Nurse Specialist; and
Daniel Lee, Pharmacist

IMPROVING TREATMENT OF OSTEOPOROSIS IN A RURAL SETTING

In 2022, Whakatane hospital in New Zealand had a fully established Fracture Liaison Service (FLS), including a geriatrician, nurse specialist and pharmacist.

Hip fracture care has been a focus of improvement efforts across the patient journey, but the FLS input has greatly improved our osteoporosis treatment rates post discharge and allowed much better liaison with primary care colleagues to initiate treatment, allowing us to capture this at 120-day follow-up.

Having a pharmacist on the clinical floor every day has helped highlight all the patients needing FLS input and ensured patients with a hip fracture undergoing rehabilitation were managed as inpatients. The team meet weekly to discuss suitability for osteoporosis treatment, with both the nurse specialist and pharmacist following up with primary care to ensure those who are discharged early or not ready for treatment receive appropriate osteoporosis management.

We cover a wide geographical rural area with limited access to treatment in some areas, so multidisciplinary teamwork is required to ensure people who break their hip get treated for osteoporosis. We are thrilled to see we are performing so well in this important and challenging aspect of care.

BONE PROTECTION MEDICATION ON DISCHARGE BY AUSTRALIAN STATE

FIGURE I17 New South Wales

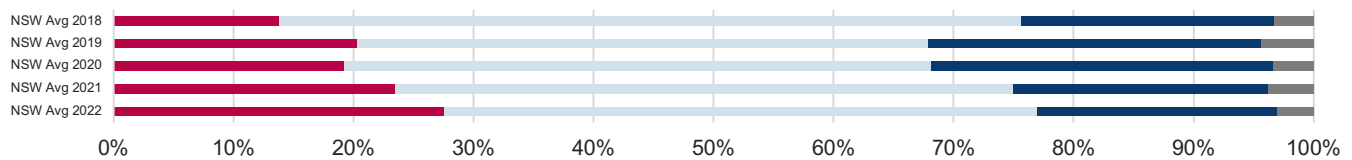


FIGURE I18 Queensland

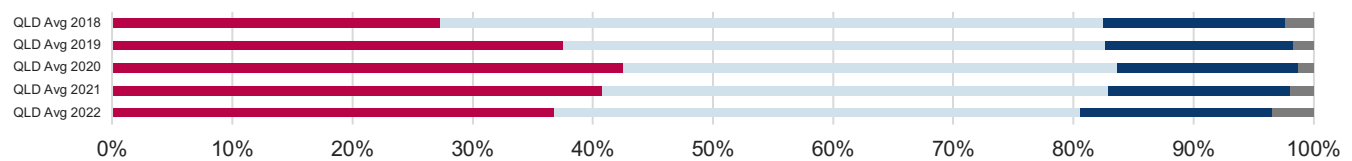


FIGURE I19 South Australia

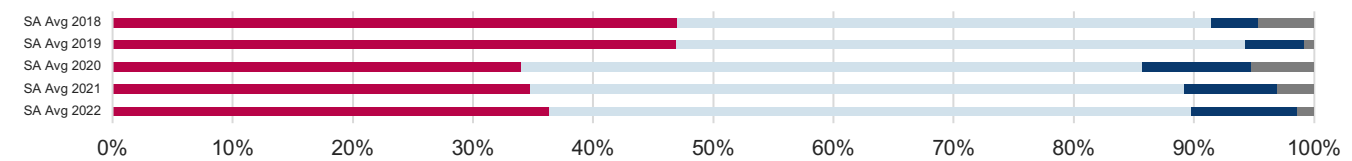


FIGURE I20 Tasmania

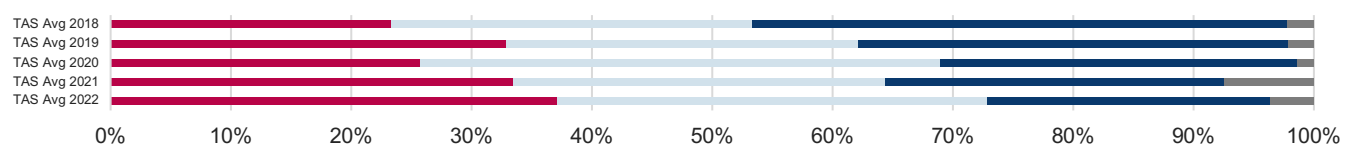


FIGURE I21 Victoria

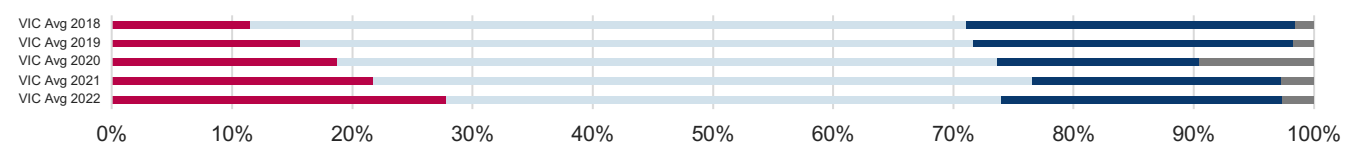
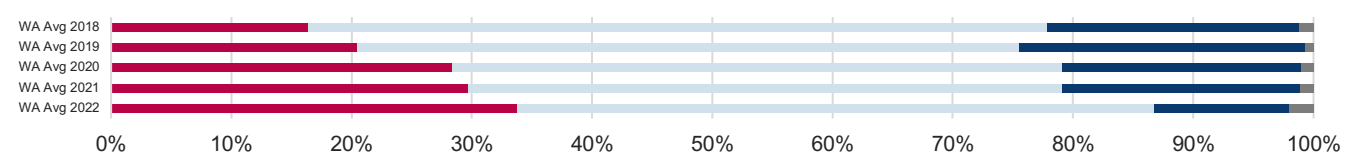


FIGURE I22 Western Australia



■ Yes - Bisphosphonates, denosumab or teriparatide
 ■ Yes - Calcium and / or vitamin D only
■ No bone protection medication
 ■ Not known

SECTION 5: FOLLOW-UP AT 120 DAYS

FIGURE 123 Follow-up at 120 days

In previous years, 120-day follow-up was only reported for sites that completed >80% of 120-day follow-up. This year, the ANZHFR has reported 120-day follow-up for all sites, in order to acknowledge the work that goes into undertaking the follow-up and amplify the patient's voice in the data reported.

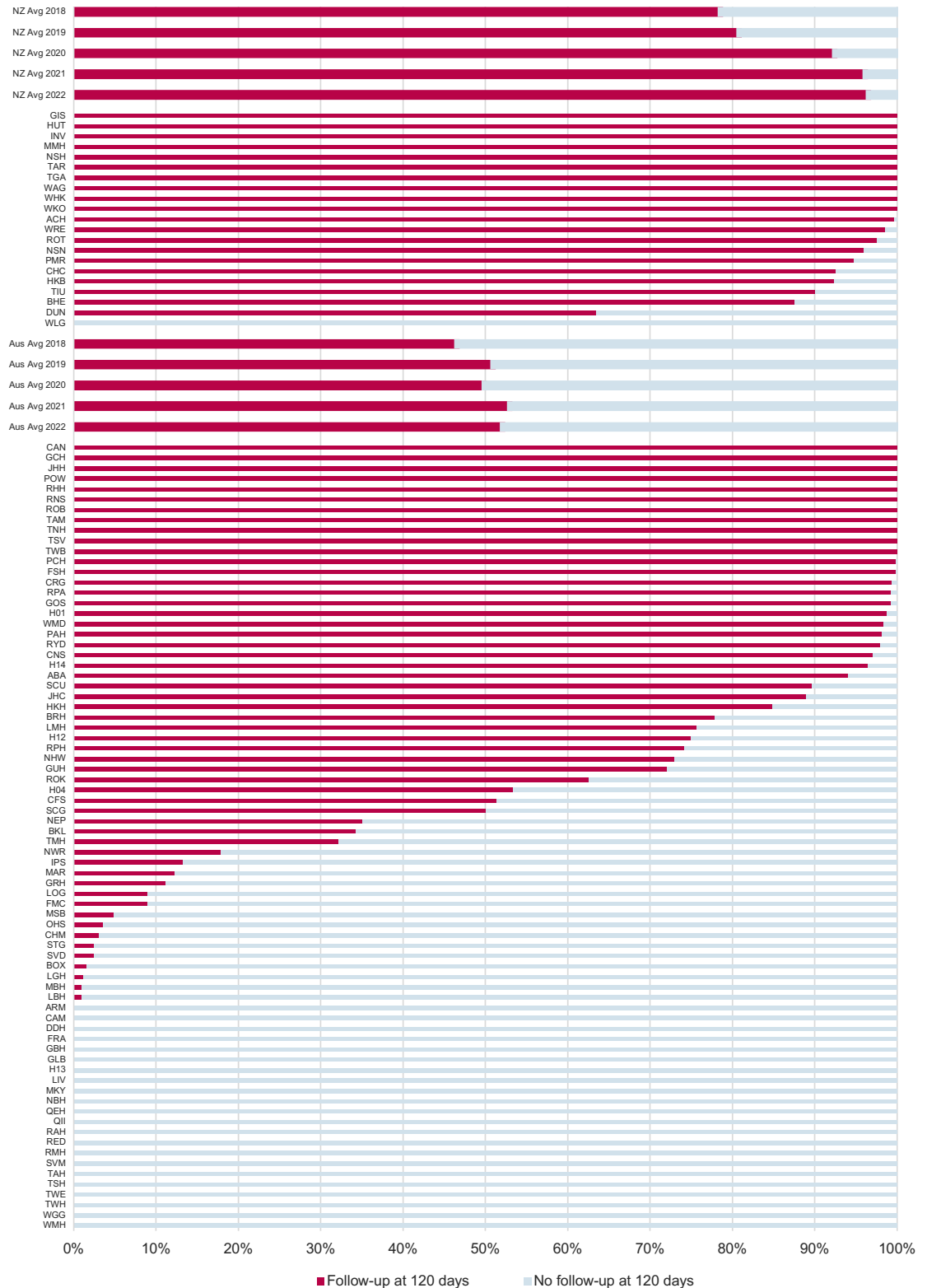


Figure 123 reports the proportion of patients followed up at each hospital. Follow-up is completed by staff at the treating hospital via telephone, and the variation reflects local differences in resources. In New Zealand, 97% of records had data for 120 days. In Australia, 52% of records had data for 120 days.

Figures 125, 127, 129 and 137 should be interpreted while considering the corresponding 120-day follow-up completion graph. There is a high proportion of not known follow-up data, particularly in Australia, suggesting caution with interpretation of the results. The results can be confidently interpreted where follow-up is near complete.

