

University of Wollongong

Research Online

Australian Health Services Research Institute

Faculty of Business and Law

2013

AROC impairment specific report: inpatient - pathway 3: orthopaedic fractures: Anywhere Hospital: January 2012 - December 2012

Frances D. Simmonds

University of Wollongong, frances@uow.edu.au

Tara L. Stevermuer

University of Wollongong, hurst@uow.edu.au

Follow this and additional works at: <https://ro.uow.edu.au/ahsri>

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

AROC impairment specific report: inpatient - pathway 3: orthopaedic fractures: Anywhere Hospital: January 2012 - December 2012

Abstract

This is the first AROC Impairment Specific Report which compares YOUR FACILITY's data to your NATIONAL data (Australia or New Zealand). Each Impairment Specific Report is structured as a series of chapters. Each report will present an overall big picture chapter on the impairment followed by a chapter looking at FIM item scoring at YOUR FACILITY as compared to your NATIONAL data by AN-SNAP class. An outcomes analysis chapter follows with an explanatory data chapter at the end.

Keywords

report, specific, hospital, 2012, december, january, impairment, 3, pathway, inpatient, aroc, orthopaedic, anywhere, fractures

Publication Details

F. D. Simmonds & T. L. Stevermuer, AROC impairment specific report: inpatient - pathway 3: orthopaedic fractures: Anywhere Hospital: January 2012 - December 2012 (Australasian Rehabilitation Outcomes Centre, Australian Health Services Research Institute, Wollongong, Australia, 2013).

AROC Impairment Specific Report

Inpatient – Pathway 3

ORTHOPAEDIC FRACTURES

Anywhere Hospital

January 2012 – December 2012



**Australasian Faculty
of Rehabilitation
Medicine**

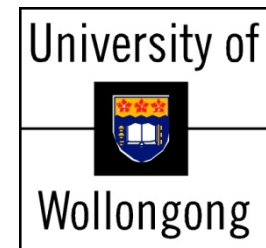


Table of contents

Introduction to impairment specific reports.....	3
Orthopaedic fractures impairment codes.....	5
Orthopaedic fractures AN-SNAP classes.....	6
The BIG picture.....	7
Review of FIM item scoring by AN-SNAP class.....	17
Outcomes analysis.....	31
Explanatory data.....	58
Appendix 1: Glossary.....	99
Appendix 2: AROC impairment codes.....	101
Appendix 3: AN-SNAP classes	103
Acknowledgements	104
AROC contact details	105

Introducing the Impairment Specific Reports

This is the first AROC Impairment Specific Report which compares YOUR FACILITY's data to your NATIONAL data (Australia or New Zealand). Each Impairment Specific Report is structured as a series of chapters. Each report will present an overall big picture chapter on the impairment followed by a chapter looking at FIM item scoring at YOUR FACILITY as compared to your NATIONAL data by AN-SNAP class. An outcomes analysis chapter follows with an explanatory data chapter at the end.

Some facilities only have a small number of episodes. While NATIONAL data includes all facilities with data on this impairment, facilities will only receive this report where they have a minimum of 20 completed episodes within this impairment.

AROC welcomes your feedback on this report.

NOTE: This report should be considered in conjunction with the relevant Target Outcomes Report and the Benchmark Core Report for your facility.

Data used in this report

- Data included in this report are all orthopaedic fracture episodes ending during the calendar year 2012 (1 January 2012 to 31 December 2012 inclusive).
- All tables and graphs present calendar year 2012 data unless otherwise indicated, and the number of episodes from YOUR FACILITY in 2012 are provided. Where there are less than five episodes within a subgroup, summary data are not provided.
- Data in this report was collected using both version 3 (V3) and version 4 (V4) AROC data sets. All data collected using the V3 data set has been mapped to the V4 data set. This report is based on the V4 data set - Pathway 3 (inpatient direct care).
- Reporting on impairment codes uses the AROC V4 dataset (Appendix 2) .
- All case-mix analysis uses the version 3 AN-SNAP class (Appendix 3), introduced January 2012. Casemix adjustment is against your NATIONAL data.
- Appendix 1 (Glossary) contains definitions of concepts referred to in this report. An understanding of these will help with interpretation of the data.
- Unit of counting is by episode, not by patient.

Orthopaedic fractures impairment codes

Orthopaedic fracture episodes were identified as those with the following AROC impairment codes:

- 8.111 — Fracture of hip, unilateral
- 8.112 — Fracture of hip, bilateral
- 8.12 — Fracture of shaft of femur
- 8.13 — Fracture of pelvis
- 8.141 — Fracture of knee
- 8.142 — Fracture of leg, ankle, foot
- 8.15 — Fracture of upper limb
- 8.16 — Fracture of spine
- 8.17 — Fracture of multiple sites
- 8.19 — Other orthopaedic fracture

NOTE: A list of all impairment codes can be found in Appendix 2

Orthopaedic fractures AN-SNAP classes

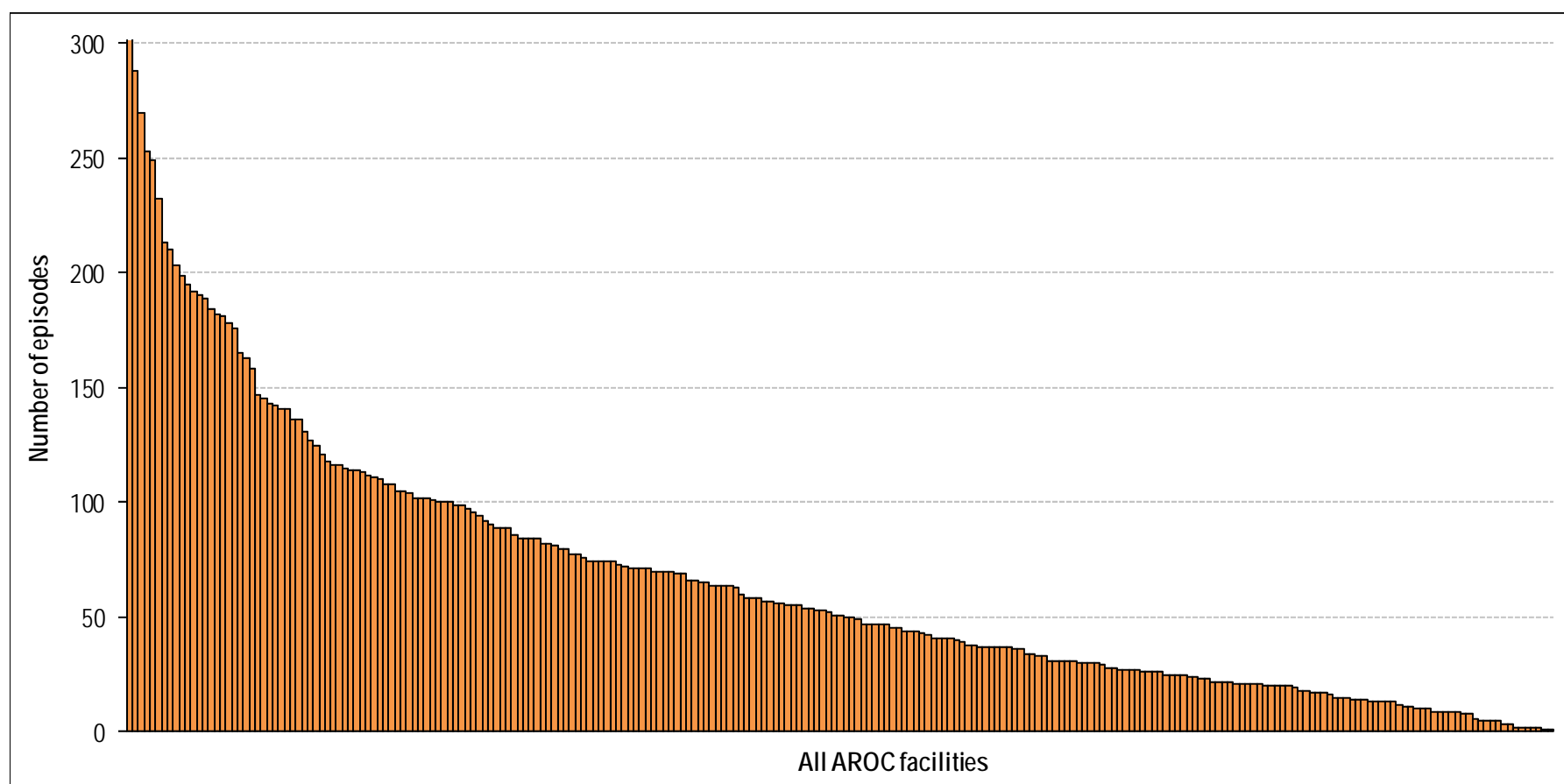
Levels of functioning for orthopaedic fractures are categorised by the following version 3 AN-SNAP classes:

- ❖ 3-227 (FIM motor 58-91)
- ❖ 3-228 (FIM motor 48-57)
- ❖ 3-229 (FIM motor 14-47, FIM cognition 19-35)
- ❖ 3-230 (FIM motor 14-47, FIM cognition 5-18)

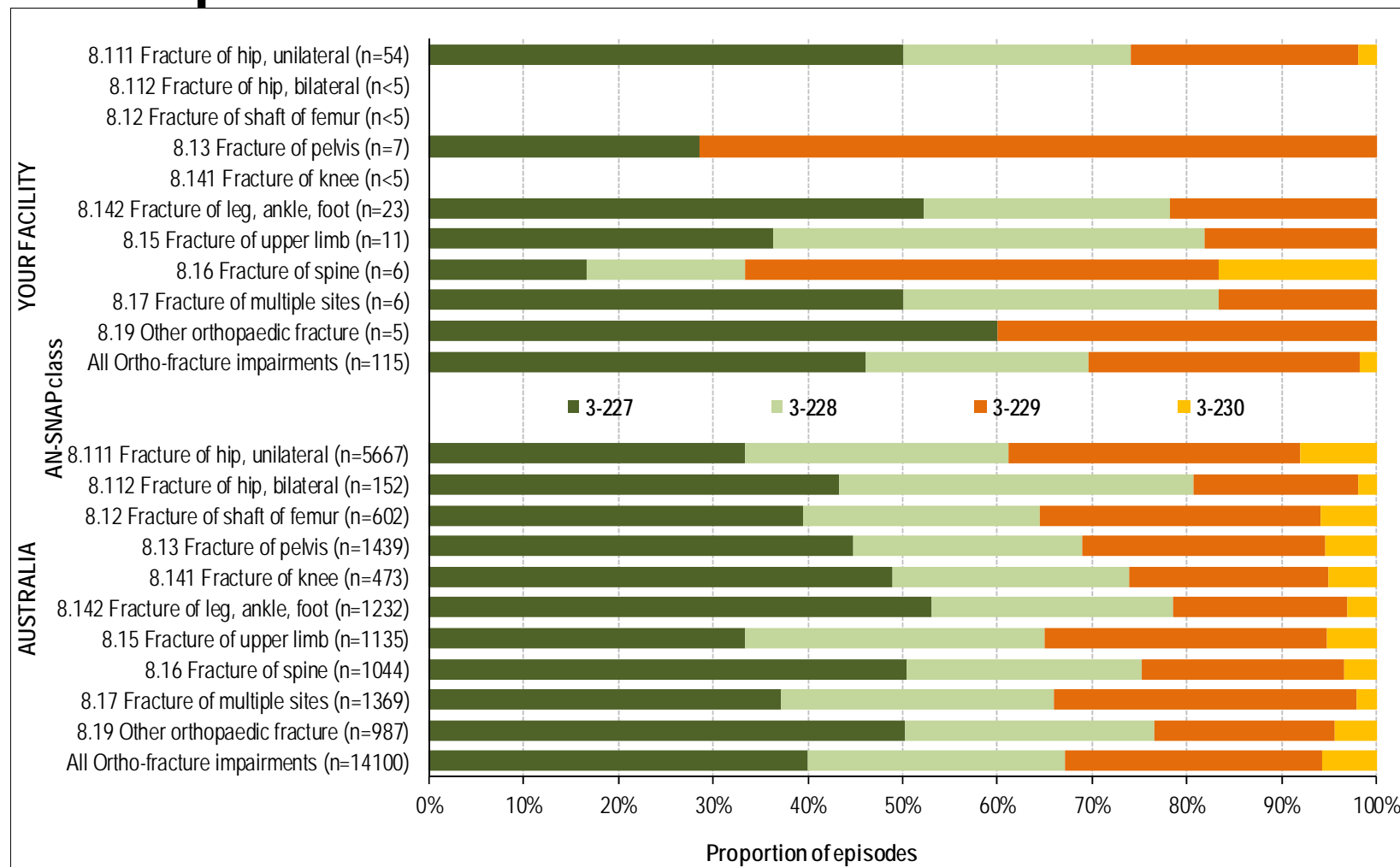
NOTE: A list of all AN SNAP classes can be found in Appendix 3

The BIG picture

Volume of episodes by facilities treating orthopaedic fractures (discharges in Jan-Dec 2012)



Proportion of episodes by impairment code and AN-SNAP class



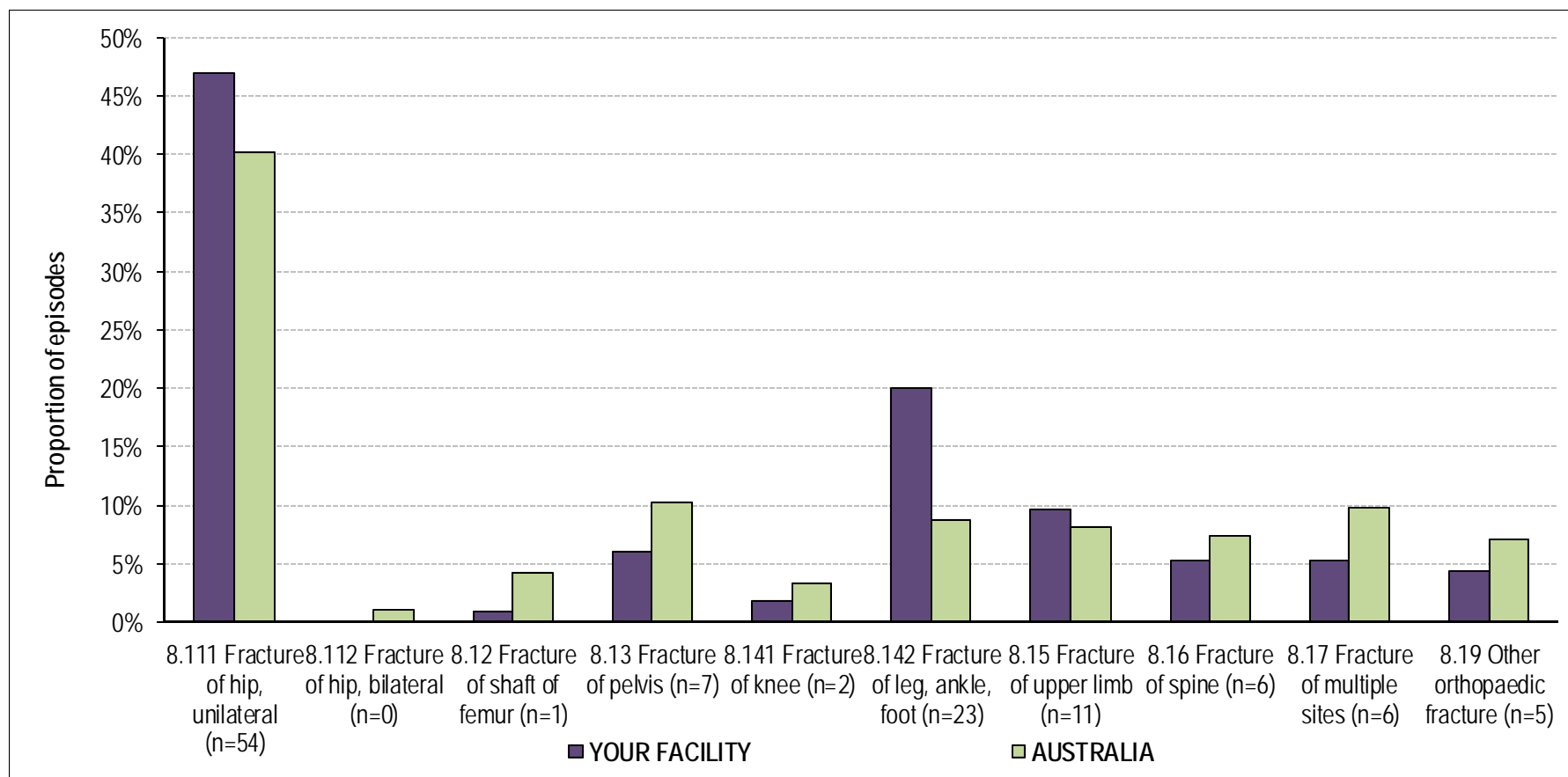
Episodes by impairment code and AN-SNAP class

Impairment code	YOUR FACILITY — N (%)				All Ortho-fracture AN-SNAP classes**
	3-227 (motor 58-91)	3-228 (motor 48-57)	3-229 (motor 14-47, cognition 19-35)	3-230 (motor 14-47, cognition 5-18)	
8.111 Fracture of hip, unilateral	27 (50.0%)	13 (24.1%)	13 (24.1%)	1 (1.9%)	54 (100.0%)
8.112 Fracture of hip, bilateral	0 —	0 —	0 —	0 —	0 —
8.12 Fracture of shaft of femur	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
8.13 Fracture of pelvis	2 (28.6%)	0 (0.0%)	5 (71.4%)	0 (0.0%)	7 (100.0%)
8.141 Fracture of knee	0 (0.0%)	0 (0.0%)	2 (100.0%)	0 (0.0%)	2 (100.0%)
8.142 Fracture of leg, ankle, foot	12 (52.2%)	6 (26.1%)	5 (21.7%)	0 (0.0%)	23 (100.0%)
8.15 Fracture of upper limb	4 (36.4%)	5 (45.5%)	2 (18.2%)	0 (0.0%)	11 (100.0%)
8.16 Fracture of spine	1 (16.7%)	1 (16.7%)	3 (50.0%)	1 (16.7%)	6 (100.0%)
8.17 Fracture of multiple sites	3 (50.0%)	2 (33.3%)	1 (16.7%)	0 (0.0%)	6 (100.0%)
8.19 Other orthopaedic fracture	3 (60.0%)	0 (0.0%)	2 (40.0%)	0 (0.0%)	5 (100.0%)
All Ortho-fracture impairments	53 (46.1%)	27 (23.5%)	33 (28.7%)	2 (1.7%)	115 (100.0%)

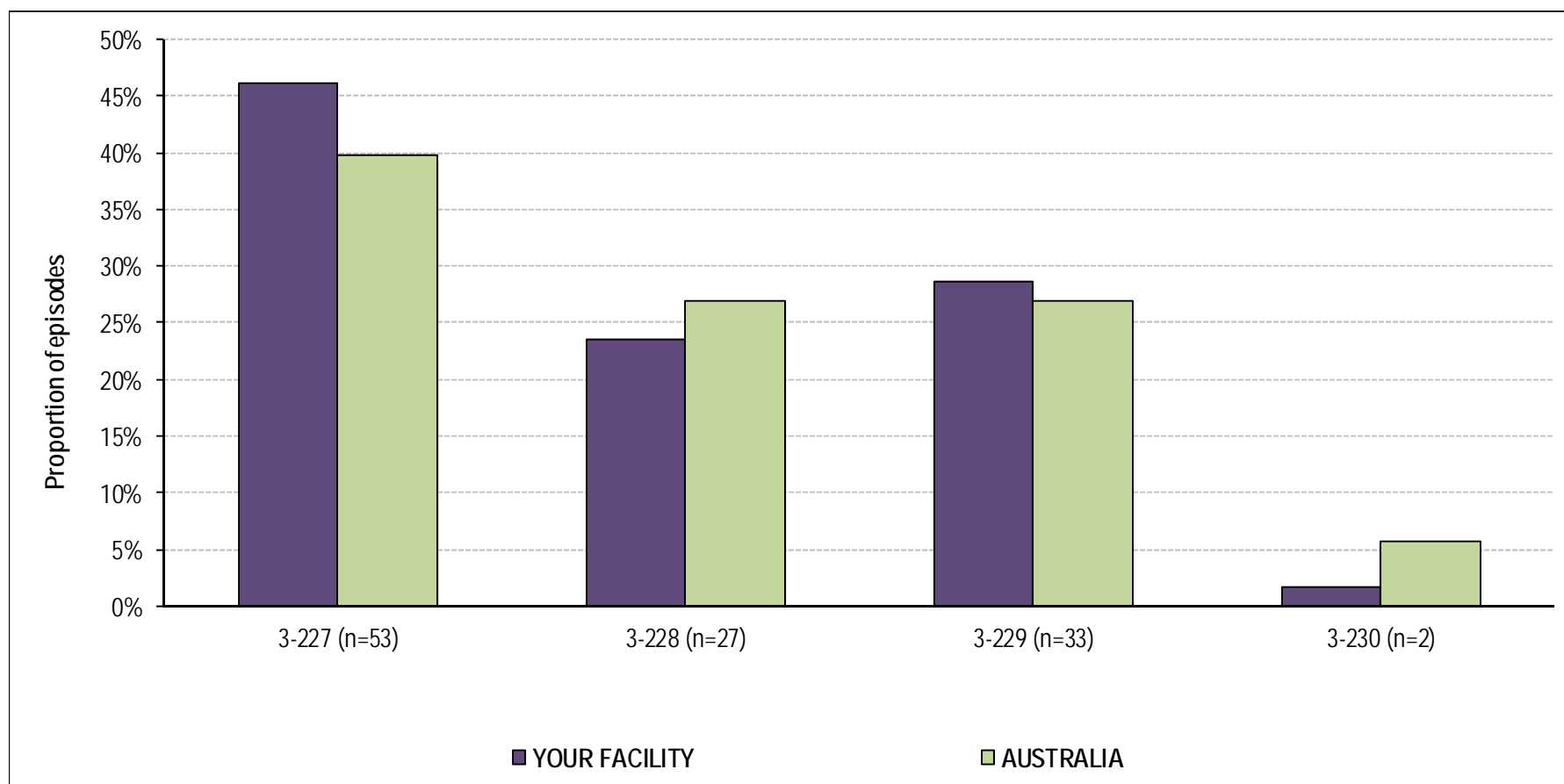
AN-SNAP class	AUSTRALIA — N (%)				All Ortho-fracture AN-SNAP classes**
	3-227 (motor 58-91)	3-228 (motor 48-57)	3-229 (motor 14-47, cognition 19-35)	3-230 (motor 14-47, cognition 5-18)	
8.111 Fracture of hip, unilateral	1,874 (33.4%)	1,556 (27.7%)	1,727 (30.8%)	454 (8.1%)	5,667 (100.0%)
8.112 Fracture of hip, bilateral	65 (43.3%)	56 (37.3%)	26 (17.3%)	3 (2.0%)	152 (100.0%)
8.12 Fracture of shaft of femur	236 (39.5%)	149 (25.0%)	177 (29.6%)	35 (5.9%)	602 (100.0%)
8.13 Fracture of pelvis	639 (44.7%)	346 (24.2%)	366 (25.6%)	78 (5.5%)	1,439 (100.0%)
8.141 Fracture of knee	231 (48.9%)	118 (25.0%)	99 (21.0%)	24 (5.1%)	473 (100.0%)
8.142 Fracture of leg, ankle, foot	652 (53.1%)	314 (25.5%)	225 (18.3%)	38 (3.1%)	1,232 (100.0%)
8.15 Fracture of upper limb	377 (33.3%)	358 (31.6%)	338 (29.9%)	59 (5.2%)	1,135 (100.0%)
8.16 Fracture of spine	523 (50.5%)	257 (24.8%)	220 (21.2%)	36 (3.5%)	1,044 (100.0%)
8.17 Fracture of multiple sites	507 (37.2%)	392 (28.7%)	437 (32.0%)	28 (2.1%)	1,369 (100.0%)
8.19 Other orthopaedic fracture	493 (50.2%)	259 (26.4%)	187 (19.0%)	43 (4.4%)	987 (100.0%)
All Ortho-fracture impairments	5,597 (40.0%)	3,805 (27.2%)	3,802 (27.2%)	798 (5.7%)	14,100 (100.0%)

** There were 98 episodes in AUSTRALIA with AN-SNAP classes 3-203 or 3-902

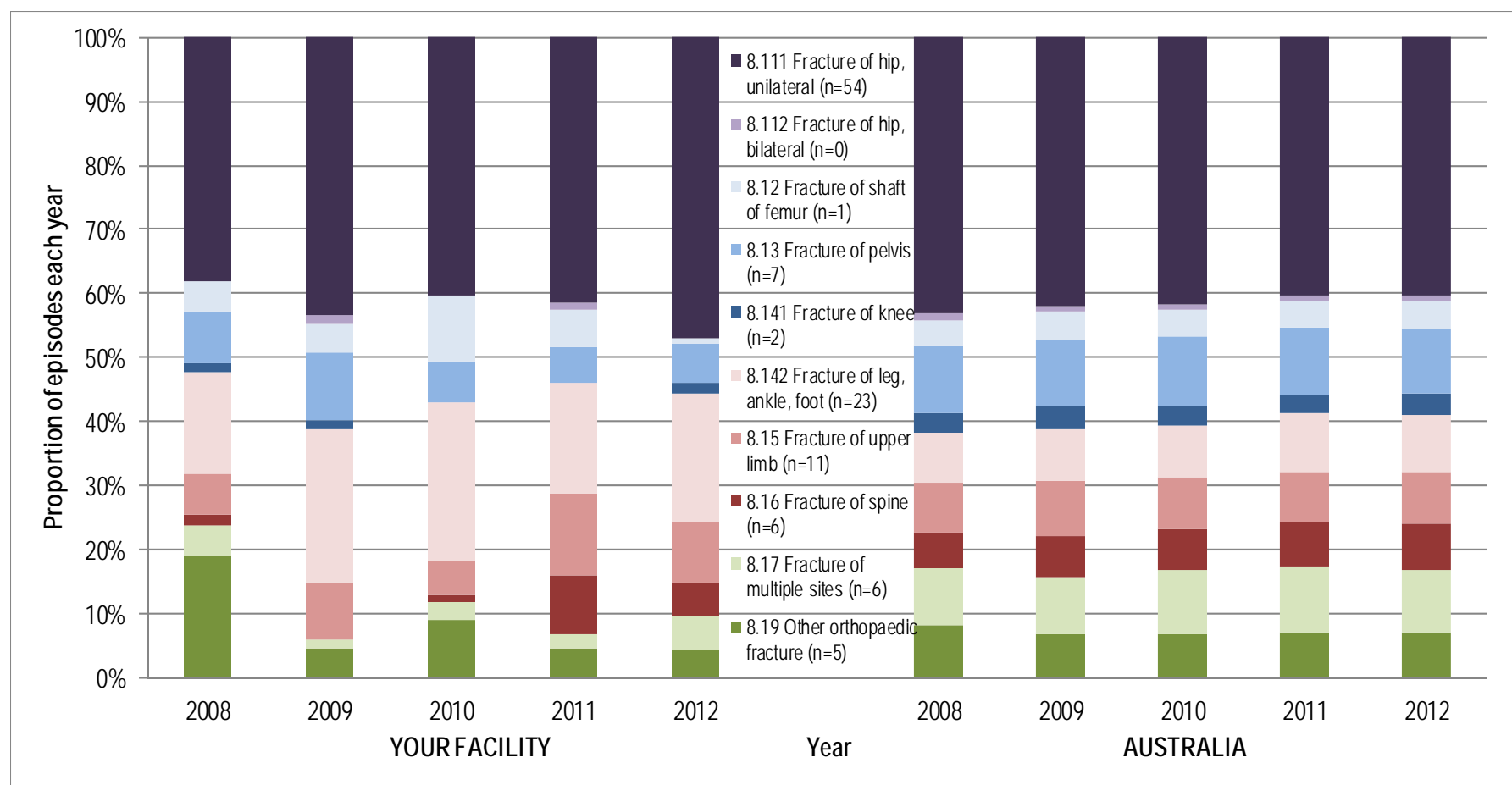
Proportion of episodes by impairment code



Proportion of episodes by AN-SNAP class



Proportion of episodes by impairment code over time

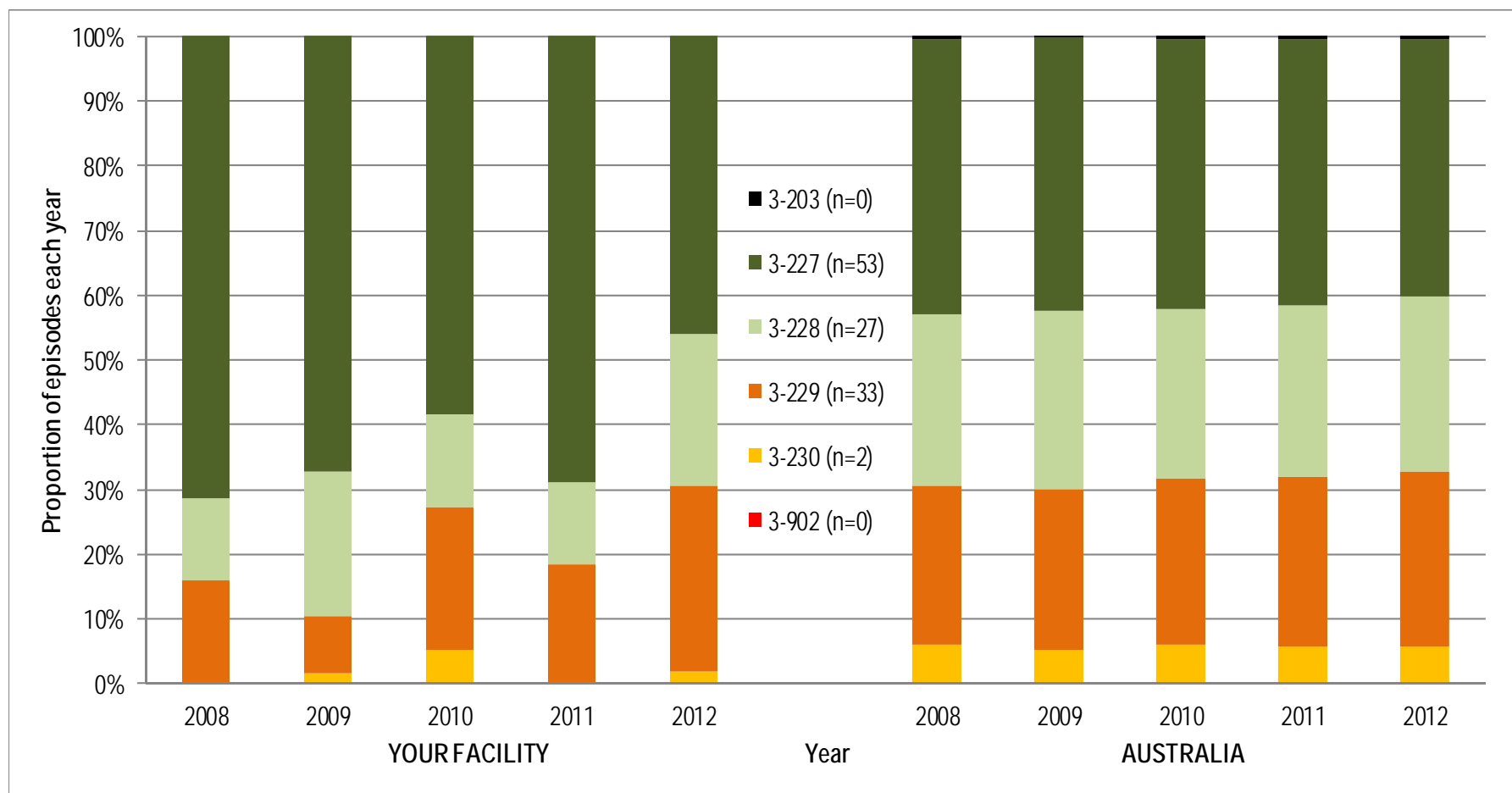


Episodes by impairment code over time

Impairment	YOUR FACILITY					AUSTRALIA				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
8.111 Fracture of hip, unilateral	24	29	31	36	54	4,623	4,707	5,458	5,483	5,667
8.112 Fracture of hip, bilateral	0	1	0	1	0	115	92	126	113	152
8.12 Fracture of shaft of femur	3	3	8	5	1	432	501	551	573	602
8.13 Fracture of pelvis	5	7	5	5	7	1,117	1,167	1,396	1,431	1,439
8.141 Fracture of knee	1	1	0	0	2	344	396	413	379	473
8.142 Fracture of leg, ankle, foot	10	16	19	15	23	833	926	1,047	1,242	1,232
8.15 Fracture of upper limb	4	6	4	11	11	815	947	1,064	1,061	1,135
8.16 Fracture of spine	1	0	1	8	6	619	727	834	939	1,044
8.17 Fracture of multiple sites	3	1	2	2	6	937	1,004	1,312	1,412	1,369
8.19 Other orthopaedic fracture	12	3	7	4	5	882	755	906	958	987
All Orthopaedic fractures	63	67	77	87	115	10,717	11,222	13,107	13,591	14,100

Impairment	YOUR FACILITY					AUSTRALIA				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
8.111 Fracture of hip, unilateral	38.1%	43.3%	40.3%	41.4%	47.0%	43.1%	41.9%	41.6%	40.3%	40.2%
8.112 Fracture of hip, bilateral	0.0%	1.5%	0.0%	1.1%	0.0%	1.1%	0.8%	1.0%	0.8%	1.1%
8.12 Fracture of shaft of femur	4.8%	4.5%	10.4%	5.7%	0.9%	4.0%	4.5%	4.2%	4.2%	4.3%
8.13 Fracture of pelvis	7.9%	10.4%	6.5%	5.7%	6.1%	10.4%	10.4%	10.7%	10.5%	10.2%
8.141 Fracture of knee	1.6%	1.5%	0.0%	0.0%	1.7%	3.2%	3.5%	3.2%	2.8%	3.4%
8.142 Fracture of leg, ankle, foot	15.9%	23.9%	24.7%	17.2%	20.0%	7.8%	8.3%	8.0%	9.1%	8.7%
8.15 Fracture of upper limb	6.3%	9.0%	5.2%	12.6%	9.6%	7.6%	8.4%	8.1%	7.8%	8.0%
8.16 Fracture of spine	1.6%	0.0%	1.3%	9.2%	5.2%	5.8%	6.5%	6.4%	6.9%	7.4%
8.17 Fracture of multiple sites	4.8%	1.5%	2.6%	2.3%	5.2%	8.7%	8.9%	10.0%	10.4%	9.7%
8.19 Other orthopaedic fracture	19.0%	4.5%	9.1%	4.6%	4.3%	8.2%	6.7%	6.9%	7.0%	7.0%
All Orthopaedic fractures	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Proportion of episodes by AN-SNAP class over time



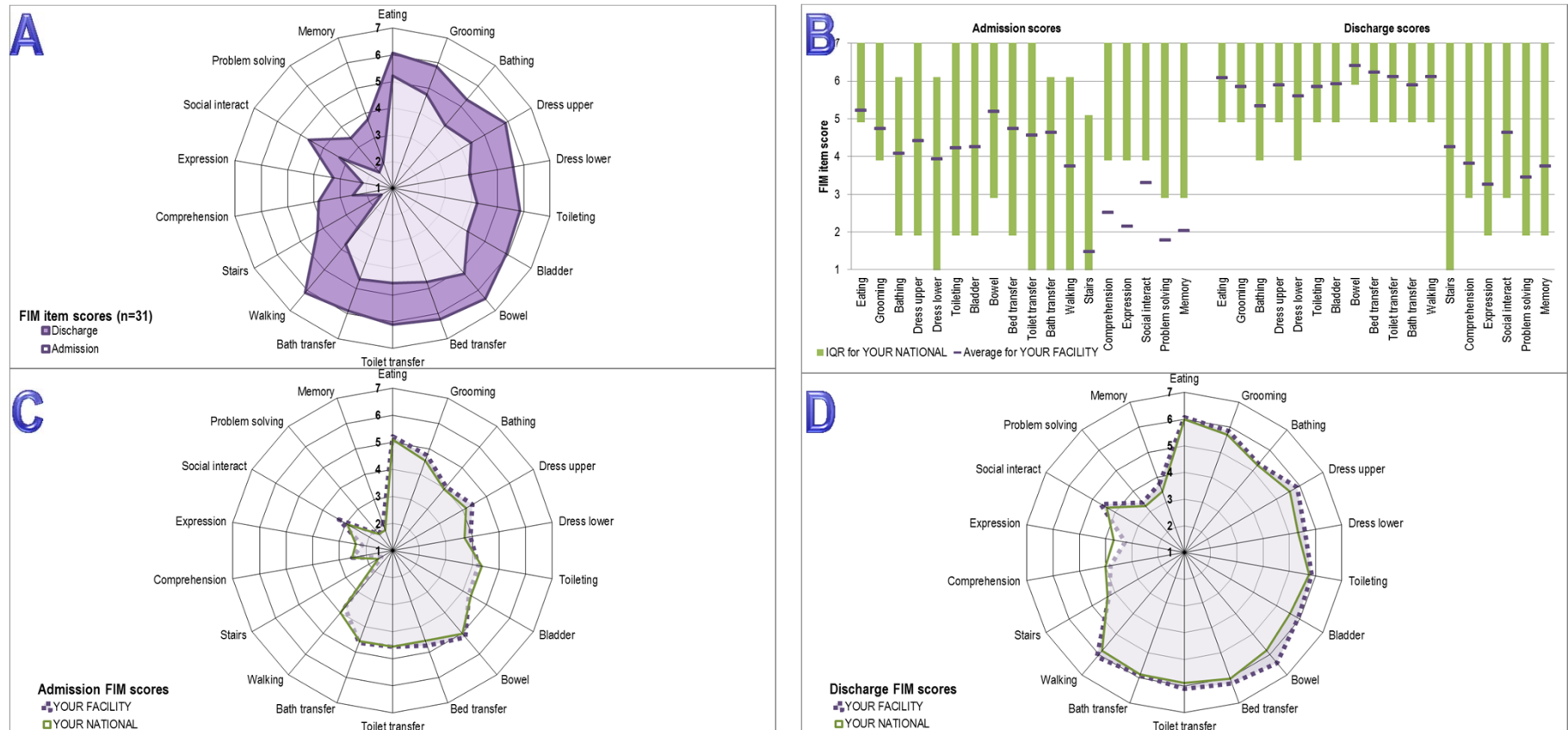
Episodes by AN-SNAP class over time

AN-SNAP class	YOUR FACILITY					AUSTRALIA				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
3-203 (motor 13)	0	0	0	0	0	36	33	63	53	76
3-227 (motor 58-91)	45	45	45	60	53	4,573	4,738	5,456	5,581	5,597
3-228 (motor 48-57)	8	15	11	11	27	2,833	3,083	3,430	3,615	3,805
3-229 (motor 14-47, cognition 19-35)	10	6	17	16	33	2,629	2,780	3,380	3,579	3,802
3-230 (motor 14-47, cognition 5-18)	0	1	4	0	2	633	572	755	739	798
3-902 (Data error - ungroupable)	0	0	0	0	0	13	16	23	24	22
All Ortho-fracture AN-SNAP classes	63	67	77	87	115	10,717	11,222	13,107	13,591	14,100