FIGURE 124 Follow-up at 120 days

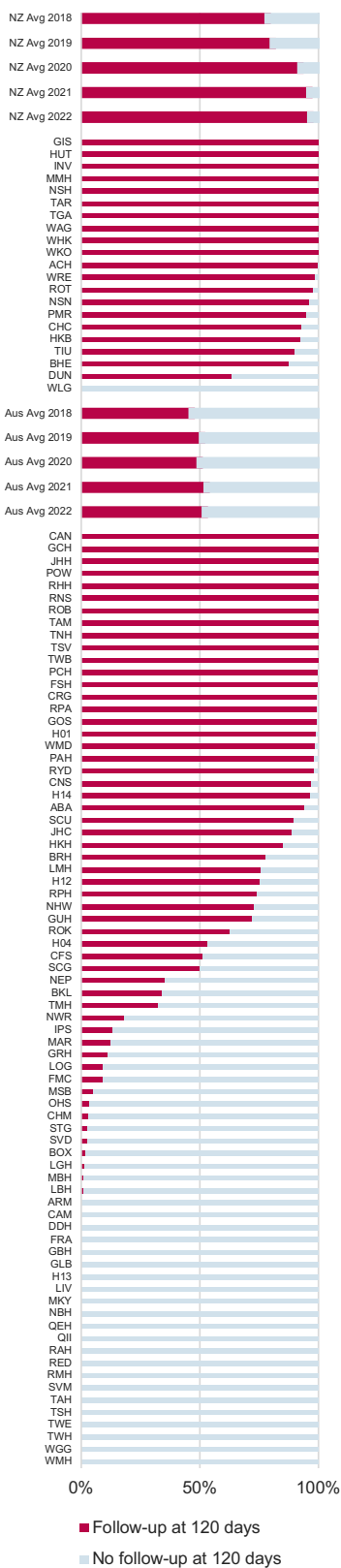


FIGURE 125 Reoperation at 120 days

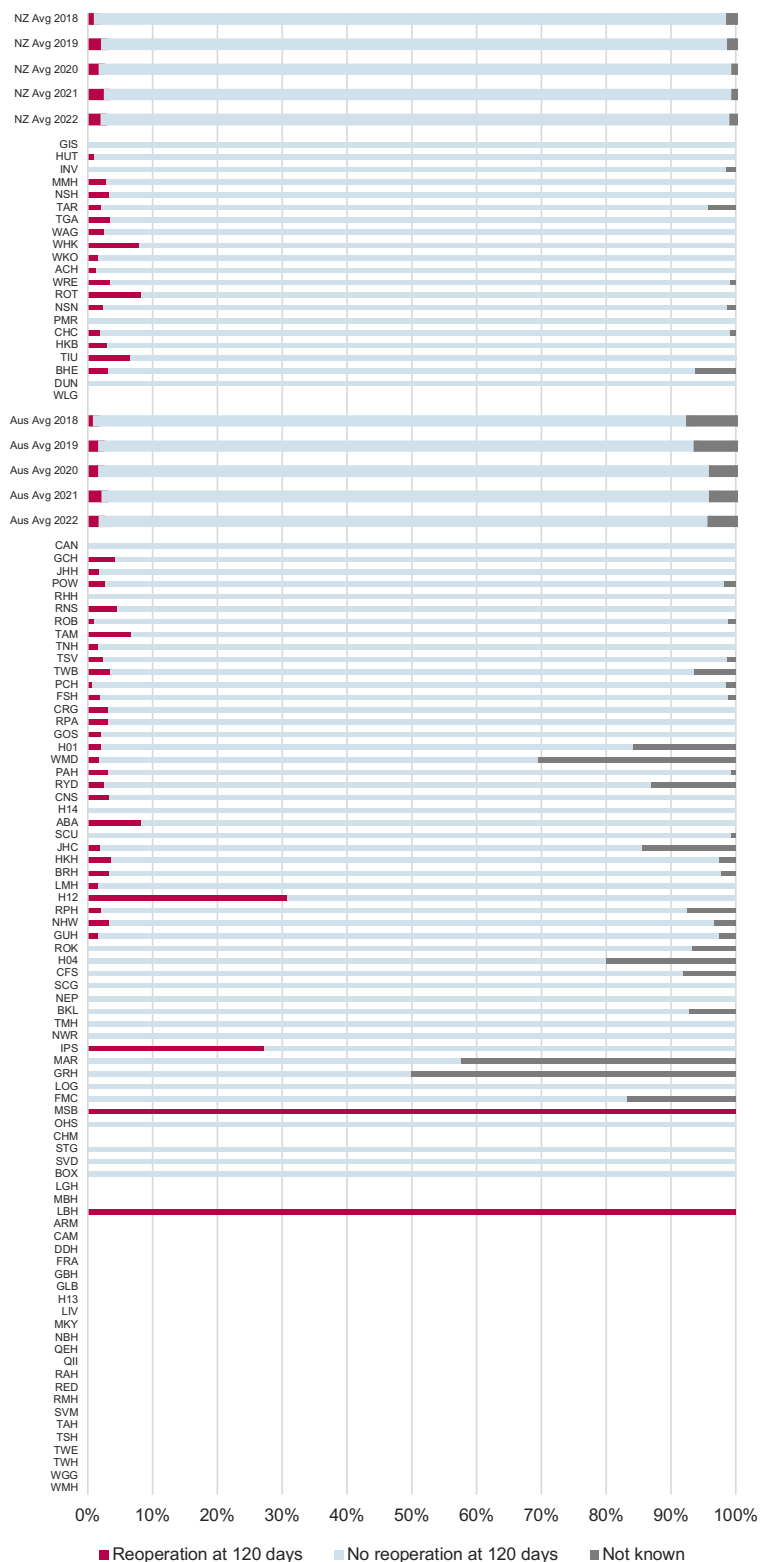


FIGURE 126

Follow-up at 120 days

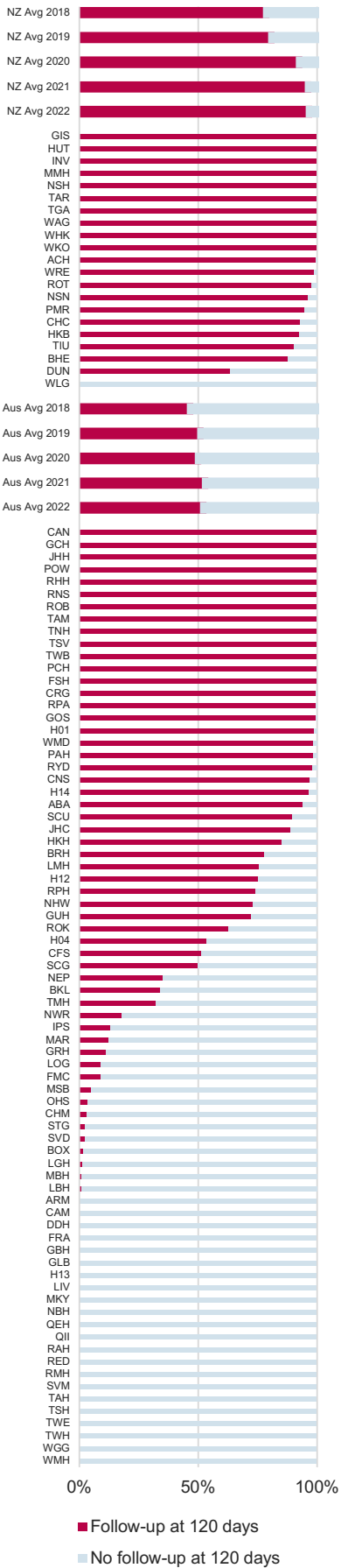
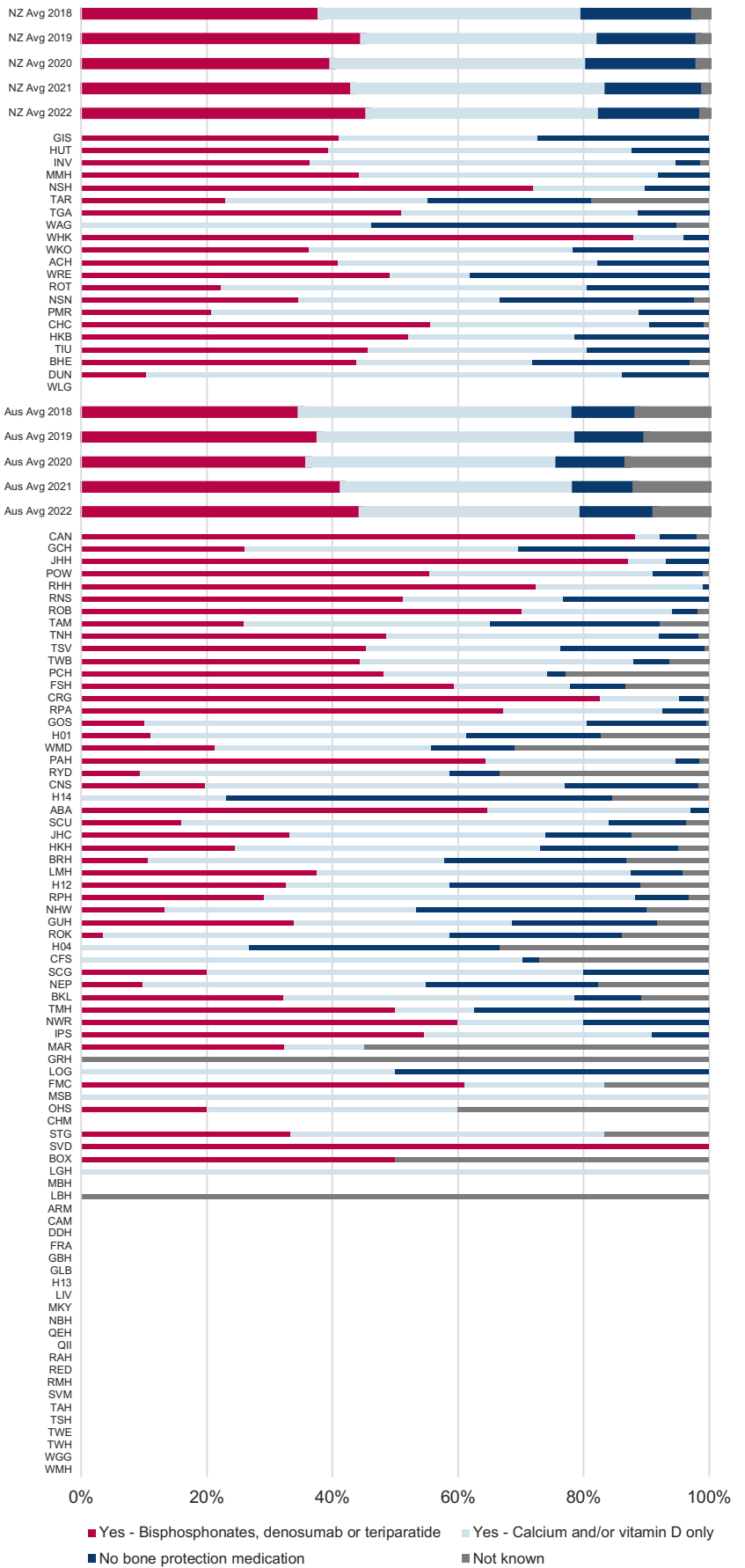


FIGURE 127

Bone protection medication at 120 days



In Australia and New Zealand, 45% of patients who were followed-up at 120 days reported receiving bone protection medication to reduce the risk of another fracture. Follow-up rates are lower in Australia.