AN-SNAP class	YOUR FACILITY					AUSTRALIA				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
3-203 (motor 13)	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.5%	0.4%	0.5%
3-227 (motor 58-91)	71.4%	67.2%	58.4%	69.0%	46.1%	42.7%	42.2%	41.6%	41.1%	39.7%
3-228 (motor 48-57)	12.7%	22.4%	14.3%	12.6%	23.5%	26.4%	27.5%	26.2%	26.6%	27.0%
3-229 (motor 14-47, cognition 19-35)	15.9%	9.0%	22.1%	18.4%	28.7%	24.5%	24.8%	25.8%	26.3%	27.0%
3-230 (motor 14-47, cognition 5-18)	0.0%	1.5%	5.2%	0.0%	1.7%	5.9%	5.1%	5.8%	5.4%	5.7%
3-902 (Data error - ungroupable)	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	0.2%	0.2%
All Ortho-fracture AN-SNAP classes	100.0%	100.0%	100.0%	100.0%	100.0%	—	100.0%	100.0%	100.0%	100.0%

Review of FIM item scoring by AN-SNAP class

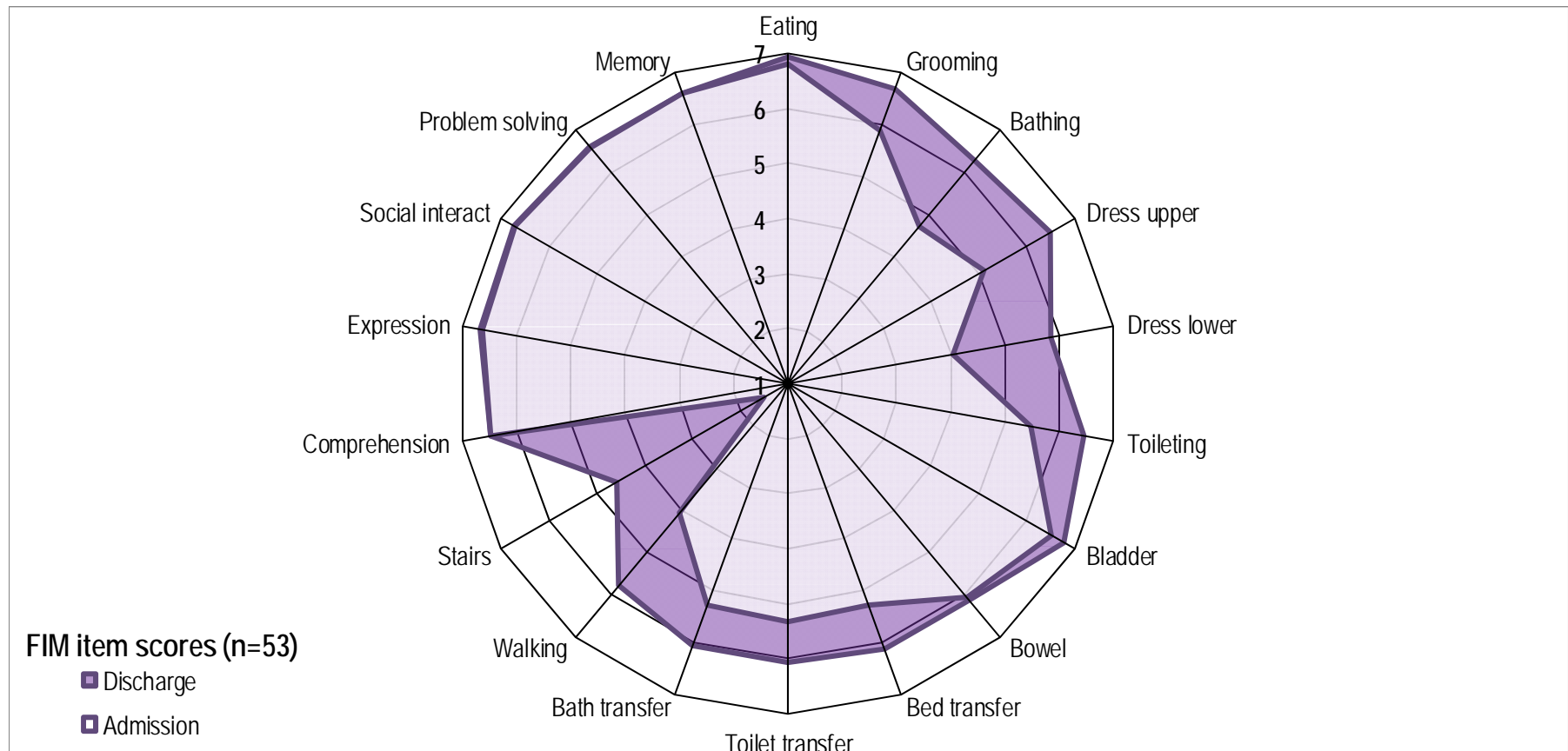
Interpreting your comparative FIM scoring charts



The FIM splot provides a graphic presentation of functional status in a radar chart. The 18 FIM items are arranged in order as 'spokes' of a wheel and the scoring levels from 1 (total dependence) to 7 (total independence) run from the centre outwards. The mean FIM item score for each item is indicated — a perfect score would be demonstrated as a large circle. The first FIM splot used in this report illustrates the FIM score change from admission to discharge at YOUR FACILITY (Figure A) — the darker shaded area represents the functional improvement at YOUR FACILITY (i.e. the difference between the mean scores on admission and discharge). The next two FIM splats compare FIM scoring on admission (Figure C) and discharge (Figure D) between YOUR FACILITY and your NATIONAL data — differences in the two shaded areas indicate differences in mean admission/discharge scoring. Figure B is a graphic presentation of YOUR FACILITY's average FIM item scores (small bar) versus your NATIONAL interquartile range of FIM scores, i.e. middle 50%, (green boxes) for each FIM item at admission and discharge — ideally YOUR FACILITY's average FIM score will lie somewhere on the IQR bar of your NATIONAL data. All graphs include only episodes with completed episodes and valid FIM scoring.

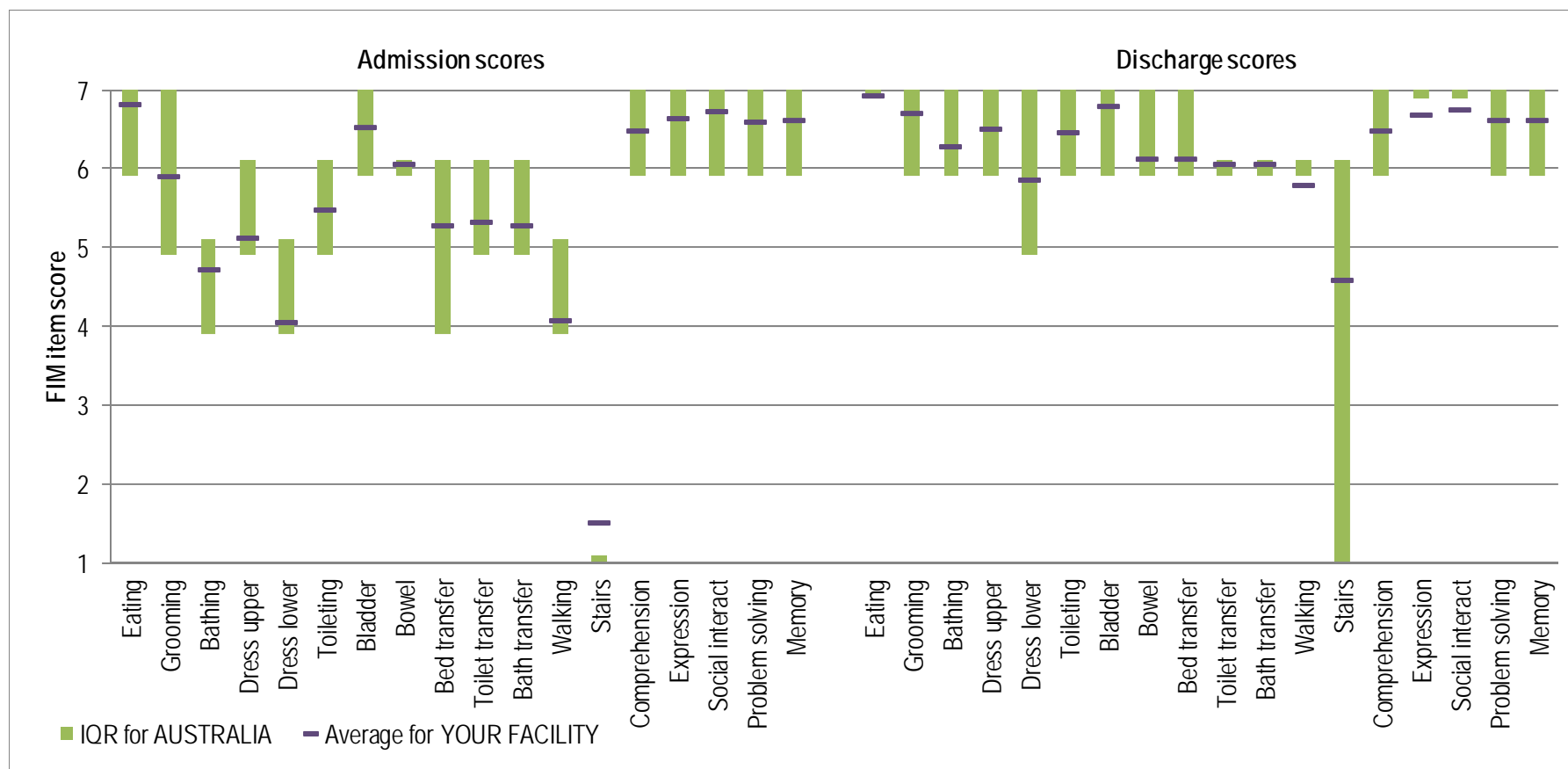
Change in FIM item scoring at YOUR FACILITY

AN-SNAP class 3-227

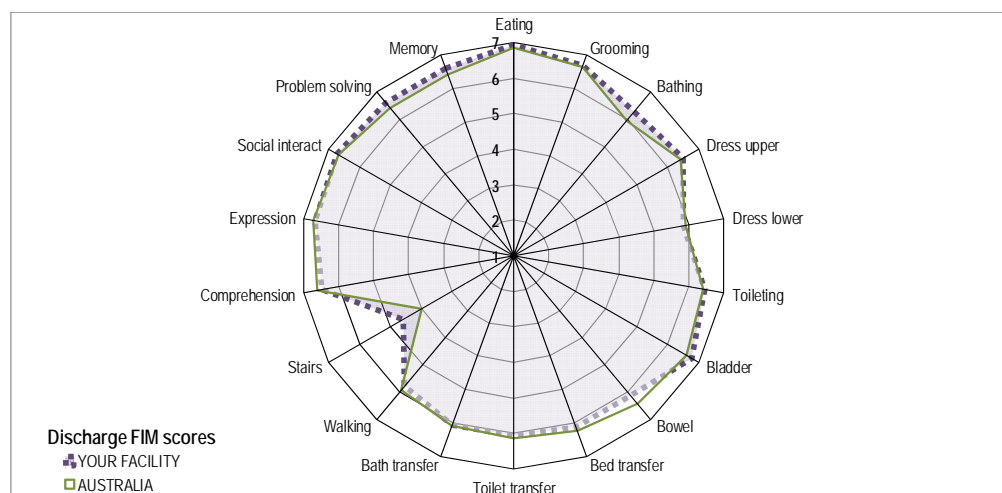
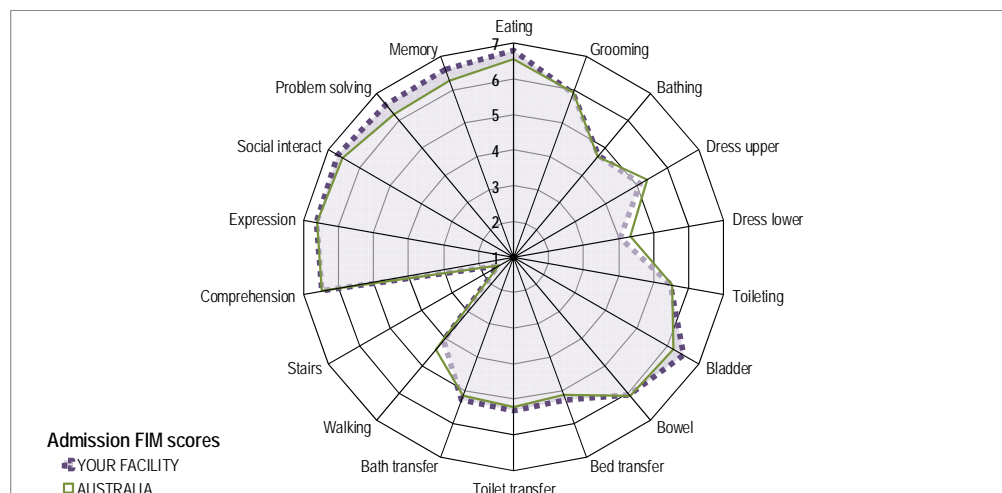


Comparative FIM item scoring

AN-SNAP class 3-227

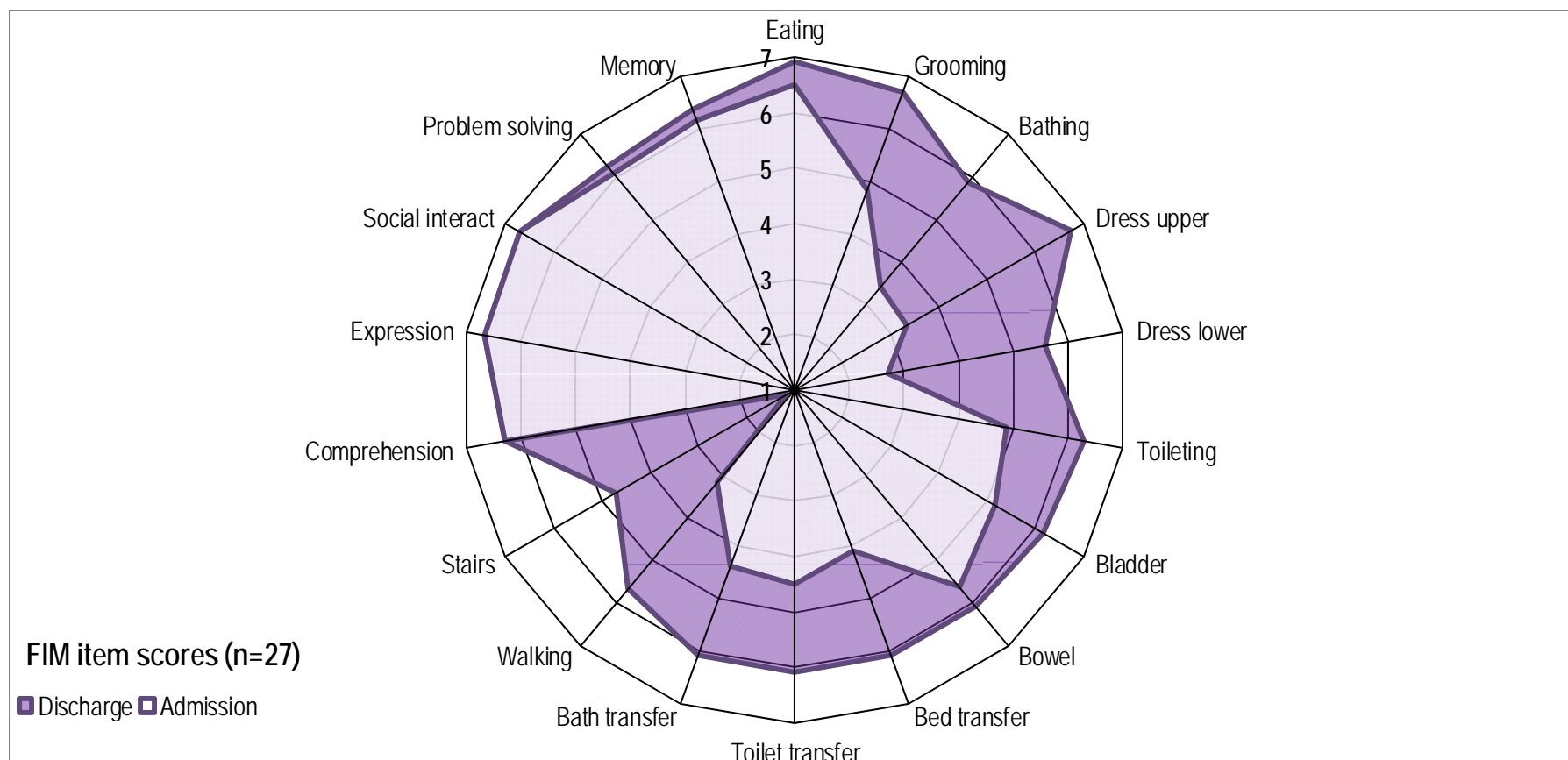


Comparative FIM item scoring AN-SNAP class 3-227



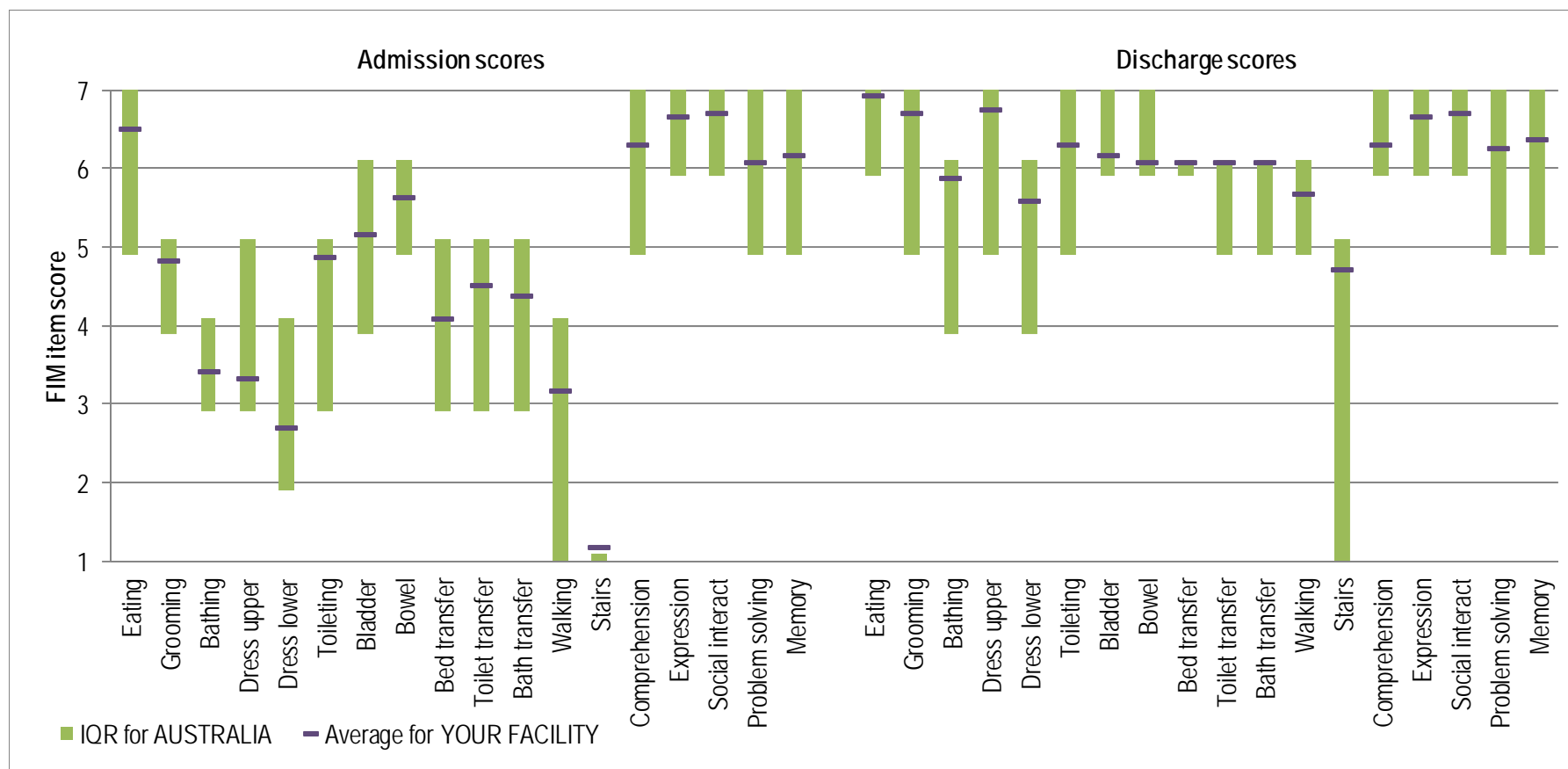
Change in FIM item scoring at YOUR FACILITY

AN-SNAP class 3-228

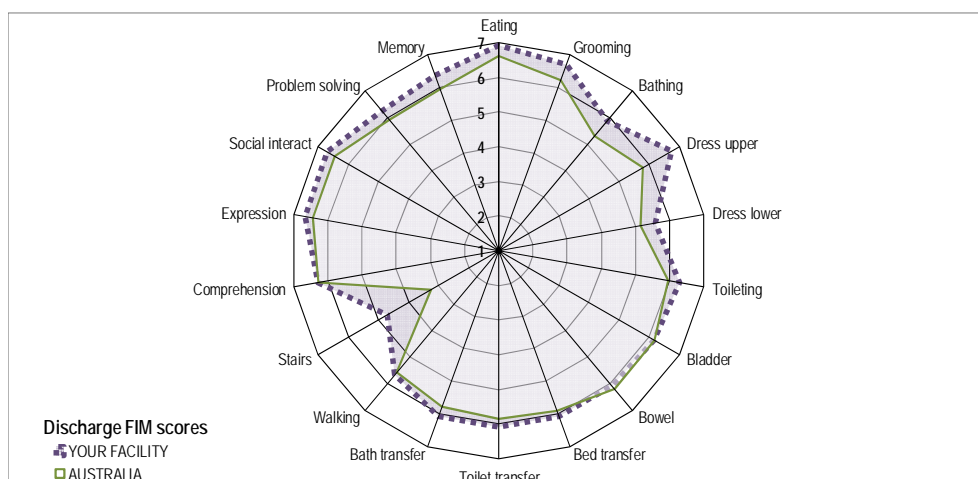
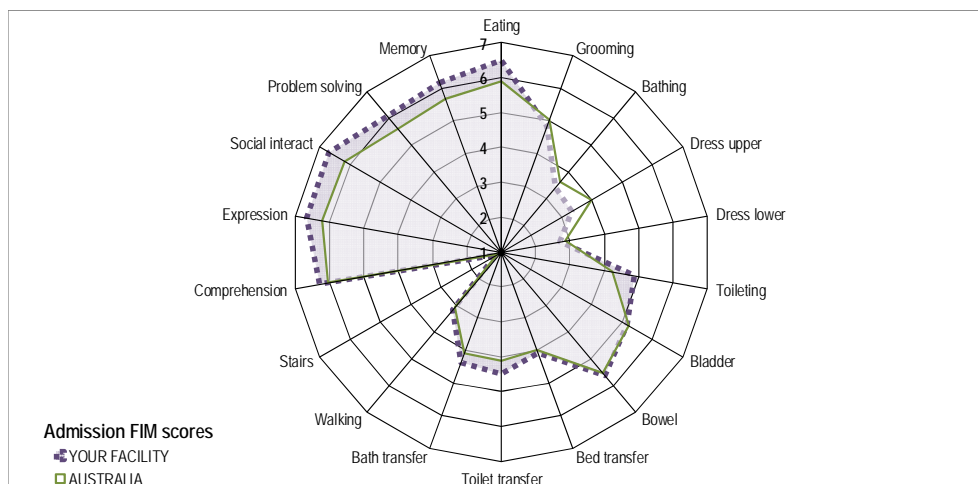