FIGURE 128

Follow-up at 120 days

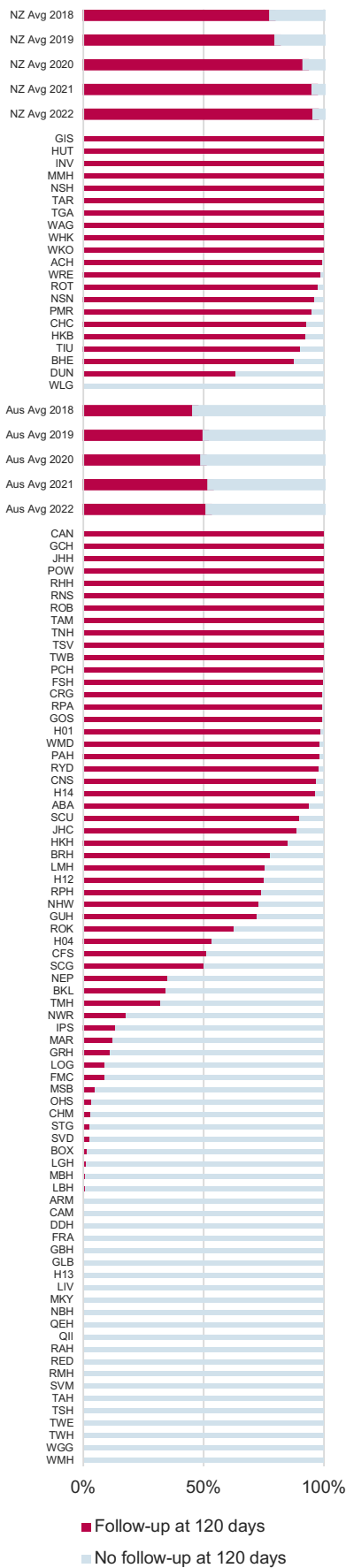
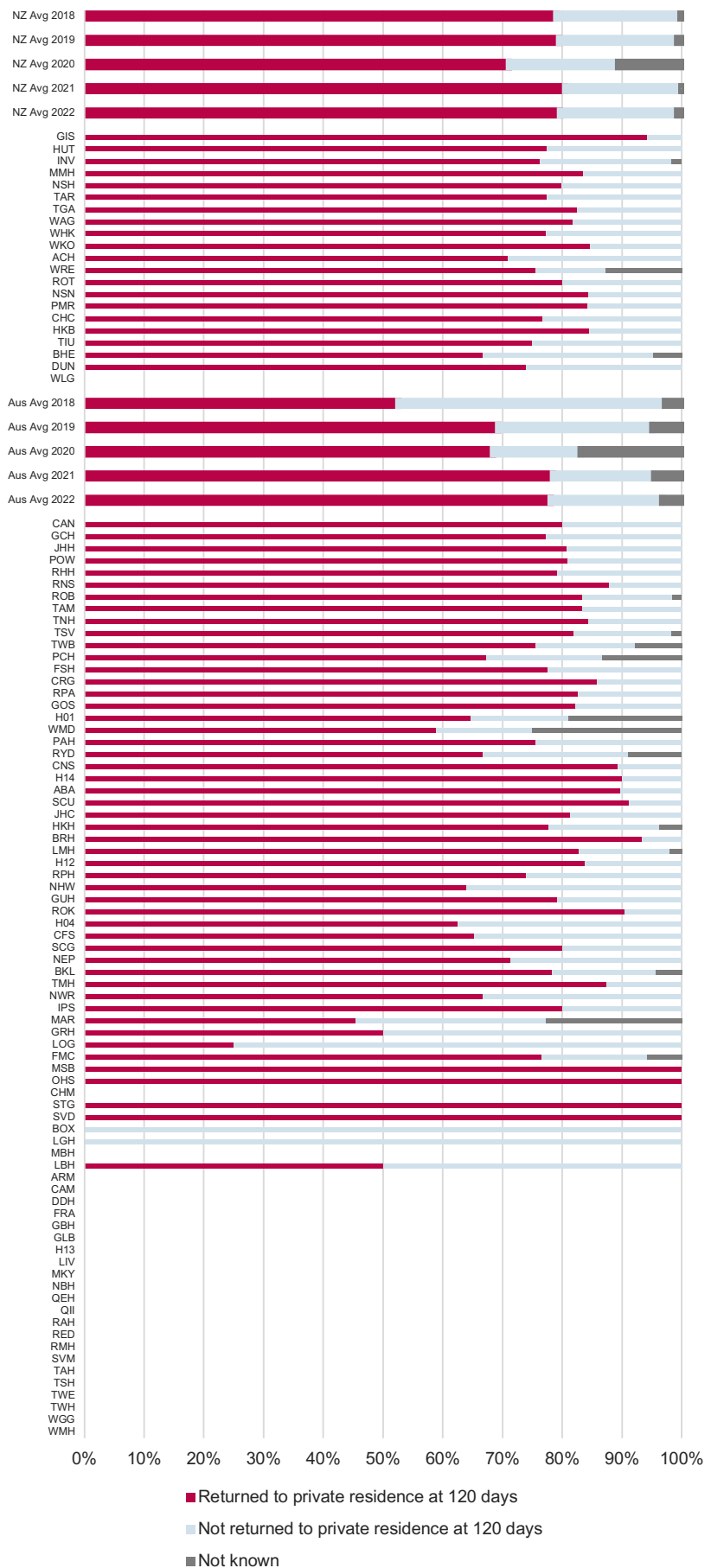


FIGURE 129

Return to private residence at 120 days



In 2022, 80% of patients in New Zealand and 78% of patients in Australia had returned to their private residence 120 days after hip fracture.

RETURN TO PRIVATE RESIDENCE AT 120 DAYS BY AUSTRALIAN STATE

FIGURE 130 New South Wales

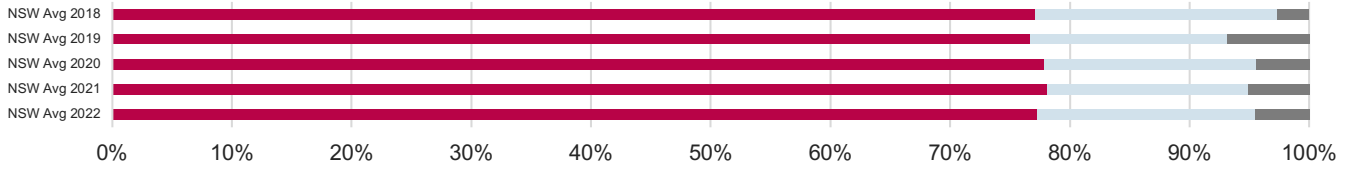


FIGURE 131 Queensland

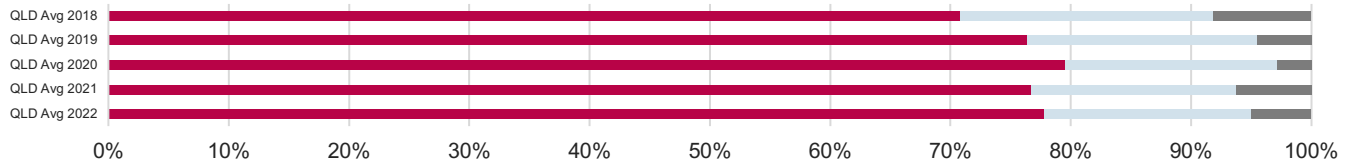


FIGURE 132 South Australia

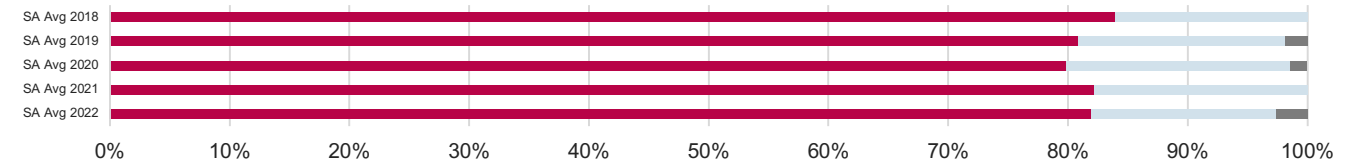


FIGURE 133 Tasmania

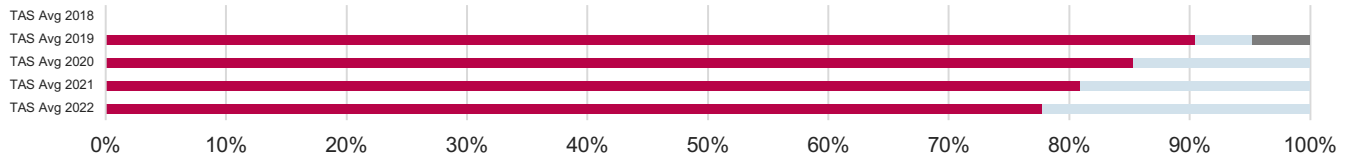


FIGURE 134 Victoria

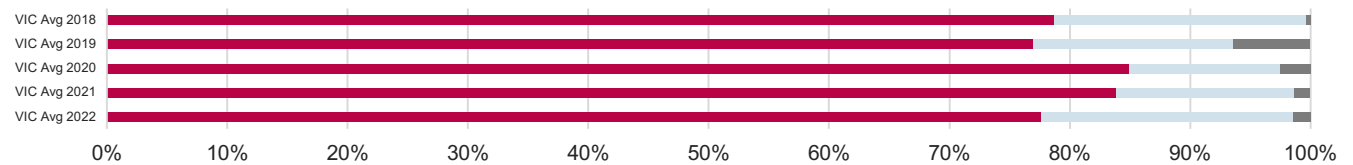
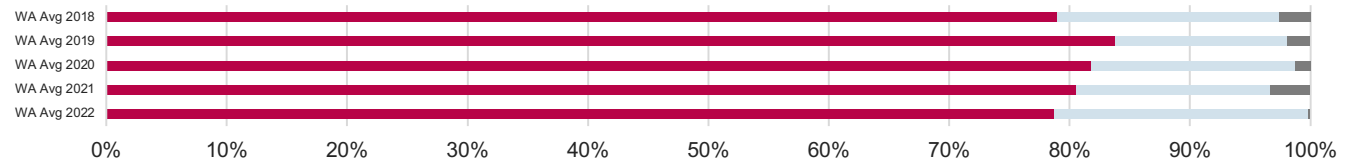