Comparative FIM item scoring

AN-SNAP class 3-228

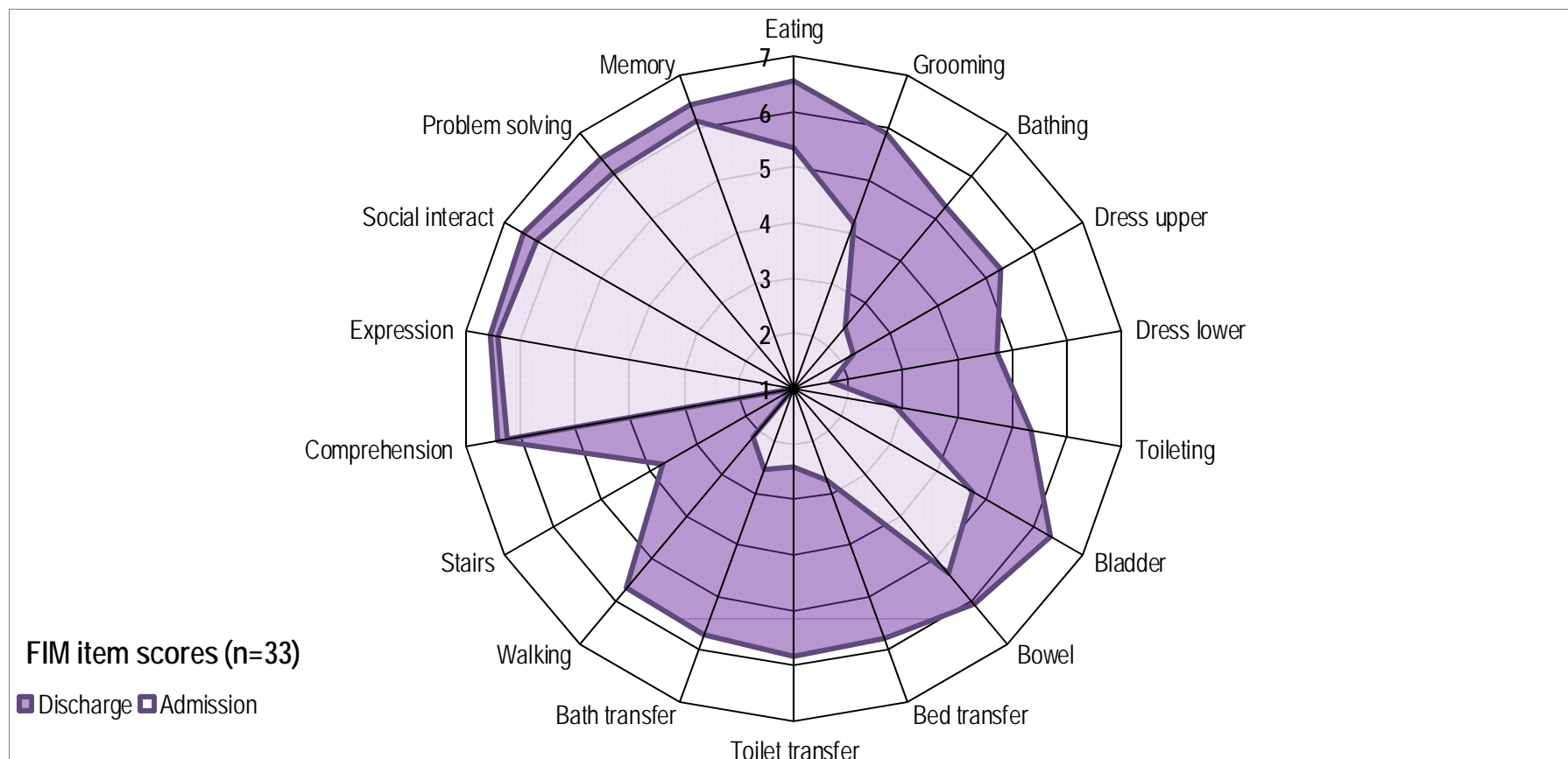


Comparative FIM item scoring AN-SNAP class 3-228

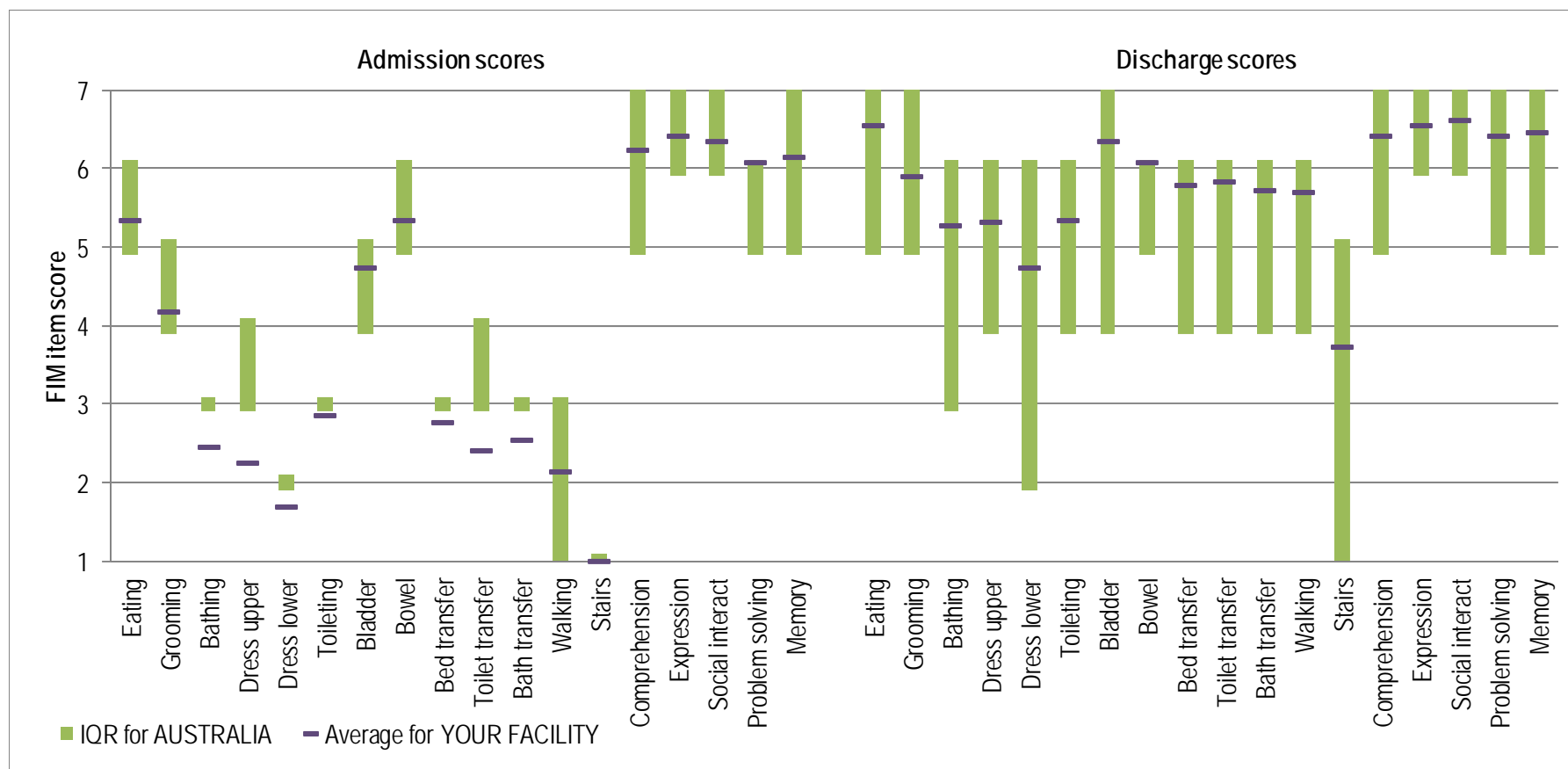


Change in FIM item scoring at YOUR FACILITY

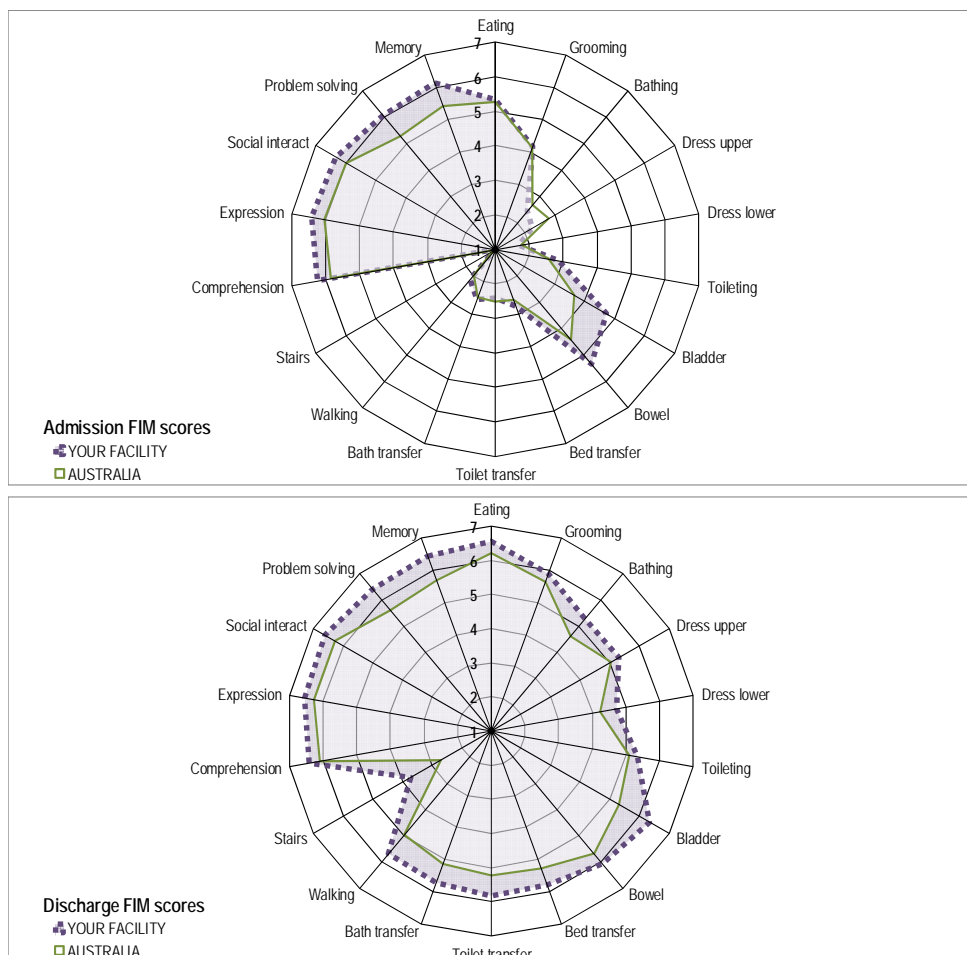
AN-SNAP class 3-229



Comparative FIM item scoring AN-SNAP class 3-229

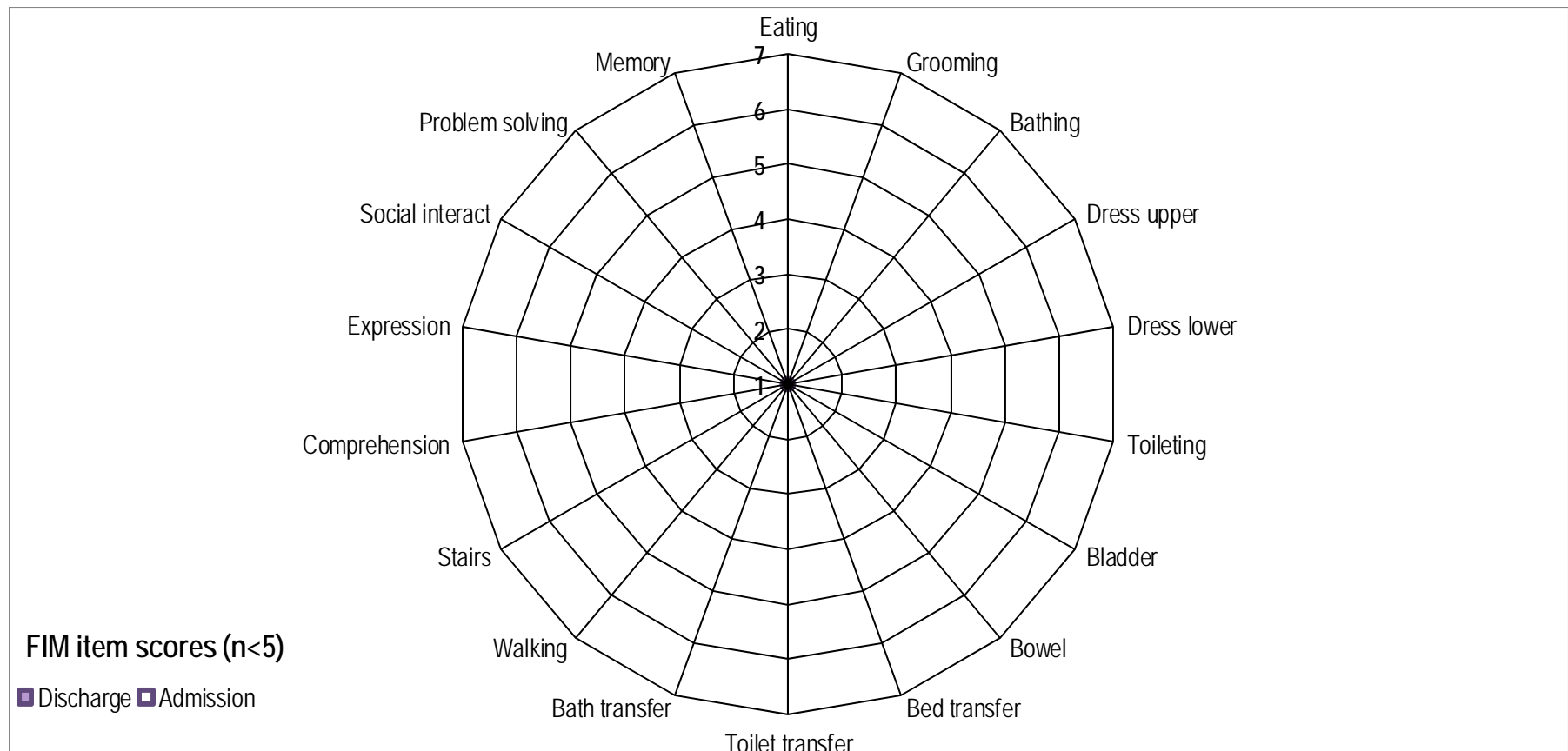


Comparative FIM item scoring AN-SNAP class 3-229

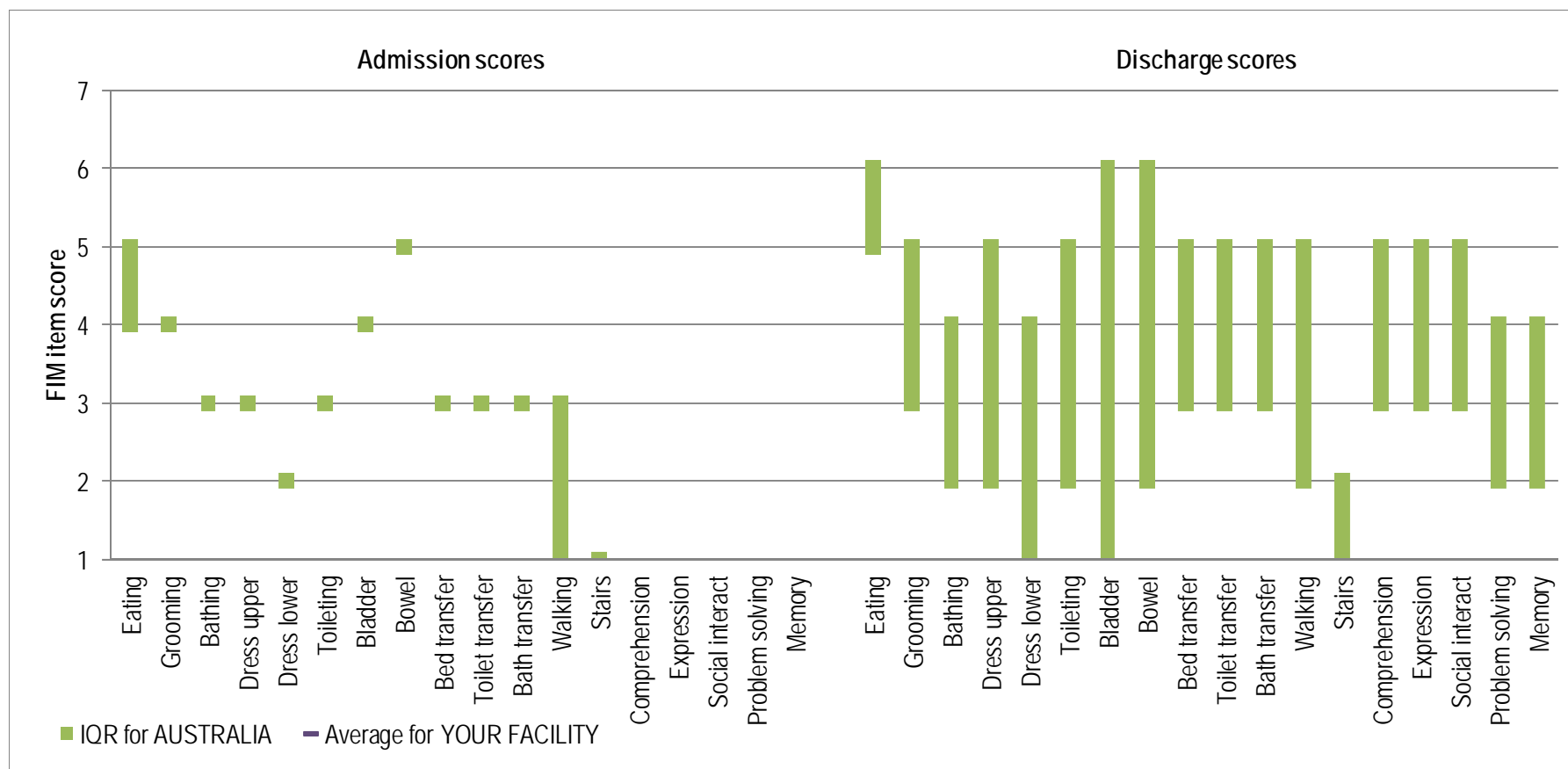


Change in FIM item scoring at YOUR FACILITY

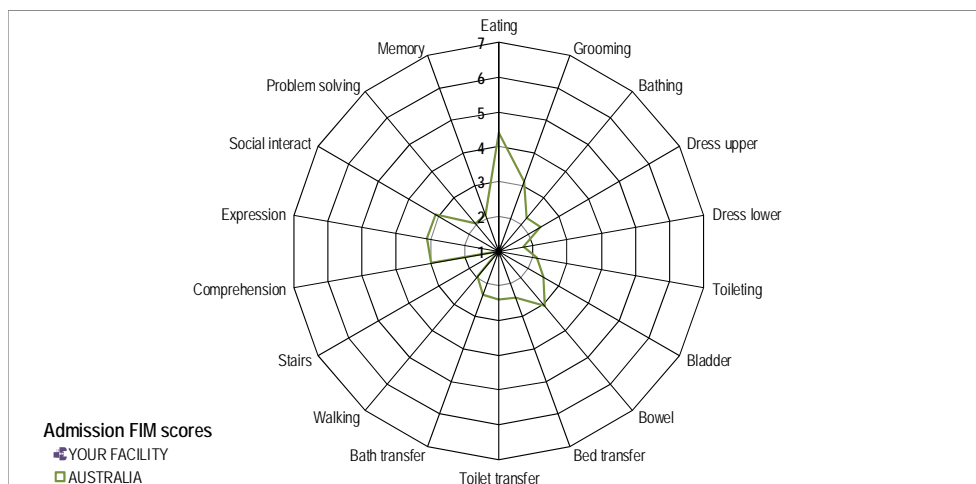
AN-SNAP class 3-230



Comparative FIM item scoring AN-SNAP class 3-230



Comparative FIM item scoring AN-SNAP class 3-230



Outcomes Analysis

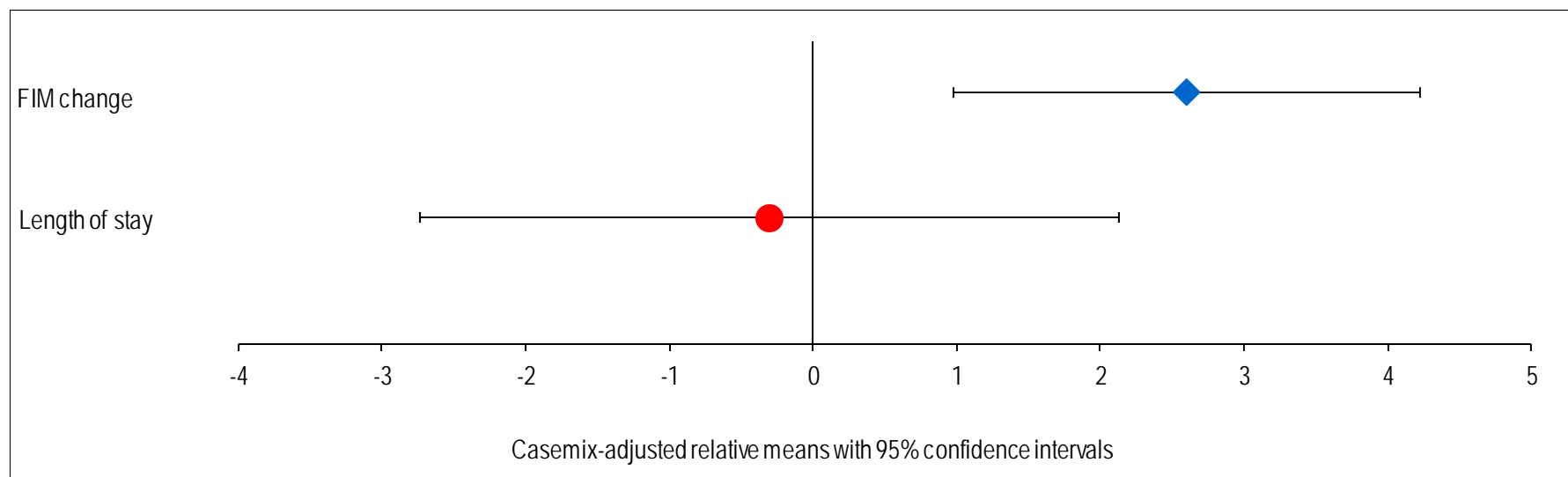
Completed episodes by impairment and AN-SNAP class

Impairment	YOUR FACILITY			AUSTRALIA		
	All episodes	Completed episodes	%Complete	All episodes	Completed episodes	%Complete
8.111 Fracture of hip, unilateral	54	46	85.2%	5,667	4,764	84.1%
8.112 Fracture of hip, bilateral	0	0	—	152	134	88.2%
8.12 Fracture of shaft of femur	1	1	100.0%	602	524	87.0%
8.13 Fracture of pelvis	7	7	100.0%	1,439	1,251	86.9%
8.141 Fracture of knee	2	2	100.0%	473	418	88.4%
8.142 Fracture of leg, ankle, foot	23	21	91.3%	1,232	1,089	88.4%
8.15 Fracture of upper limb	11	9	81.8%	1,135	985	86.8%
8.16 Fracture of spine	6	5	83.3%	1,044	903	86.5%
8.17 Fracture of multiple sites	6	5	83.3%	1,369	1,112	81.2%
8.19 Other orthopaedic fracture	5	4	80.0%	987	882	89.4%
All Orthopaedic fractures	115	100	87.0%	14,100	12,062	85.5%

AN-SNAP class	YOUR FACILITY			AUSTRALIA		
	All episodes	Completed episodes	%Complete	All episodes	Completed episodes	%Complete
3-227 (motor 58-91)	53	46	86.8%	5,597	5,033	89.9%
3-228 (motor 48-57)	27	24	88.9%	3,805	3,321	87.3%
3-229 (motor 14-47, cognition 19-35)	33	29	87.9%	3,802	3,089	81.2%
3-230 (motor 14-47, cognition 5-18)	2	1	50.0%	798	582	72.9%
All Ortho-fracture AN-SNAP classes	115	100	87.0%	14,100	12,062	85.5%

NOTE: All outcomes analysis are based on completed episodes. A definition of completed episodes can be found in Appendix1 (Glossary)

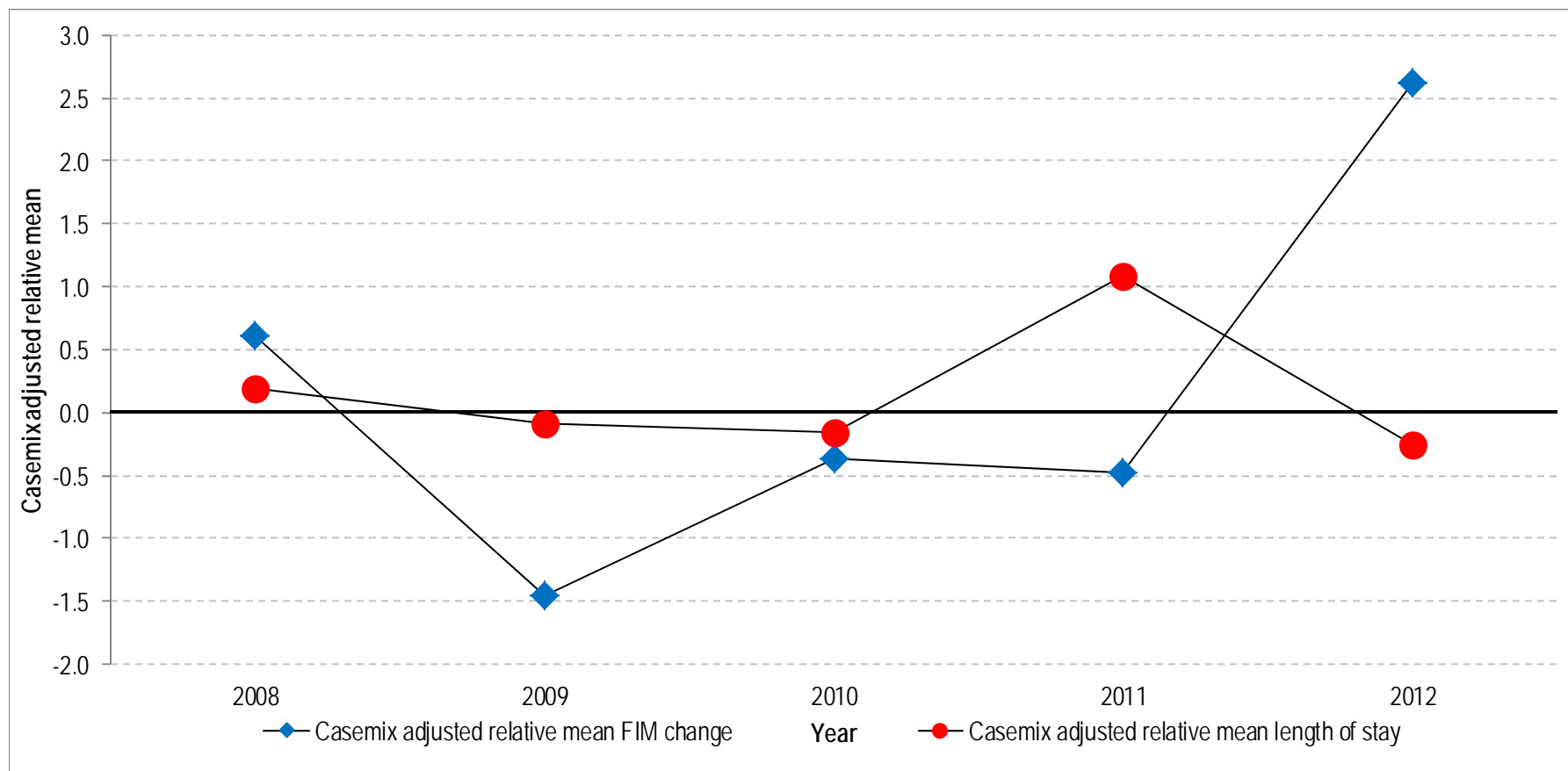
Casemix-adjusted relative means



Outcome measures	YOUR FACILITY	
	Casemix adjustment relative mean	95% CI
Length of stay	-0.3	-2.7 to 2.2
FIM change	2.6	1.0 to 4.3

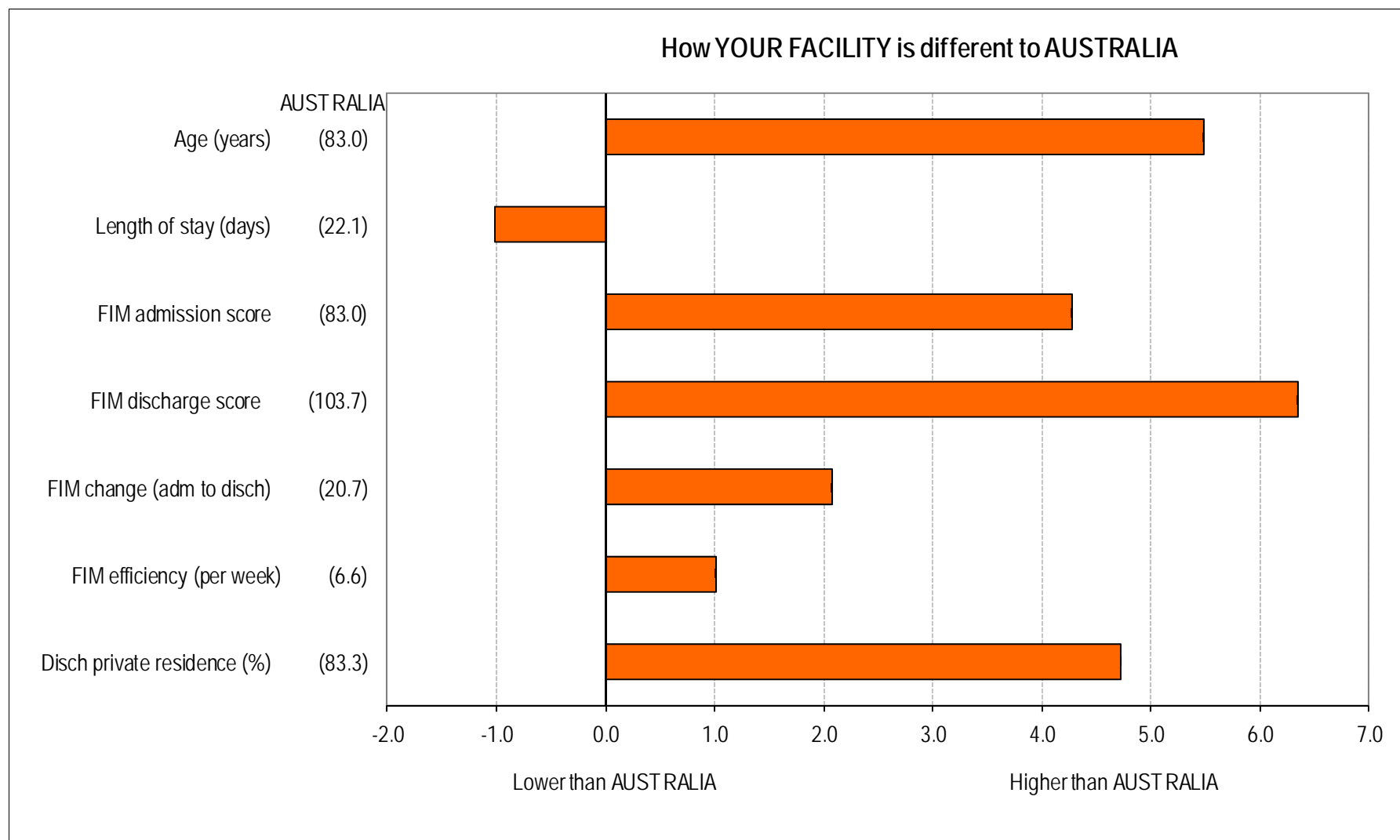
NOTE: Includes only completed episodes with valid FIM scores and LOS

Casemix-adjusted relative means over time



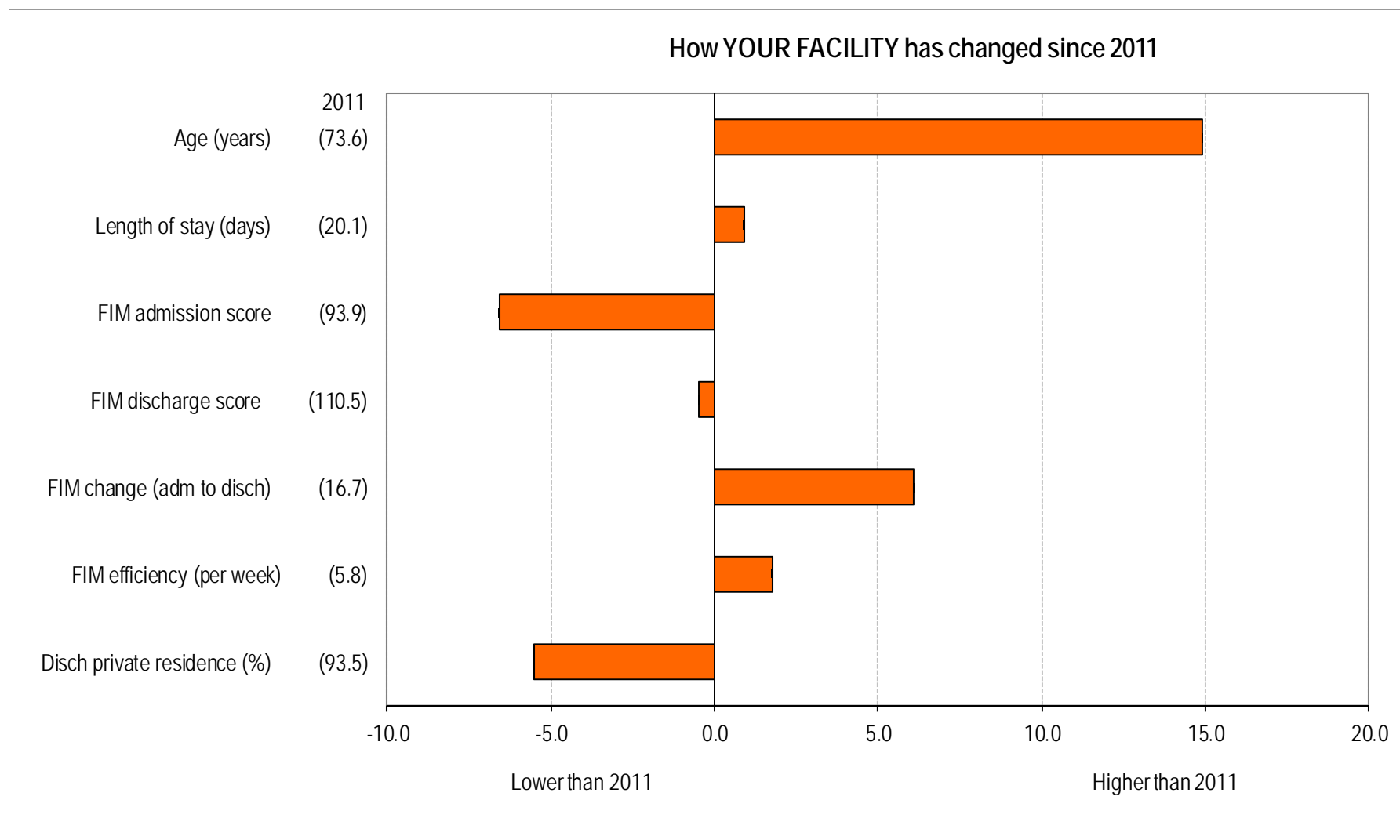
NOTE: Includes only completed episodes with valid FIM scores and LOS; where n<5 the casemix-adjusted relative mean will be zero

Outcome measures – difference from National



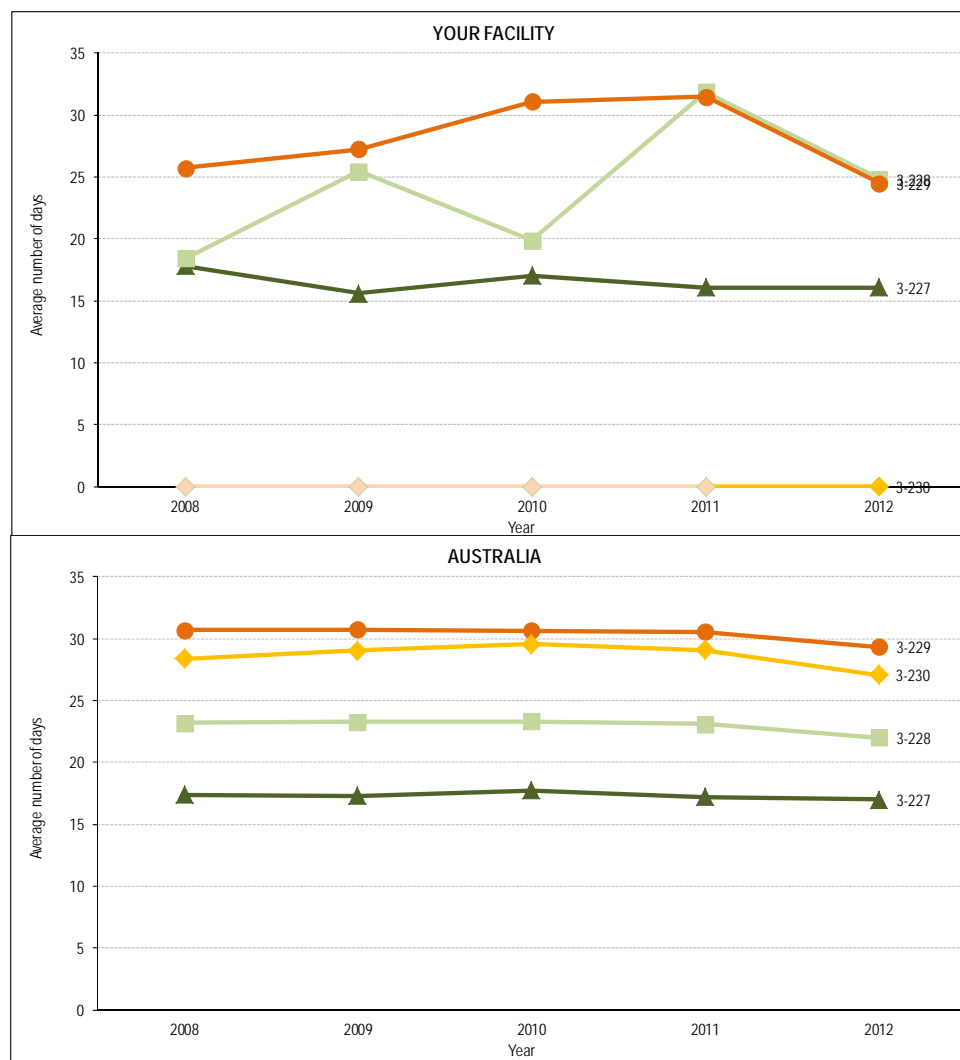
NOTE: Includes only completed episodes with valid FIM scores and LOS

Outcome measures – difference from 2011



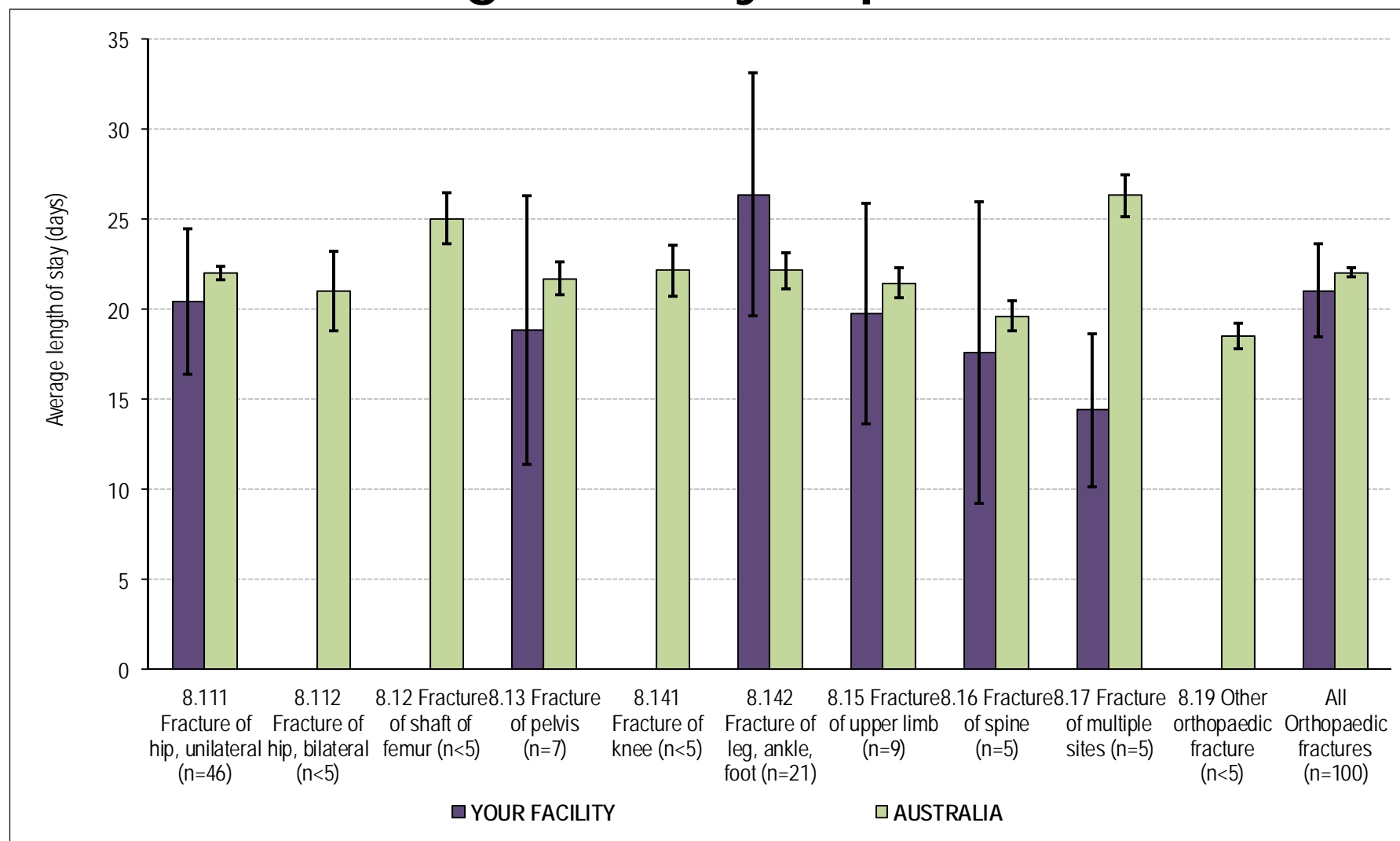
NOTE: Includes only completed episodes with valid FIM scores and LOS

Average LOS by AN-SNAP class over time



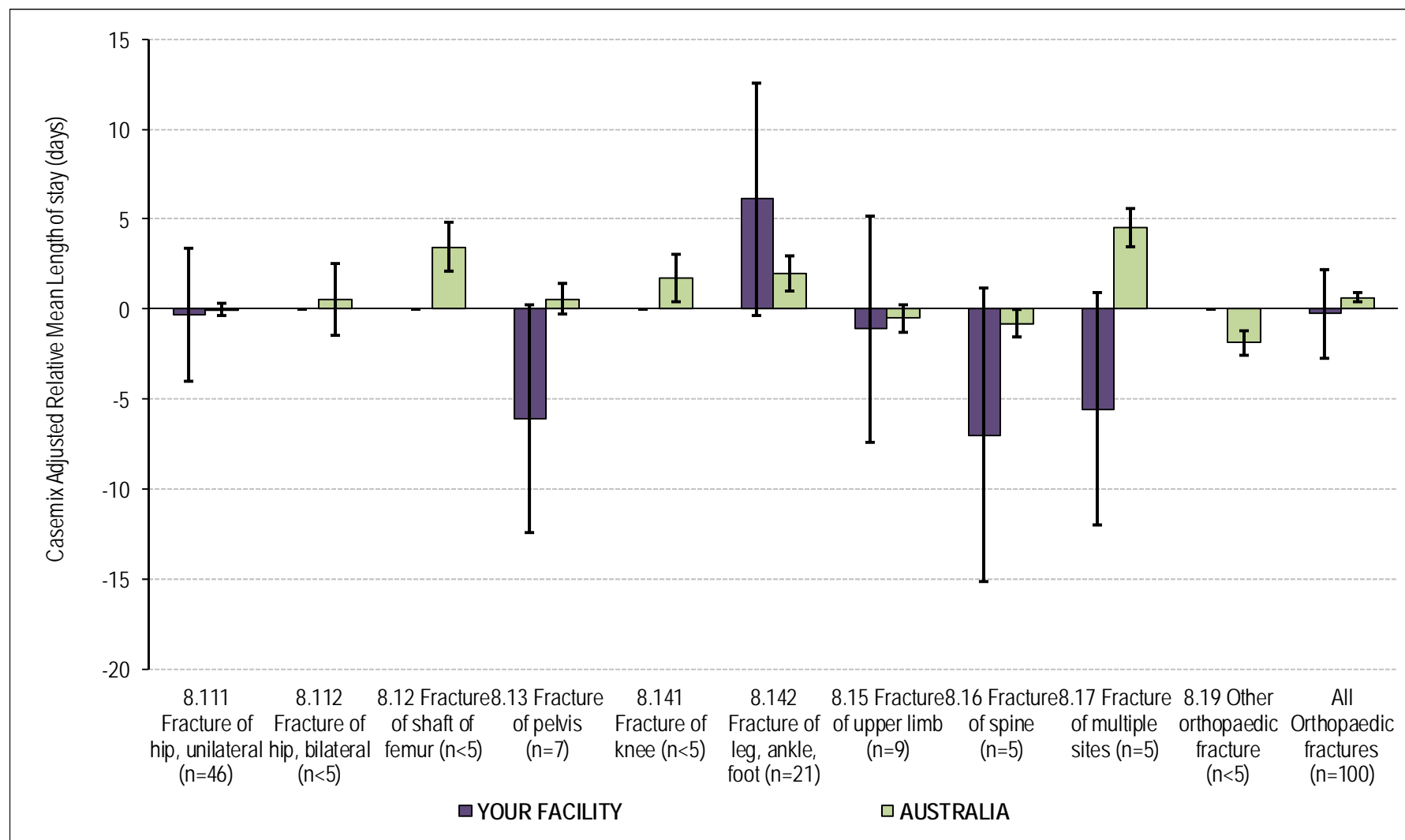
NOTE: Includes only completed episodes with valid LOS; where n<5 ALOS will be zero

Average LOS by impairment



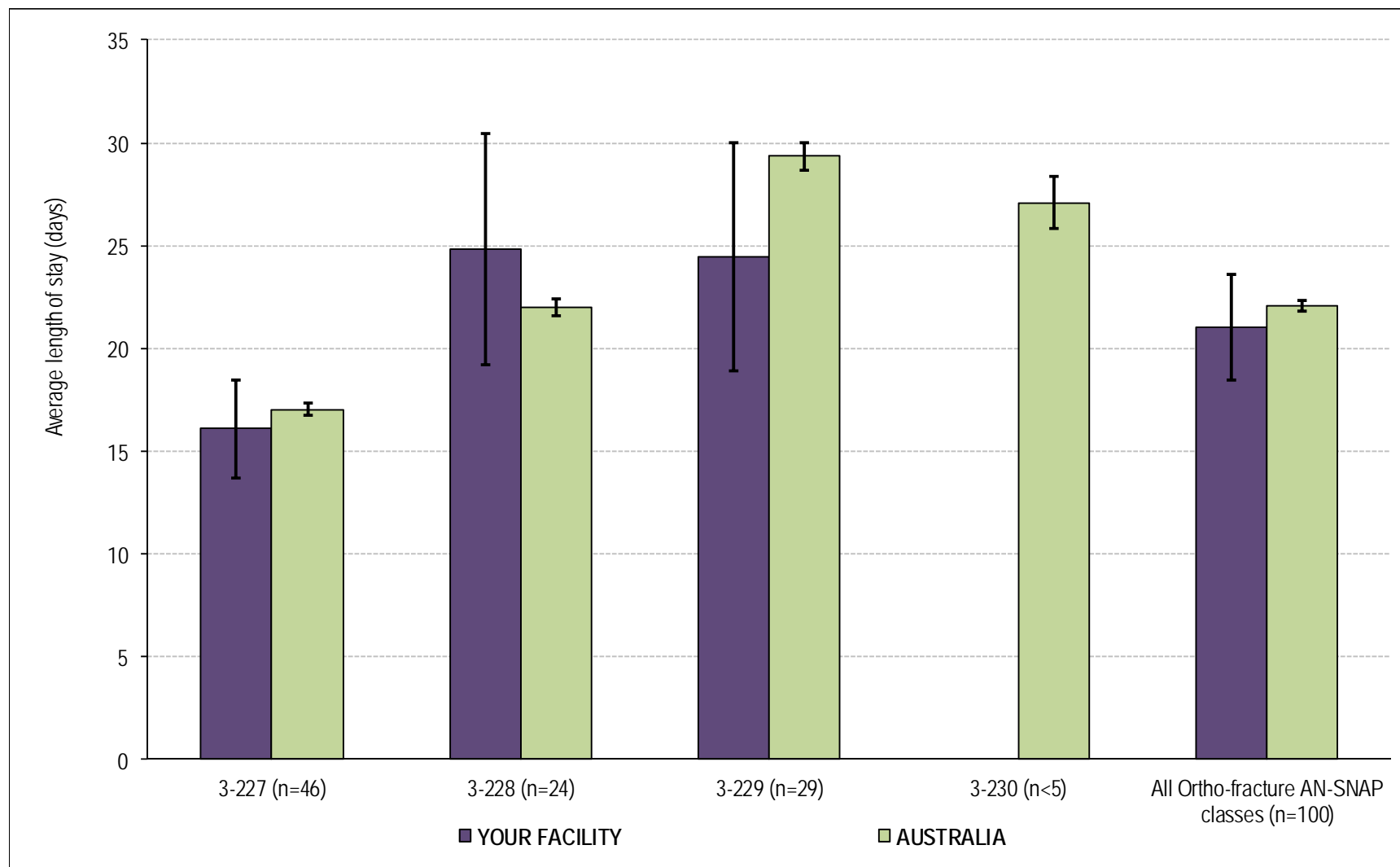
NOTE: Includes only completed episodes with valid LOS

Casemix-adjusted relative mean LOS by impairment



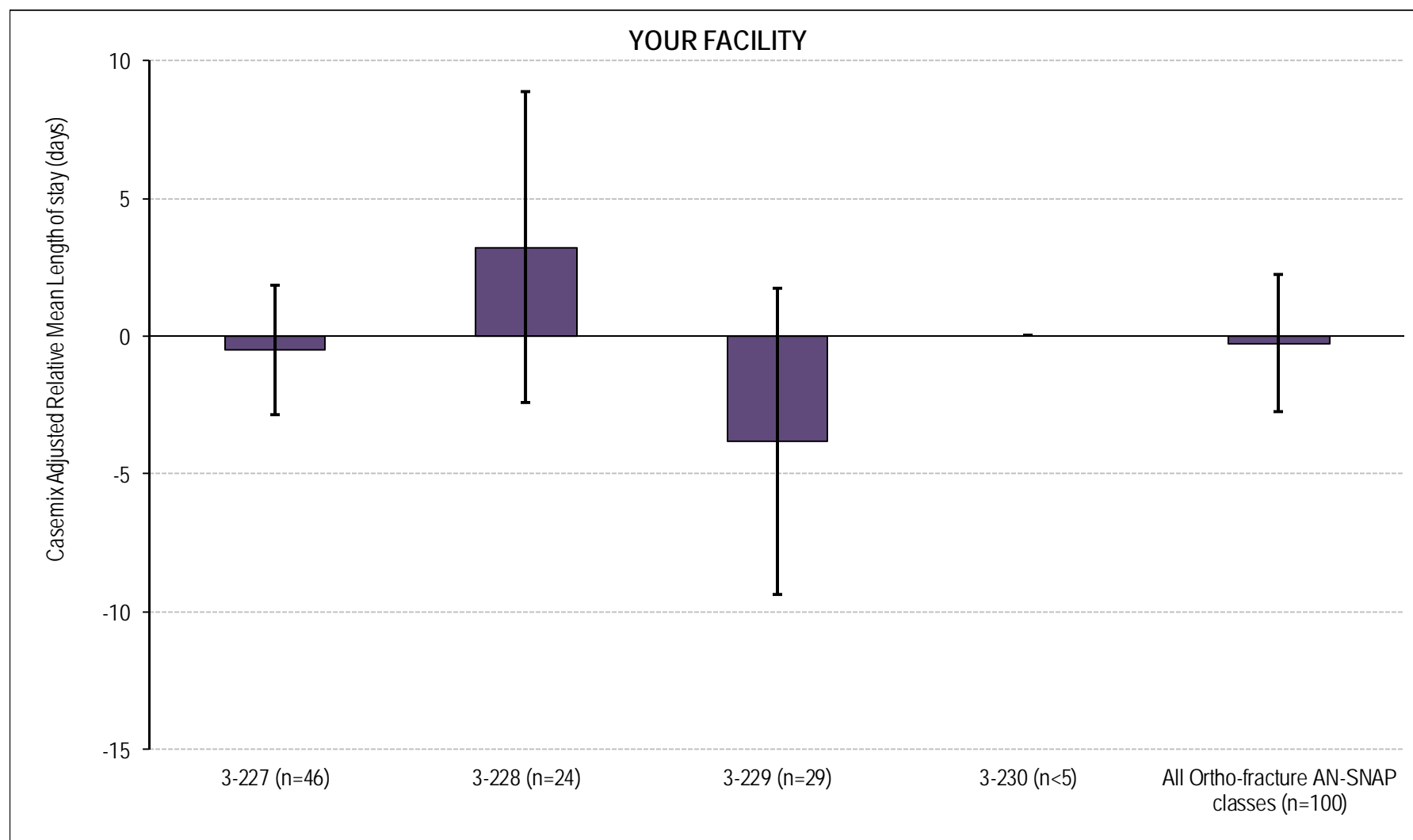
NOTE: Includes only completed episodes with valid LOS