FIGURE 135 Western Australia



■ Returned to private residence at 120 days ■ Not returned to private residence at 120 days ■ Not known



FIGURE 136

Follow-up at 120 days

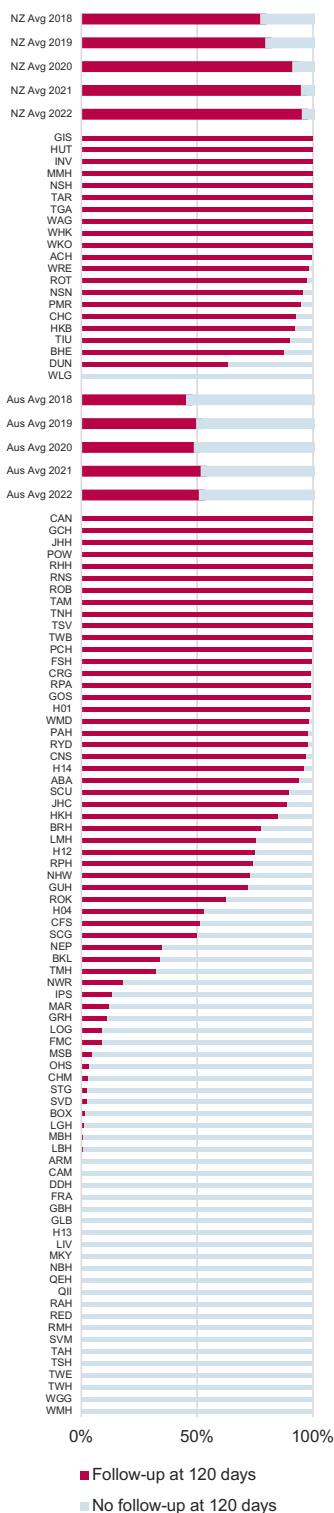
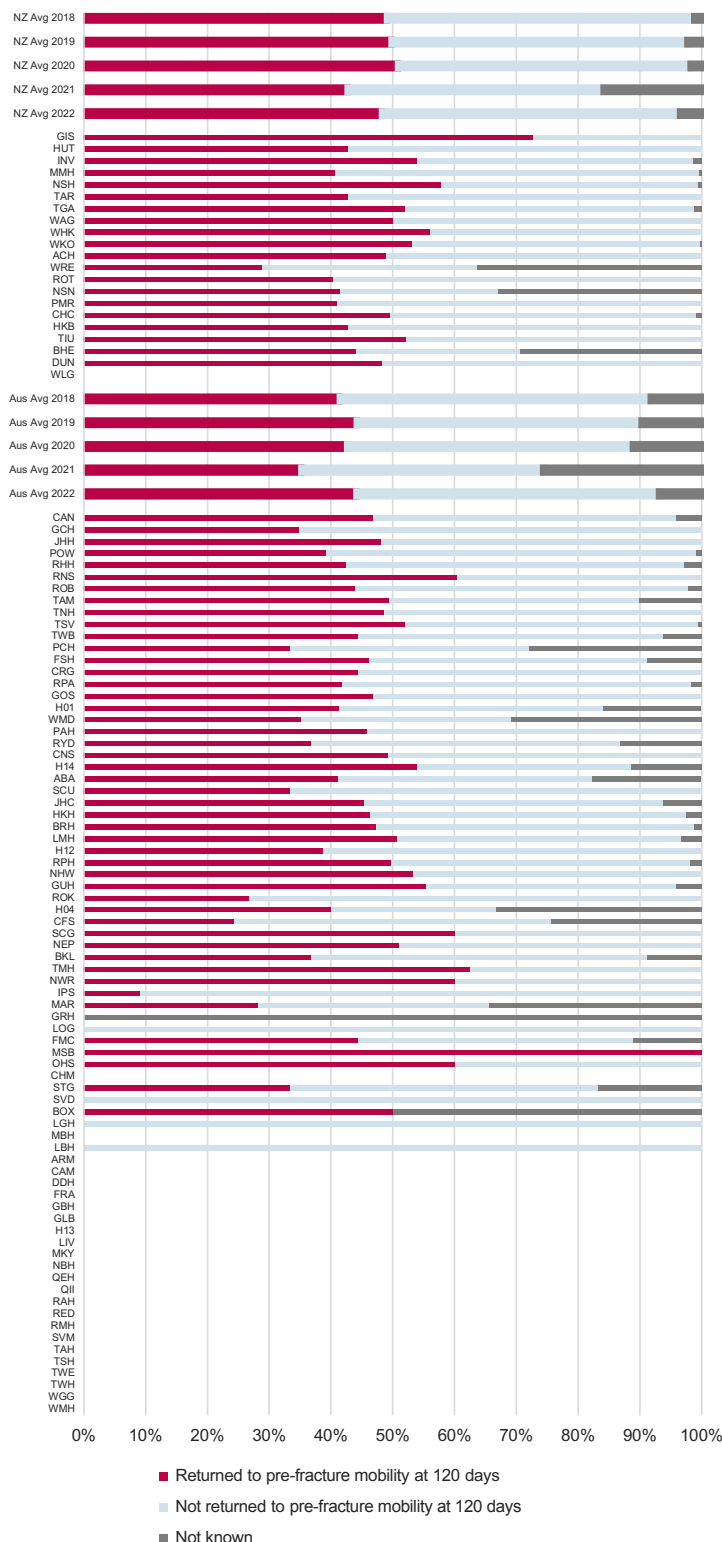


FIGURE 137

Return to pre-fracture mobility at 120 days



Where follow-up was completed, 48% of patient's in New Zealand and 44% of patients in Australia reported a return to their pre-fracture mobility at 120 days (Figure 137).

SECTION 6: OUTLIER REPORT

The 16 quality indicators in the Hip Fracture Care Clinical Care Standard focus on the priority areas for quality improvement in hip fracture care and, as such, were selected for the identification of outliers of hospital-level performance and subsequent investigation of the causes of variation by participating hospitals.

Outliers constitute unusually low or high values for an indicator of clinical care quality. Information on Indicators 1a, 2a, and 7a are obtained from the annual facility level survey and are reported as either 'evidence provided' (green) or 'evidence not provided' (red). Information on the remaining indicators (excluding Indicator 6b that is not currently collected and 8b that is reported separately) is obtained from the patient level data. All clinical care quality indicators are reported as a percentage for each hospital in the ANZHFR annual report, where:

- Excellence is performance in the top 2.5th percentile of all hospitals
- Normal performance is categorised as those hospitals falling within the middle 95% of all hospitals
- An alert for poorer performance is between the bottom 2.5th percentile and the bottom 1st percentile of all hospitals
- An outlier is performance below the bottom 1st percentile of all hospitals
- Not recorded

Missing values were included with 'not known', and hospitals with >30% 'not known' / missing were omitted from the calculations. For hospitals with less than 30% missing values, 'not known' / missing were coded as not meeting the indicator.

The ANZHFR data outlier review protocol details the identification and management of outlier values for binational indicators of hip fracture care at the level of the participating hospital. It can be found at anzhfr.org.

FIGURE 138 New Zealand hospital data indicators

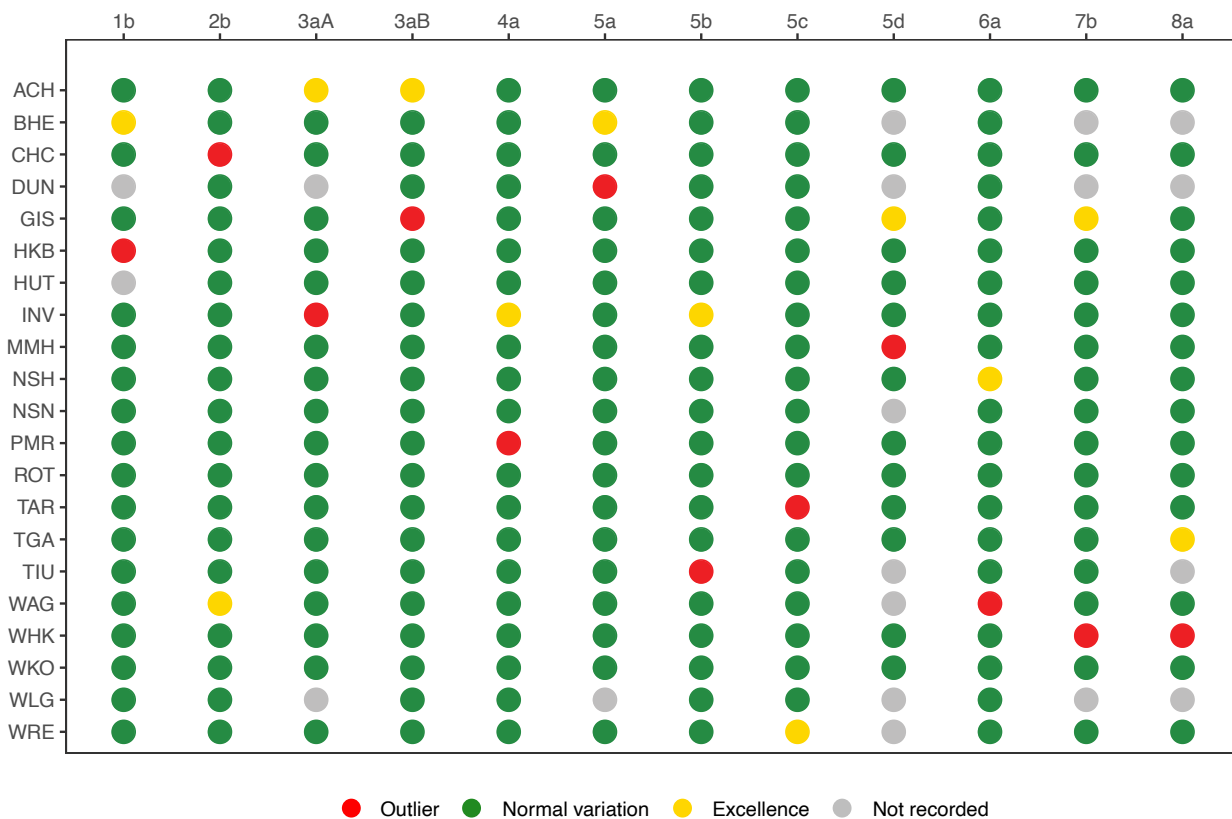
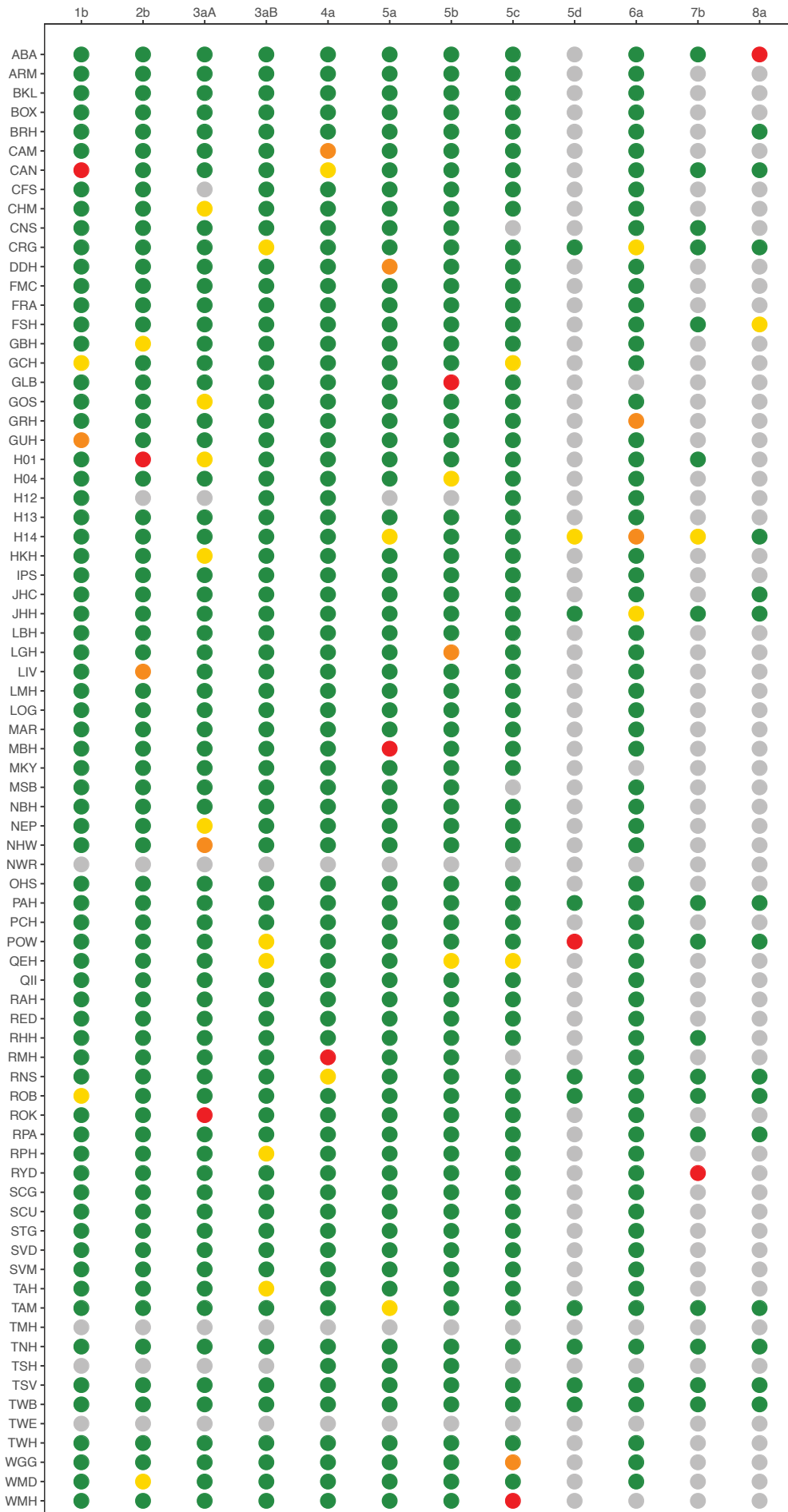


FIGURE 139 Australian hospital data indicators



● Outlier ● Alert ● Normal variation ● Excellence ● Not recorded

HOSPITAL DATA INDICATORS:

- Indicator 1b:** Proportion of patients with a hip fracture who have had their preoperative cognitive status assessed
- Indicator 2b:** Proportion of patients with a hip fracture who have documented assessment of pain within 30 minutes of presentation to the emergency department AND either receive analgesia within this time or do not require it according to the assessment
- Indicator 3aA:** Proportion of patients with a hip fracture receiving a preoperative medical assessment
- Indicator 3aB:** Proportion of patients with a hip fracture receiving a geriatric medicine assessment during the acute phase of the episode of care
- Indicator 4a:** Proportion of patients with a hip fracture receiving surgery within 48 hours of presentation with the hip fracture
- Indicator 5a:** Proportion of patients with a hip fracture given the opportunity to mobilise on day one post hip fracture surgery
- Indicator 5b:** Proportion of patients with a hip fracture with unrestricted weight bearing immediately post hip fracture surgery
- Indicator 5c:** Proportion of patients with a hip fracture experiencing a new Stage II or higher pressure injury during their hospital stay
- Indicator 5d:** Proportion of patients with a hip fracture returning to pre-fracture mobility
- Indicator 6a:** Proportion of patients with a hip fracture receiving bone protection medicine at discharge from the operating hospital
- Indicator 7b:** Proportion of patients with a hip fracture living in a private residence prior to their hip fracture returning to private residence within 120 days post hip fracture surgery
- Indicator 8a:** Proportion of patients undergoing reoperation of hip fracture within 120 days post hip fracture surgery

FIGURE I40

New Zealand survey data indicators



SURVEY DATA INDICATORS:

Indicator 1a:

Evidence of local arrangements for the management of patients with hip fracture in the emergency department

Indicator 2a:

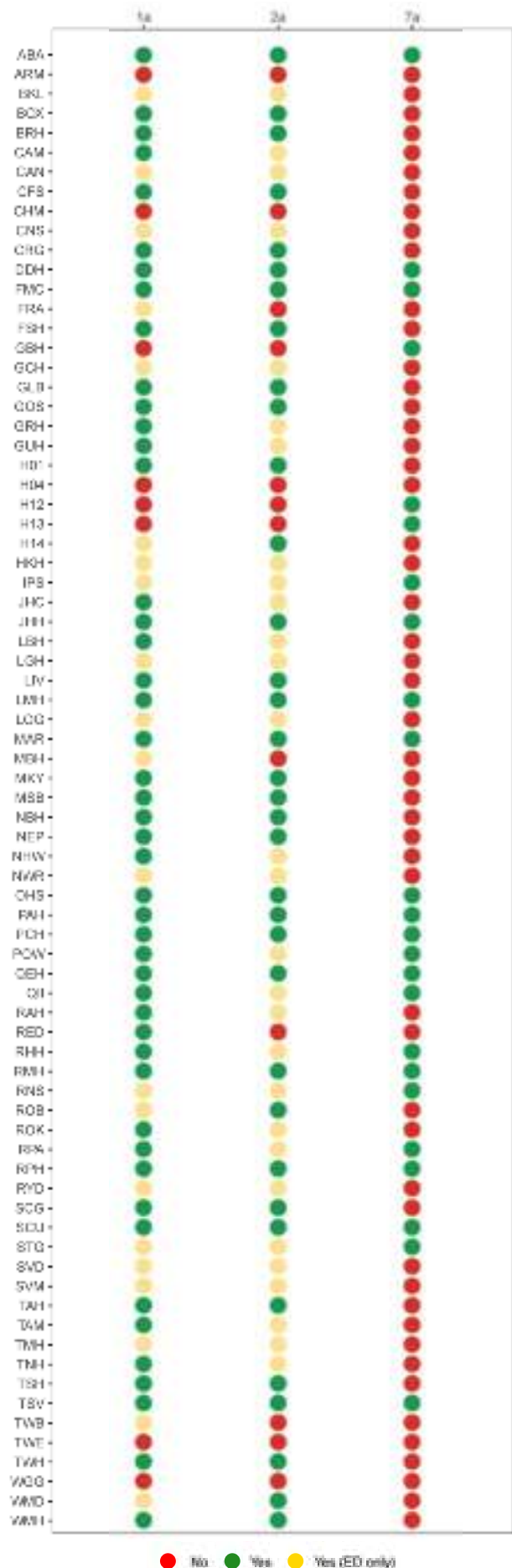
Evidence of local arrangements for timely and effective pain management for hip fracture

Indicator 7a:

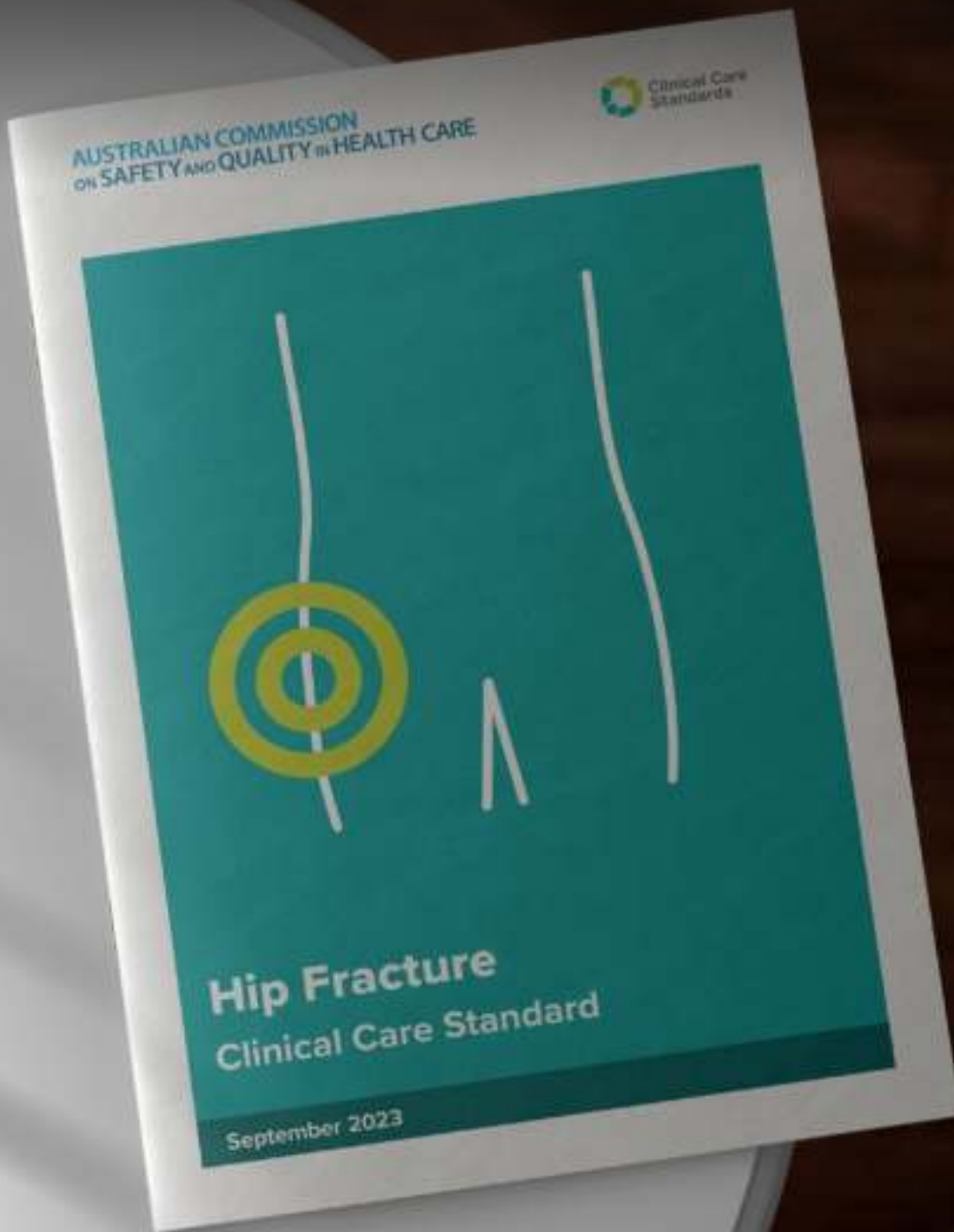
Evidence of local arrangements for the development of an individualised care plan at discharge for hip fracture patients

FIGURE I41

Australian survey data indicators



Did you know there are some changes to the Hip Fracture Clinical Care Standard?