Average LOS by AN-SNAP class



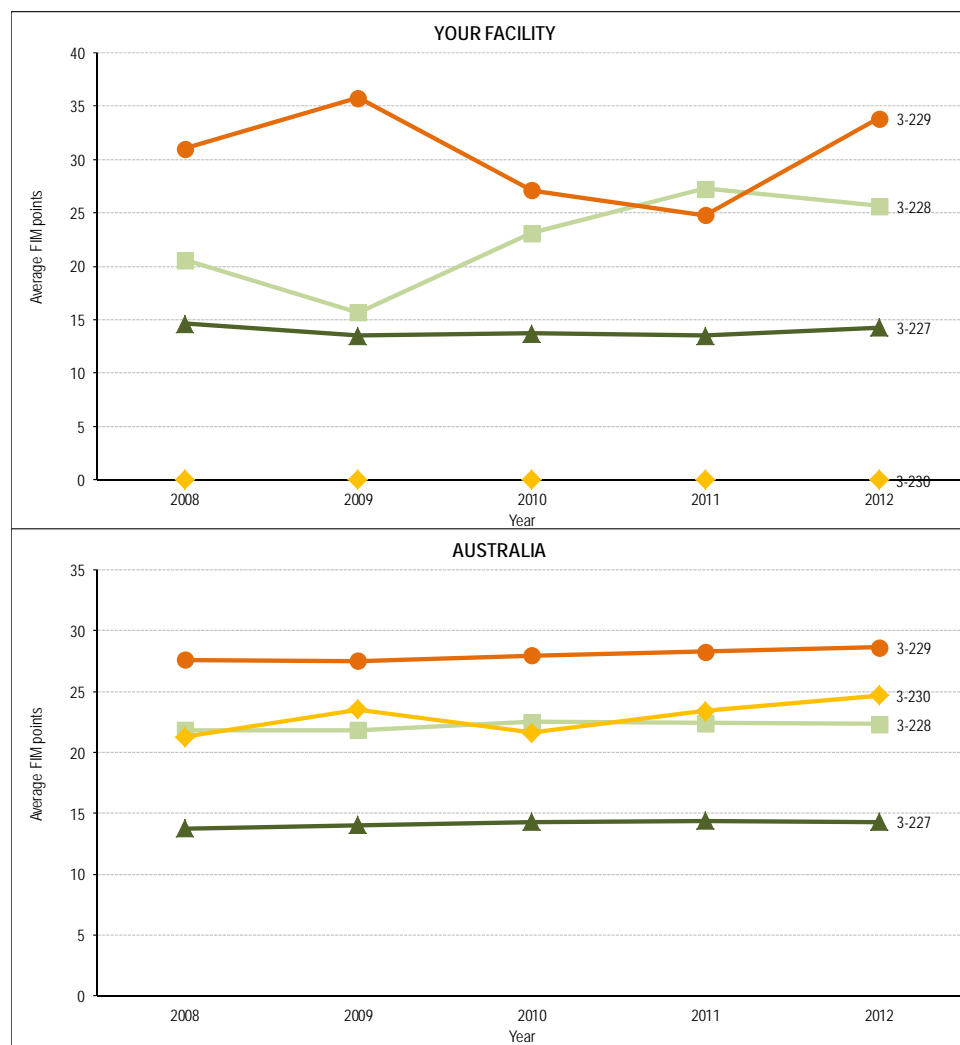
NOTE: Includes only completed episodes with valid LOS

Casemix-adjusted relative mean LOS by AN-SNAP class



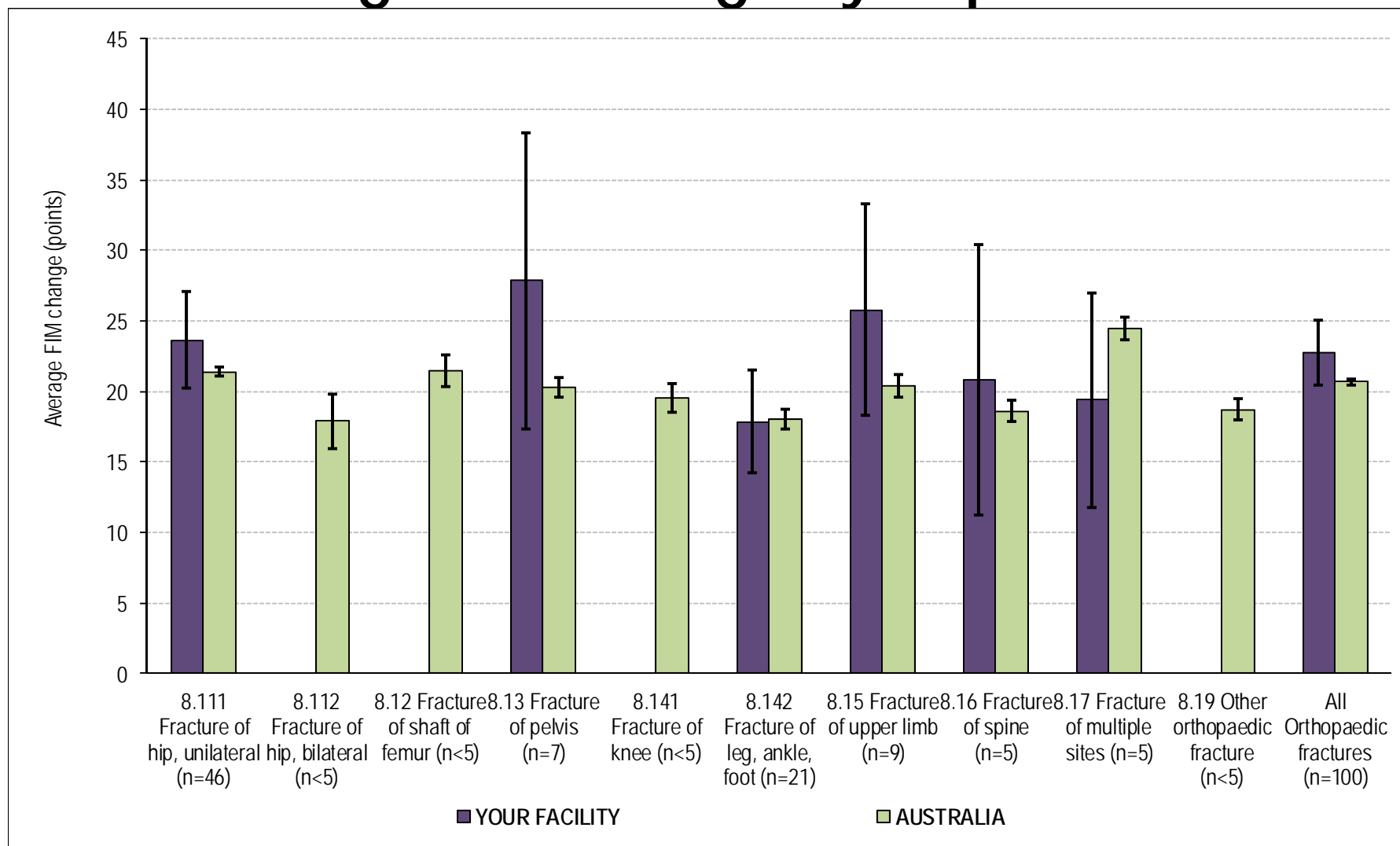
NOTE: Includes only completed episodes with valid LOS

Average FIM change by AN-SNAP class over time



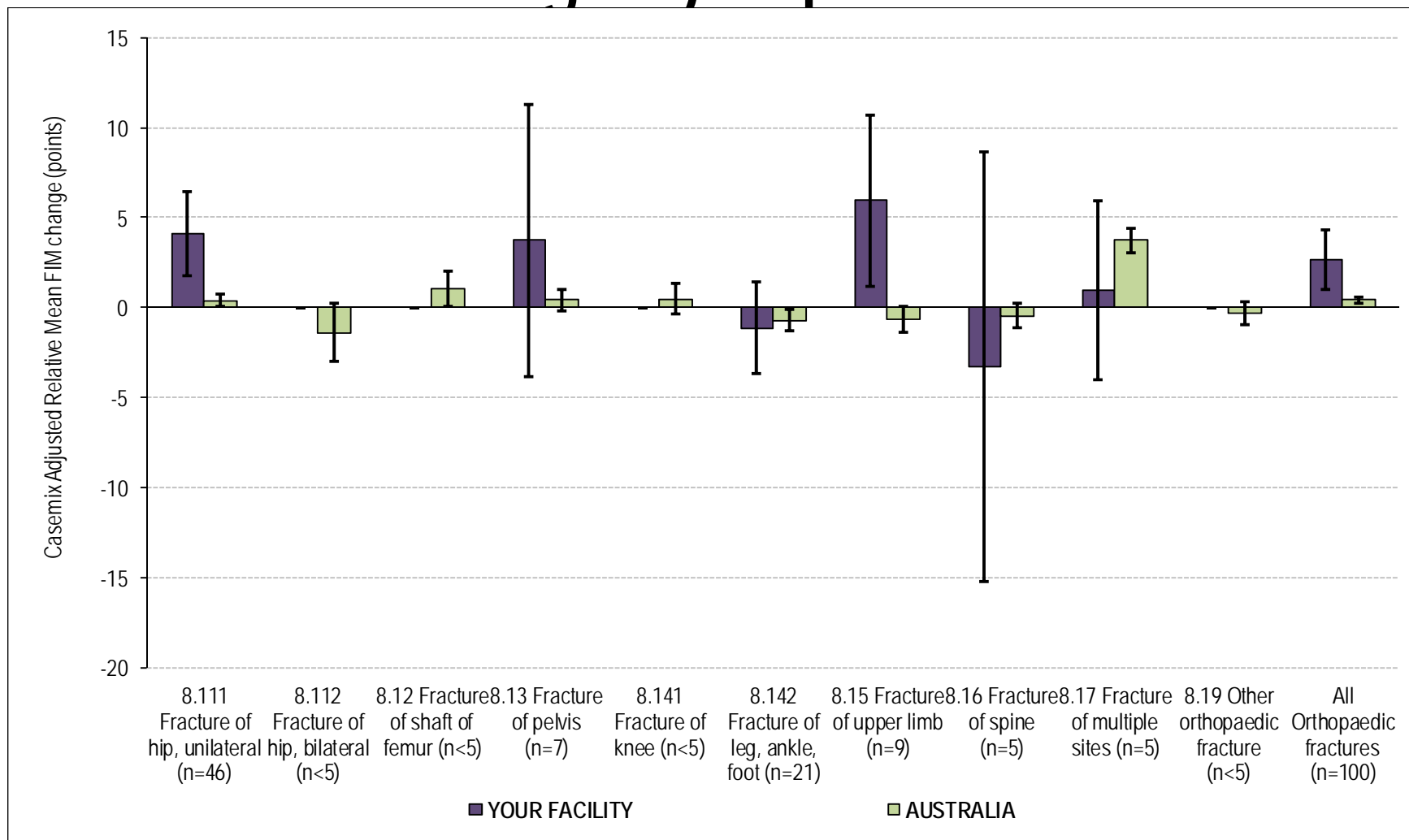
NOTE: Includes only completed episodes with valid FIM scores; where n<5 average FIM change will be zero

Average FIM change by impairment



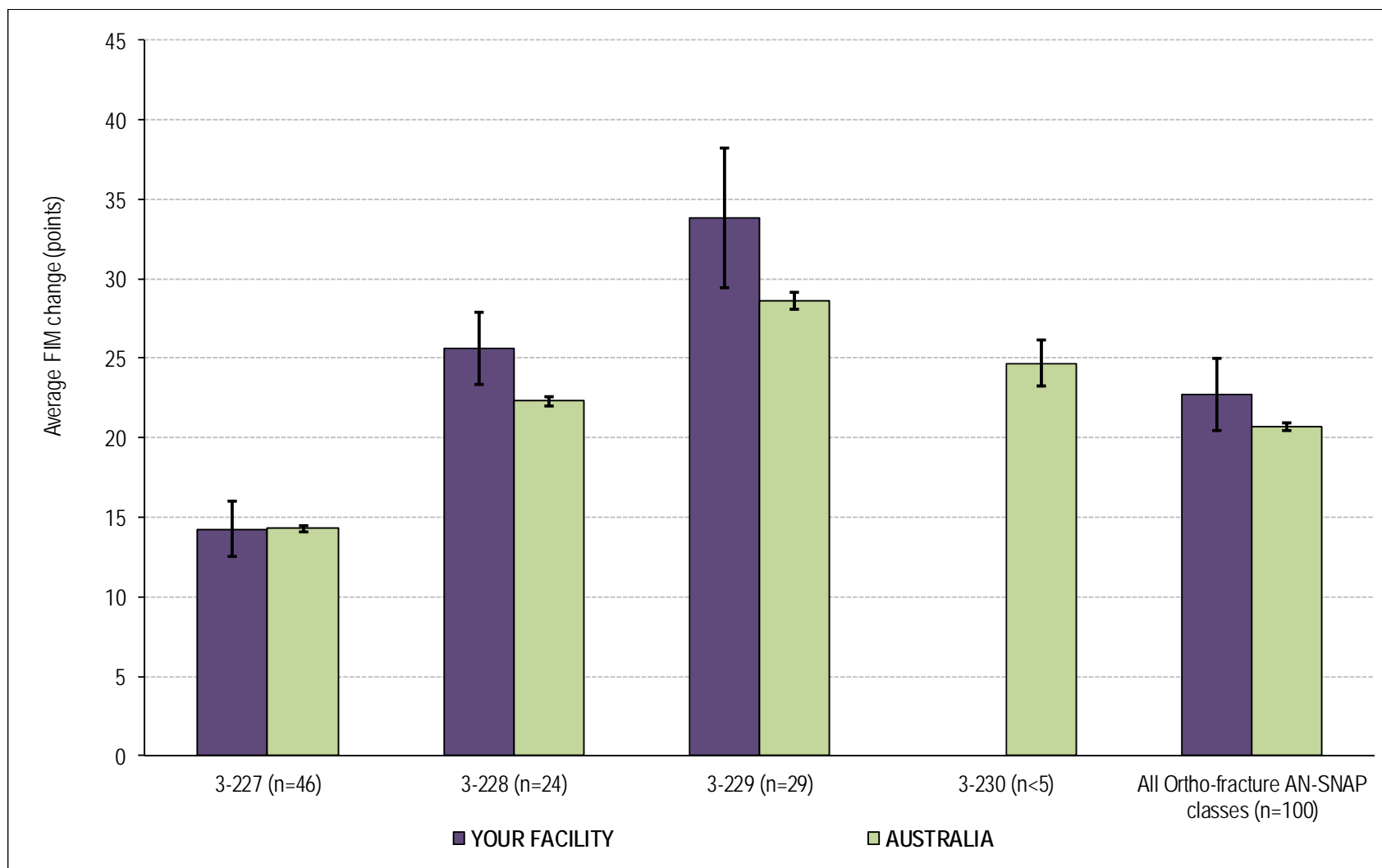
NOTE: Includes only completed episodes with valid FIM scores

Casemix-adjusted relative mean FIM change by impairment



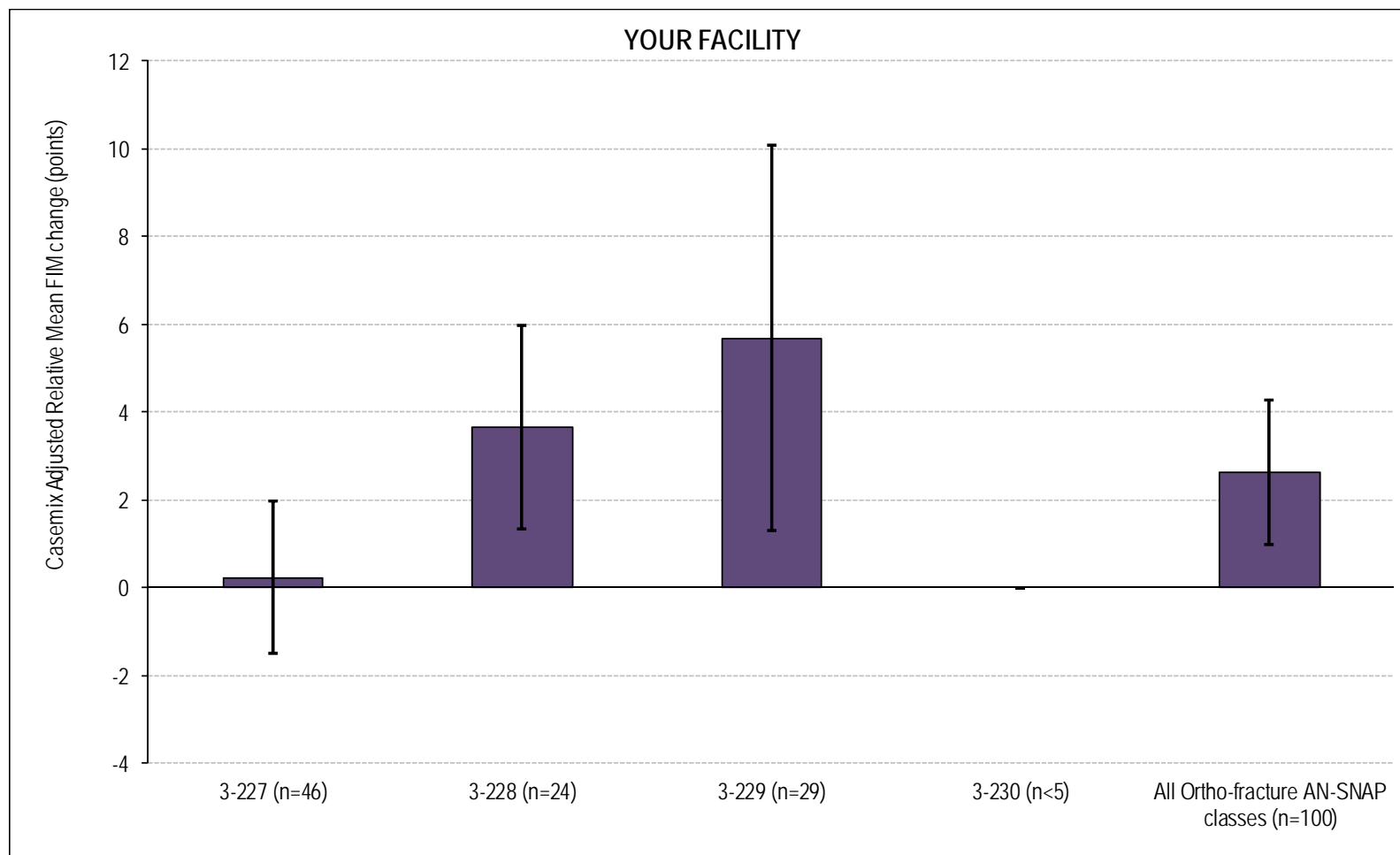
NOTE: Includes only completed episodes with valid FIM scores