Due to be launched in September 2023, key changes in the revised version include:

- › Cultural safety and equity considerations
- › Assessment and management of delirium, nutrition and frailty
- › The use of nerve blocks
- › A reduction in the recommended time to surgery from 48 hours to 36 hours
- › A change to monitor first day walking instead of opportunity to mobilise

There will also be some changes to the quality indicators to align with the updates.

For a copy of the revised Hip Fracture Clinical Care Standard and associated resources, go to the Commission's website: safetyandquality.gov.au/hipfracture-ccs





FACILITY LEVEL AUDIT

This is the 11th facility level audit of Australian and New Zealand hospitals delivering surgical care to older people with a hip fracture. The aim of the audit is to document the services, resources, protocols and practices that exist across both countries over time. This year, 117 hospitals completed the audit for the 2022 calendar year.

GENERAL INFORMATION

FIGURE 152 Number of hip fractures treated in 2022

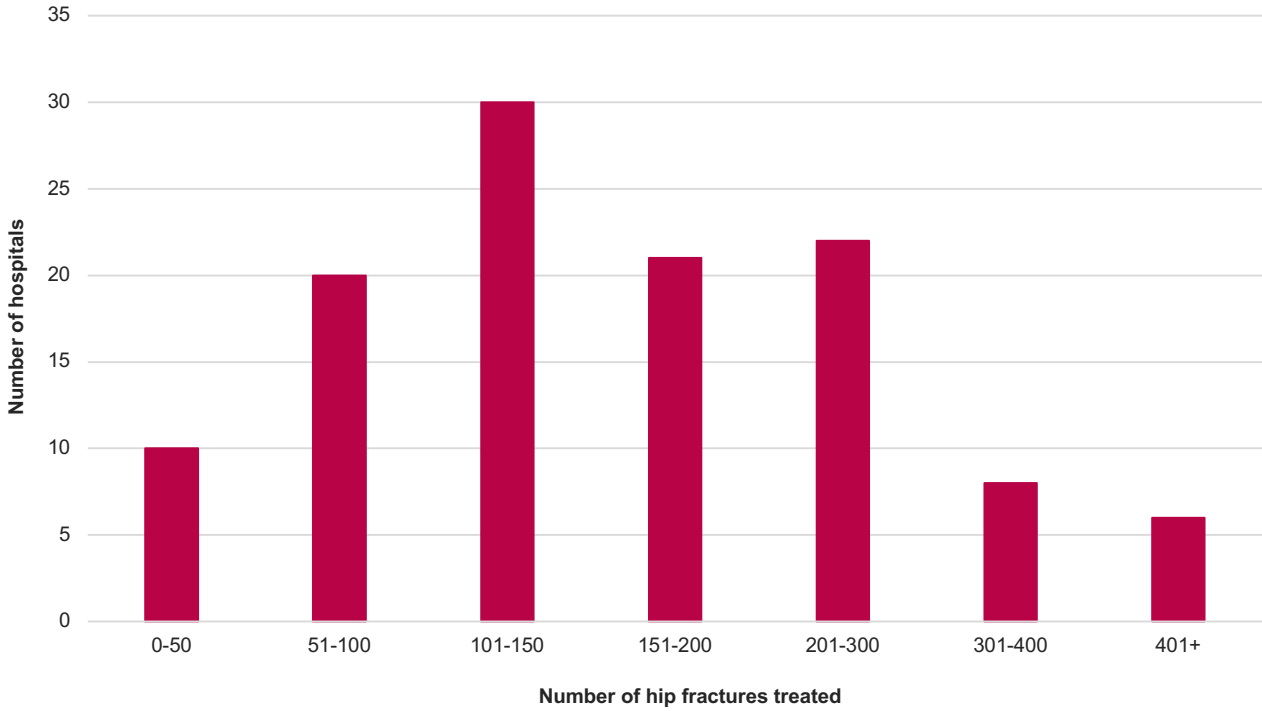
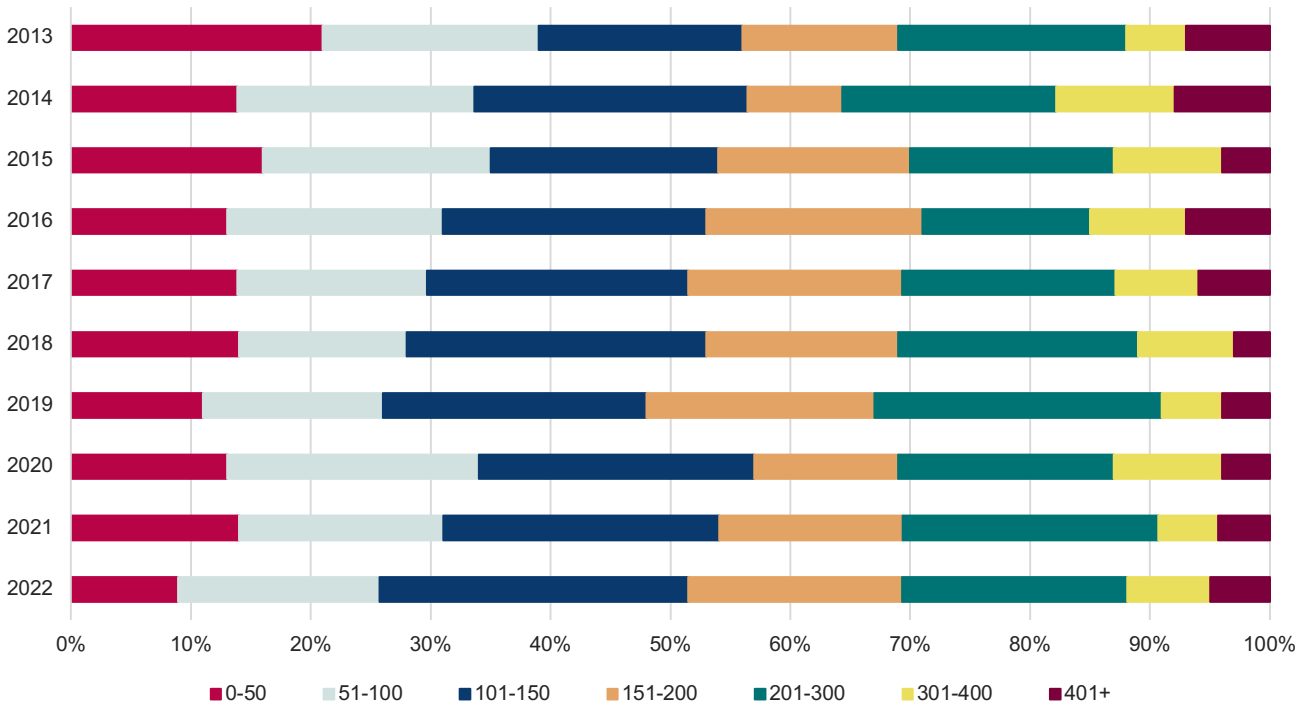


FIGURE 153 Number of hip fractures treated 2013–2022



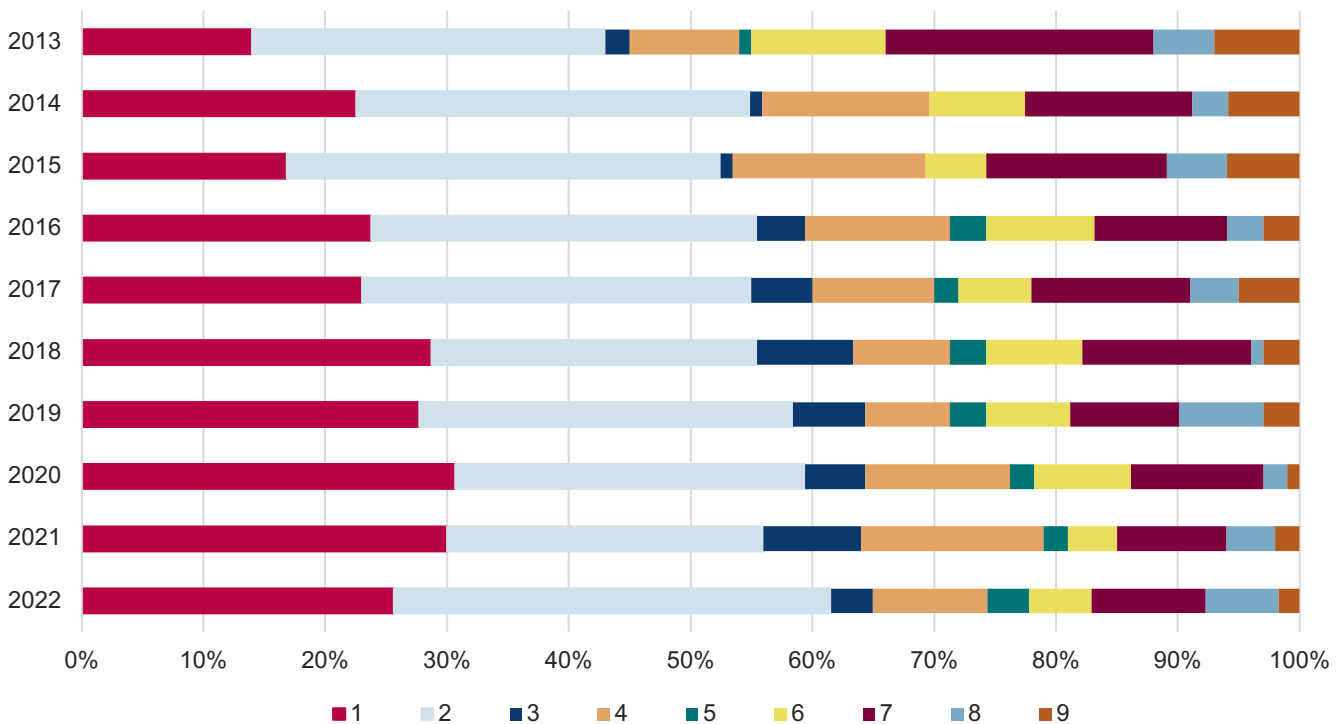
SERVICE MODEL OF CARE

Health services should ensure systems are in place to offer hip fracture care that is based on an orthogeriatric model of care, as recommended in the Australian and New Zealand Guideline for Hip Fracture Care³.

In 2022, 62% (72/117) of hospitals reported a shared care arrangement or a daily weekday orthogeriatric liaison service, representing a steady increase over time (Figure 154). However, there was a small reduction in the proportion of hospitals reporting a shared care arrangement between orthopaedics and geriatric medicine. Only 2% (2/117) of hospitals reported that no formal service existed at the time of the audit.

FIGURE 154

Orthogeriatric care model by hospital (New Zealand and Australia combined) 2013–2022



1. A shared care arrangement where there is joint responsibility for the patient from admission between orthopaedics and geriatric medicine for all older hip fracture patients
2. An orthogeriatric liaison service where geriatric medicine provides regular review of all older hip fracture patients (daily during working week)
3. A medical liaison service where a general physician or GP provides regular review of all older hip fracture patients (daily during working week)
4. An orthogeriatric liaison service where geriatric medicine provides intermittent review of all older hip fracture patients (2-3 times weekly)
5. A medical liaison service where a general physician or GP provides intermittent review of hip fracture patients (2-3 times weekly)
6. An orthogeriatric liaison service (2014) / geriatric service (2015) where a consult system determines which patients are reviewed
7. A medical liaison service (2014) / medical service (2015) where a consult system determines which patients are reviewed
8. Other
9. No formal service exists

3 Australian and New Zealand Hip Fracture Registry Steering Group. (2014) Australian and New Zealand guideline for hip fracture care: improving outcomes in hip fracture management of adults. Sydney: ANZHFR Steering Group. Available from: anzhfr.org/resources/

NSW AGENCY FOR CLINICAL INNOVATION RELEASES ORTHOGERIATRIC HIP FRACTURE CARE: CLINICAL PRACTICE GUIDE

A shared care approach, involving multidisciplinary teams, family and carers, should be in place when caring for patients with a hip fracture. This results in higher quality of care and better outcomes for patients.

This guide highlights best practice recommendations across the inpatient journey: from the time a patient with a hip fracture arrives at the hospital to the time they are discharged. It provides considerations for:

- preoperative care
- surgery
- postoperative management
- transfer of care planning.

The Orthogeriatric hip fracture care: Clinical practice guide aims to inform contemporary clinical practice for orthogeriatric hip fracture care.

As there is no single best type of model of care, the guide recommends healthcare settings should develop a shared care model that meets the needs of their patients and suits their capacity, staffing and requirements.

Download the guide at:

aci.health.nsw.gov.au/resources/aged-health/hip-fracture/orthogeriatric-hip-fracture-care.



PROTOCOLS AND ELEMENTS OF CARE

Protocols and pathways are interventions used in the provision of health care that aim to improve the quality, cost and satisfaction of that care. They help to sequence specific aspects of care for a given condition, such as hip fracture, and support improved communication and collaboration between healthcare professionals.

Resources, including local protocols and clinical pathways for hip fracture care, have been shared by some hospitals that contribute to the ANZHFR. These can be found on the [ANZHFR website](#).

Hip fracture pathway

In 2022, 91% of New Zealand hospitals and 86% of Australian hospitals reported having a hip fracture pathway. The proportion of hospitals with a hip fracture pathway has remained relatively unchanged over the last four years.

Computed Tomography (CT) / Magnetic Resonance Imaging (MRI)

In 2022, 68% of New Zealand hospitals and 66% of Australian hospitals reported the availability of a protocol or pathway to access either CT or MRI if plain imaging of a suspected fracture was inconclusive. Overall, the ability to access either CT or MRI imaging has improved over time in both countries.

Venous Thromboembolism (VTE)

VTE is a serious complication of lower limb trauma and agreed protocols to prevent its onset are common. In 2022, 91% of New Zealand hospitals and 96% of Australian hospitals utilised a protocol for the prevention of VTE.

Pain pathway

In 2022, a protocol or pathway for pain was available at 86% of New Zealand hospitals and 82% of Australian hospitals. The existence of a protocol or pathway for pain has remained relatively static over the last four years.

The facility level audit also asks if patients are offered local nerve blocks as part of pre- and postoperative pain management. Ninety-one percent (20/22) of

New Zealand hospitals and 99% (94/95) of Australian hospitals responded that patients were 'always' or 'frequently' offered nerve blocks preoperatively. Seventy-seven percent (17/22) of New Zealand hospitals and 83% (79/95) of Australian hospitals responded that patients were 'always' or 'frequently' offered nerve blocks for postoperative pain relief.

Choice of anaesthesia

In 2022, 68% of New Zealand hospitals and 80% of Australian hospitals reported routinely offering a choice of anaesthesia 'always' or 'frequently'.

Planned theatre list

The Australian and New Zealand guideline for hip fracture care recommends that older hip fracture patients are operated on a scheduled list in daytime working hours. In 2022, 36% of New Zealand hospitals and 54% of Australian hospitals reported having access to a planned operating theatre list, or planned trauma list, for hip fracture patients. The proportion of ANZ hospitals reporting access to a planned theatre list has not changed significantly over the past five years and may represent an opportunity to address delay to surgery.

Weekend therapy

Early mobilisation (on the day of, or day after hip fracture surgery) is associated with higher functional recovery and improved outcomes. Provision of access to weekend therapy ensures the day of surgery does not delay the rehabilitation process. In 2022, 68% of New Zealand hospitals and 91% of Australian hospitals reported routine access to weekend physiotherapy services.

FIGURE 155

New Zealand hospitals reported elements of hip fracture care 2017–2022

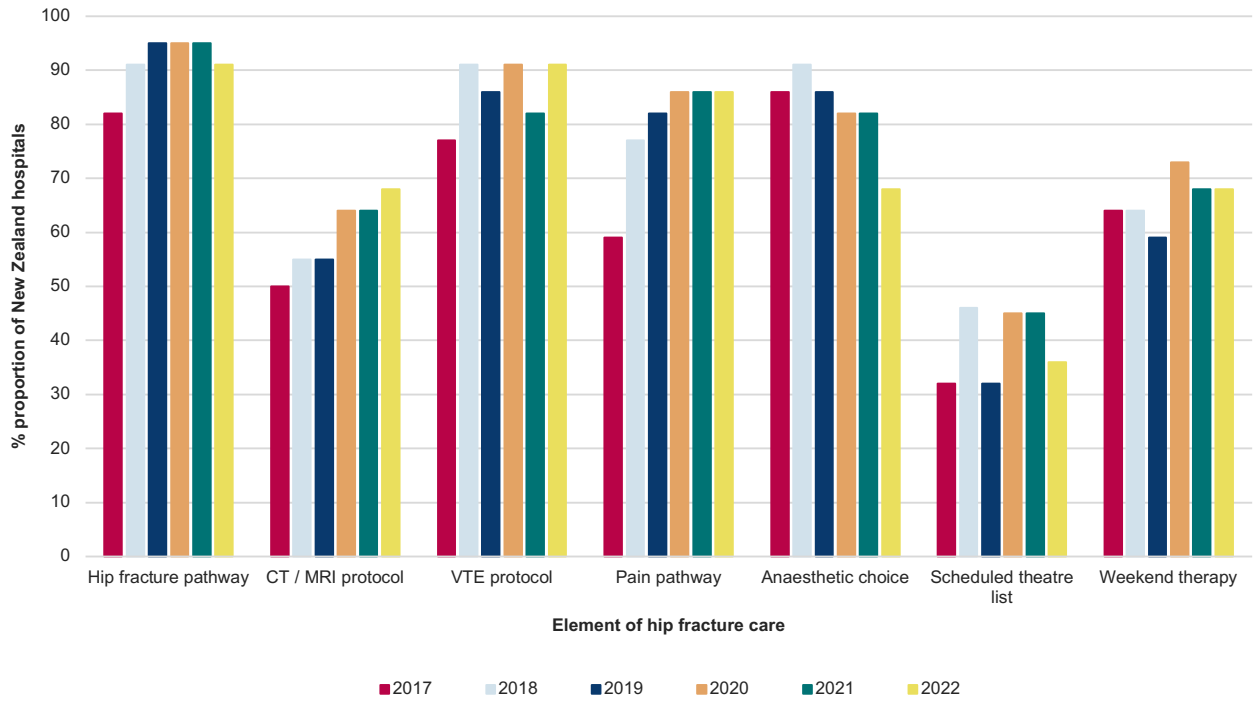
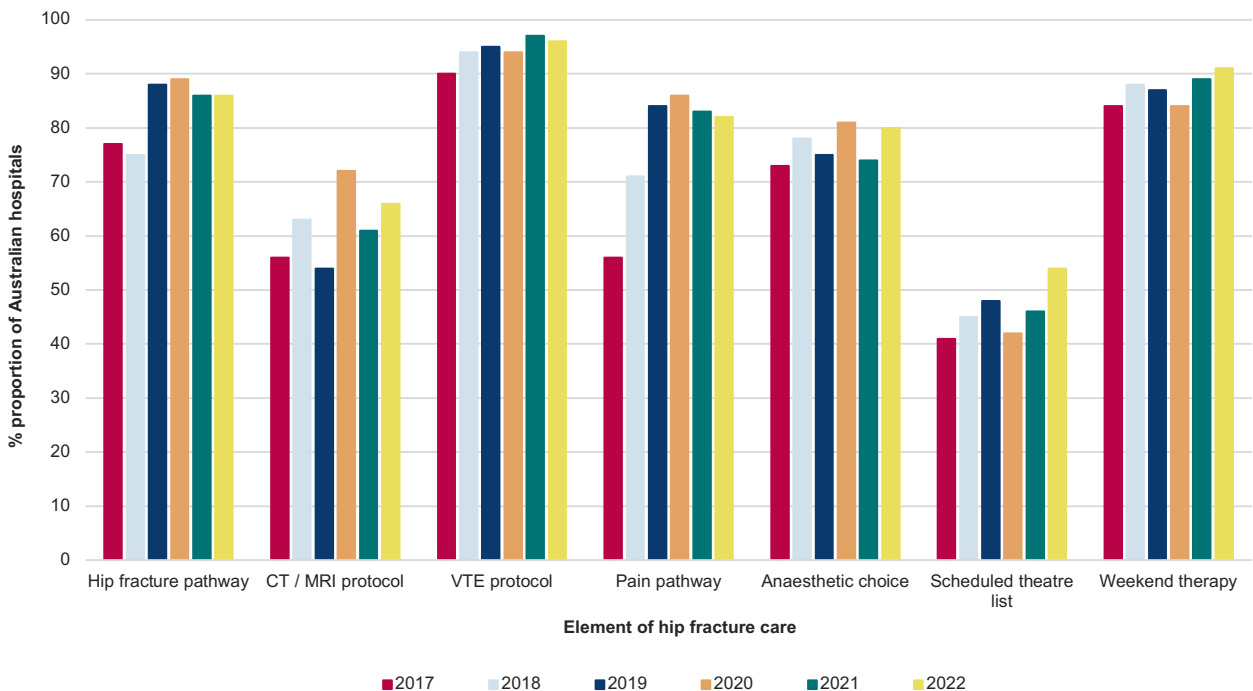


FIGURE 156

Australian hospitals reported elements of hip fracture care 2017–2022



BEYOND THE ACUTE HOSPITAL STAY

Patient and carer information

Health systems should be set up to enable development of an individualised care plan with patients prior to discharge. There has been a steady increase in the provision of written information on treatment and care after hip fracture over the years of the facility level audit. This year, 72% of New Zealand respondents and 64% of Australian respondents reported providing this at their hospital (Figure 157).

The provision of individualised written information on the prevention of future falls and fractures has improved in New Zealand, with 55% of hospitals reporting that they routinely provide individualised falls prevention information to hip fracture patients. In Australia, 32% of hospitals responded that they provide individualised falls and fracture prevention information (Figure 158).

FIGURE 157

Proportion of New Zealand and Australian hospitals reporting routine provision of written information on treatment and care after hip fracture 2013–2022

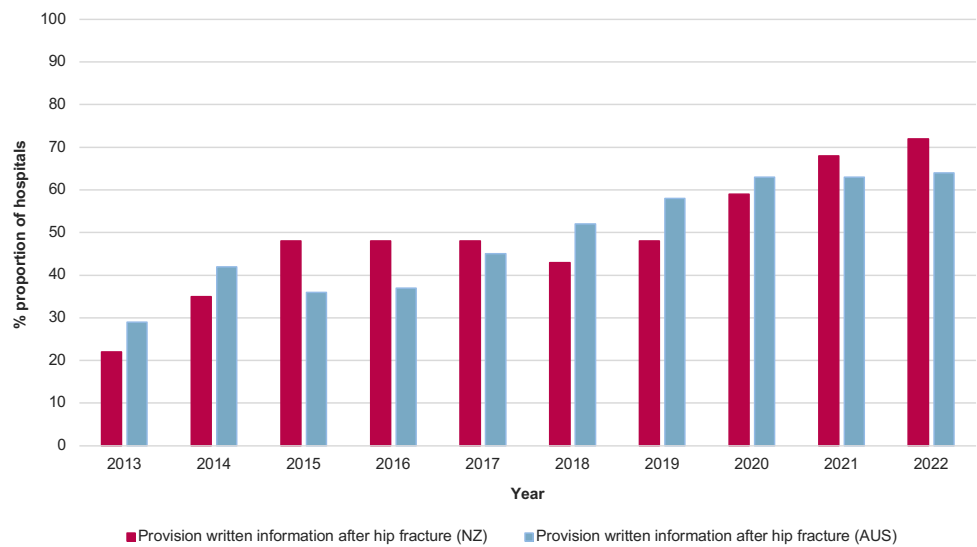
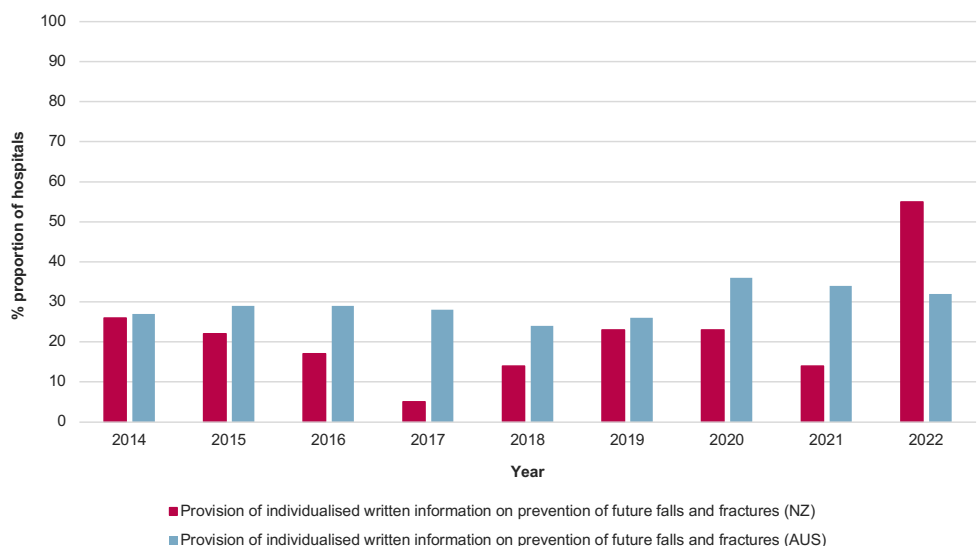


FIGURE 158

Proportion of New Zealand and Australian hospitals reporting routine provision of individualised written information on prevention of future falls and fractures 2014–2022





Rehabilitation

Early mobilisation and rehabilitation should be encouraged as they lead to improved functional recovery.

In 2022, 40% of hospitals reported access to both onsite and offsite rehabilitation. Fifty-seven percent of hospitals reported access to home-based rehabilitation (Figure 159).

Fracture Liaison Services

Dedicated resources allocated to the identification, management and follow up of minimal trauma fractures are successful in reducing refracture rates in people with osteopenia and osteoporosis. The availability of fracture liaison services (FLS) has increased to 43% in 2022 (Figure 159).

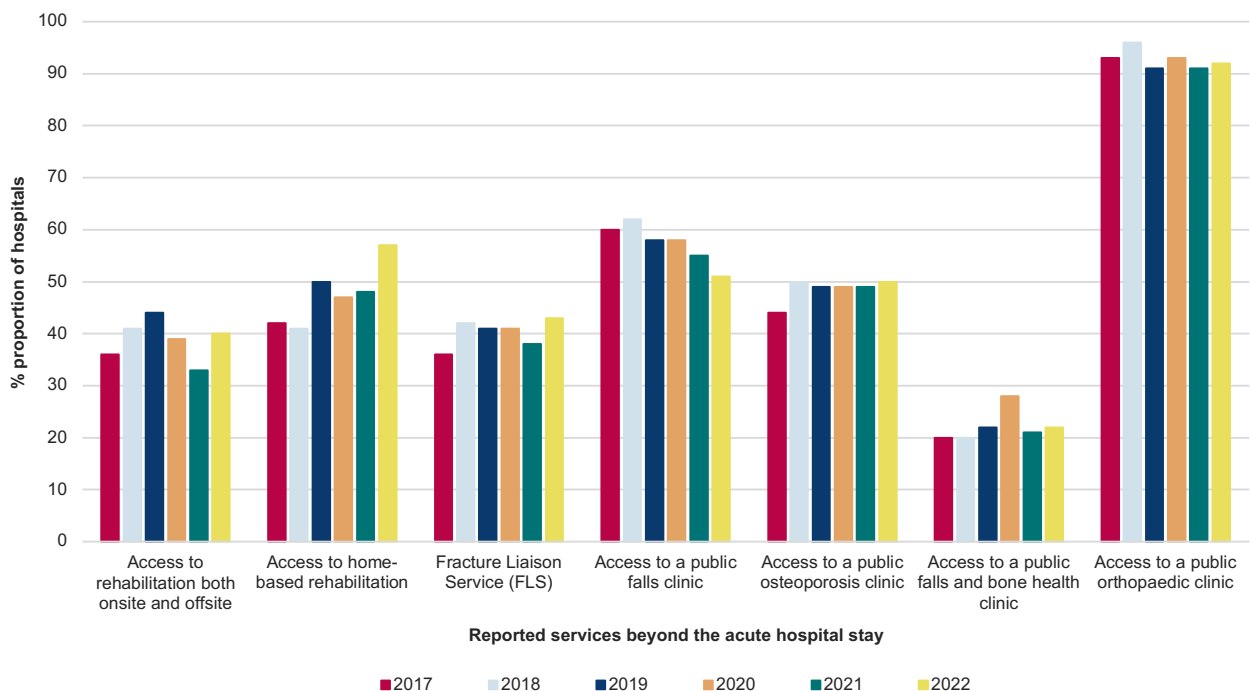
The launch of the Clinical Standards for Fracture Liaison Services in New Zealand and the establishment of a best-practice FLS within each hospital is anticipated to lead to further improvements in osteoporosis screening and management in New Zealand.

Outpatient clinics

In 2022, access to separate public falls clinic (51%) and osteoporosis clinic (50%) remains relatively unchanged. Access to a combined falls and bone clinic was reported by 22% of hospitals. Access to orthopaedic clinics remains high at 92% (Figure 159).

FIGURE 159

Proportion of New Zealand and Australian hospitals reporting specific services beyond the acute hospital stay 2017–2022



ANZHFR STEERING GROUP MEMBERSHIP

Members of the ANZHFR Steering Group

- › **Professor Jacqueline Close**, Geriatrician Co-Chair
- › **A/Professor Catherine McDougall**, Orthopaedic Surgeon Co-Chair
- › **Dr Frazer Anderson, Geriatrician**, Osteoporosis New Zealand
- › **Mr Brett Baxter**, Physiotherapist, Australian Physiotherapy Association
- › **Dr Jack Bell**, Advanced Accredited Practising Dietitian, Dietitians Australia
- › **Dr Casey Bennetts**, Emergency Physician, Australasian College of Emergency Medicine
- › **Professor Ian Cameron**, Rehabilitation Physician, Australasian Faculty of Rehabilitation Medicine
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- › **Dr Weiwen Chen**, Endocrinologist, Healthy Bones Australia
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THANK YOU TO ALL
THE TEAMS WORKING
ACROSS OUR HOSPITALS
IN AUSTRALIA AND
NEW ZEALAND. YOUR
EFFORTS ARE DRIVING
IMPROVEMENTS IN HIP
FRACTURE CARE.