Average FIM change by AN-SNAP class



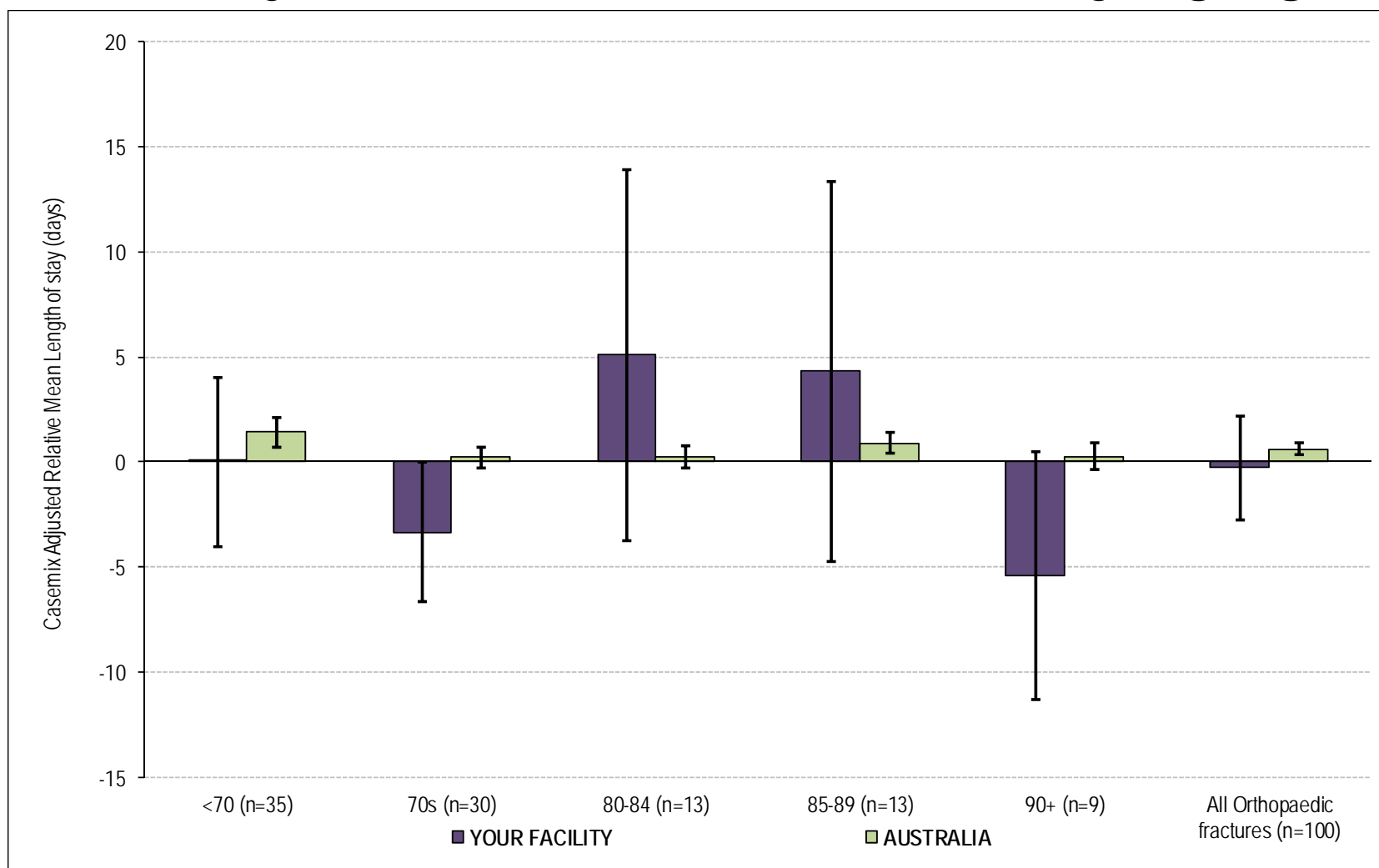
NOTE: Includes only completed episodes with valid FIM scores

Casemix-adjusted relative mean FIM change by AN-SNAP class



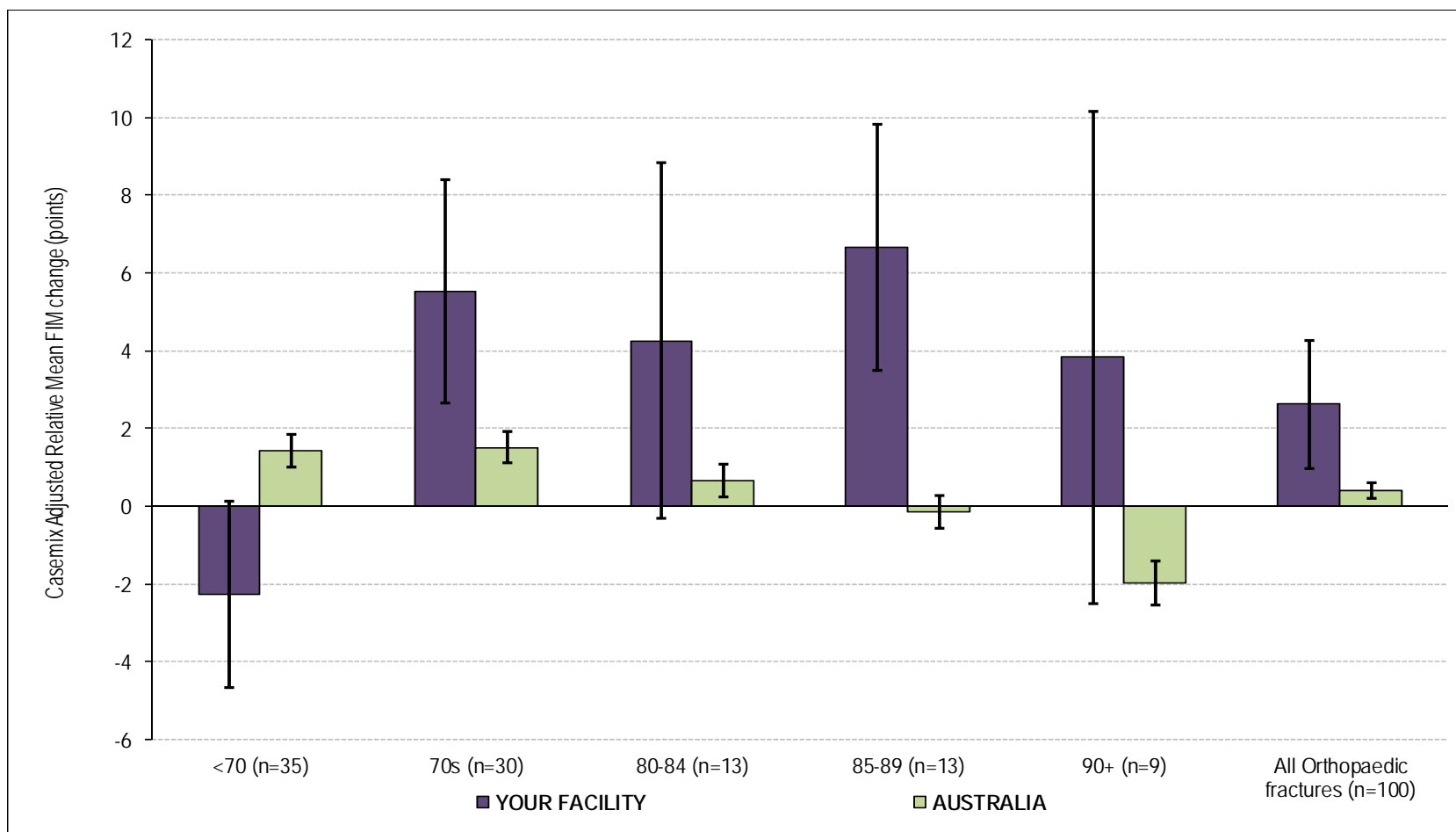
NOTE: Includes only completed episodes with valid FIM scores

Casemix-adjusted relative mean LOS by age group*



NOTE: Includes only completed episodes with valid LOS and age
*Approximately 20% national population per age group

Casemix-adjusted relative mean FIM change by age group*



NOTE: Includes only completed episodes with valid FIM scores and age

* Approximately 20% national population per age group

Average and casemix-adjusted relative mean length of stay and FIM change by age group*

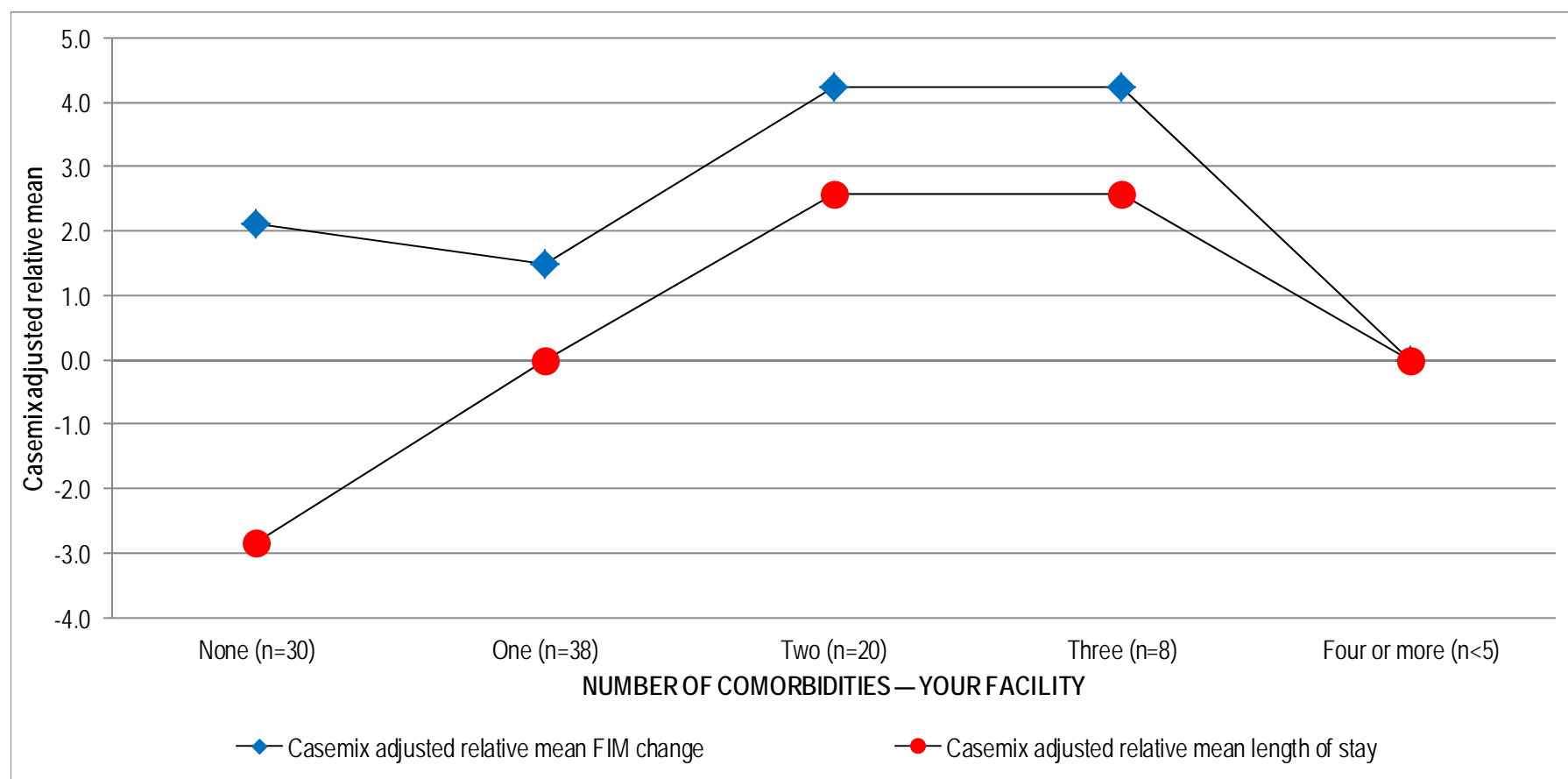
Age group	YOUR FACILITY		AUSTRALIA	
	LOS (95%CI)	FIM change (95%CI)	LOS (95%CI)	FIM change (95%CI)
<70	20.3 (16.3—24.4)	16.5 (13.8—19.2)	21.7 (21.0—22.5)	20.3 (19.8—20.8)
70s	18.9 (15.5—22.3)	26.9 (22.4—31.3)	21.1 (20.6—21.6)	21.1 (20.6—21.6)
80-84	25.5 (15.5—35.6)	23.4 (16.8—30.0)	21.6 (21.0—22.2)	20.8 (20.4—21.3)
85-89	26.6 (17.2—36.0)	28.3 (23.2—33.4)	23.0 (22.5—23.5)	20.9 (20.5—21.4)
90+	16.2 (10.1—22.3)	24.3 (15.3—33.4)	23.1 (22.5—23.8)	20.0 (19.4—20.6)
All Orthopaedic fractures	21.0 (18.4—23.6)	22.8 (20.5—25.0)	22.1 (21.8—22.3)	20.7 (20.5—20.9)

Age group	YOUR FACILITY		AUSTRALIA	
	CARMi LOS (95%CI)	CARMi FIM change (95%CI)	CARMi LOS (95%CI)	CARMi FIM change (95%CI)
<70	0.0 (-4.0—4.0)	-2.3 (-4.7—0.1)	1.4 (0.7—2.1)	1.4 (1.0—1.8)
70s	-3.3 (-6.6—0.0)	5.5 (2.7—8.4)	0.2 (-0.3—0.7)	1.5 (1.1—1.9)
80-84	5.1 (-3.8—13.9)	4.3 (-0.3—8.8)	0.2 (-0.3—0.8)	0.7 (0.2—1.1)
85-89	4.3 (-4.7—13.4)	6.7 (3.5—9.8)	0.9 (0.4—1.4)	-0.1 (-0.6—0.3)
90+	-5.4 (-11.3—0.5)	3.8 (-2.5—10.2)	0.3 (-0.4—0.9)	-2.0 (-2.6—1.4)
All Orthopaedic fractures	-0.3 (-2.7—2.2)	2.6 (1.0—4.3)	0.6 (0.4—0.9)	0.4 (0.2—0.6)

NOTE: Includes only completed episodes with valid FIM scores and LOS and age

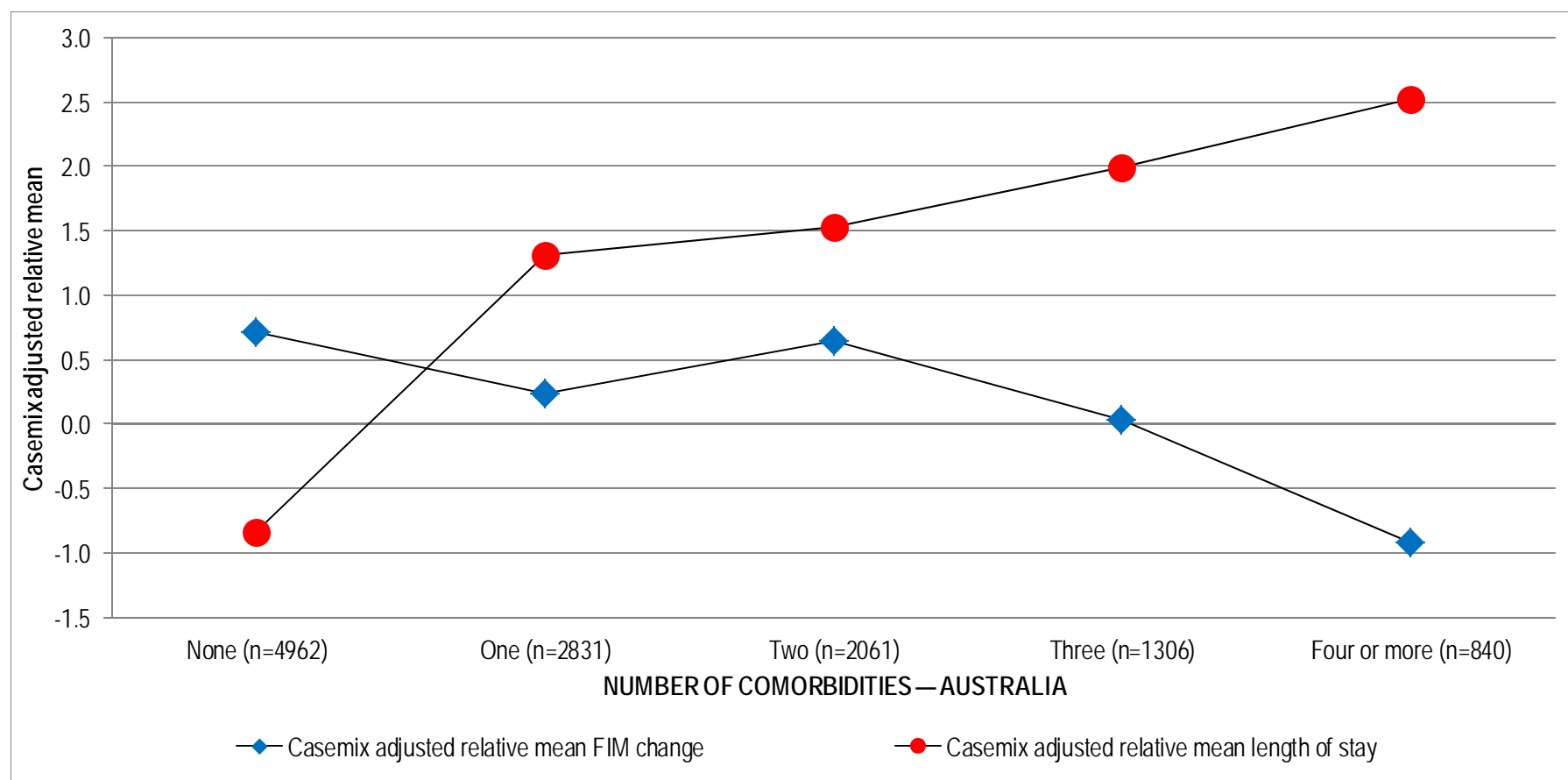
*Approximately 20% national population per age group

Casemix-adjusted relative mean LOS and FIM change by number of comorbidities – YOUR FACILITY



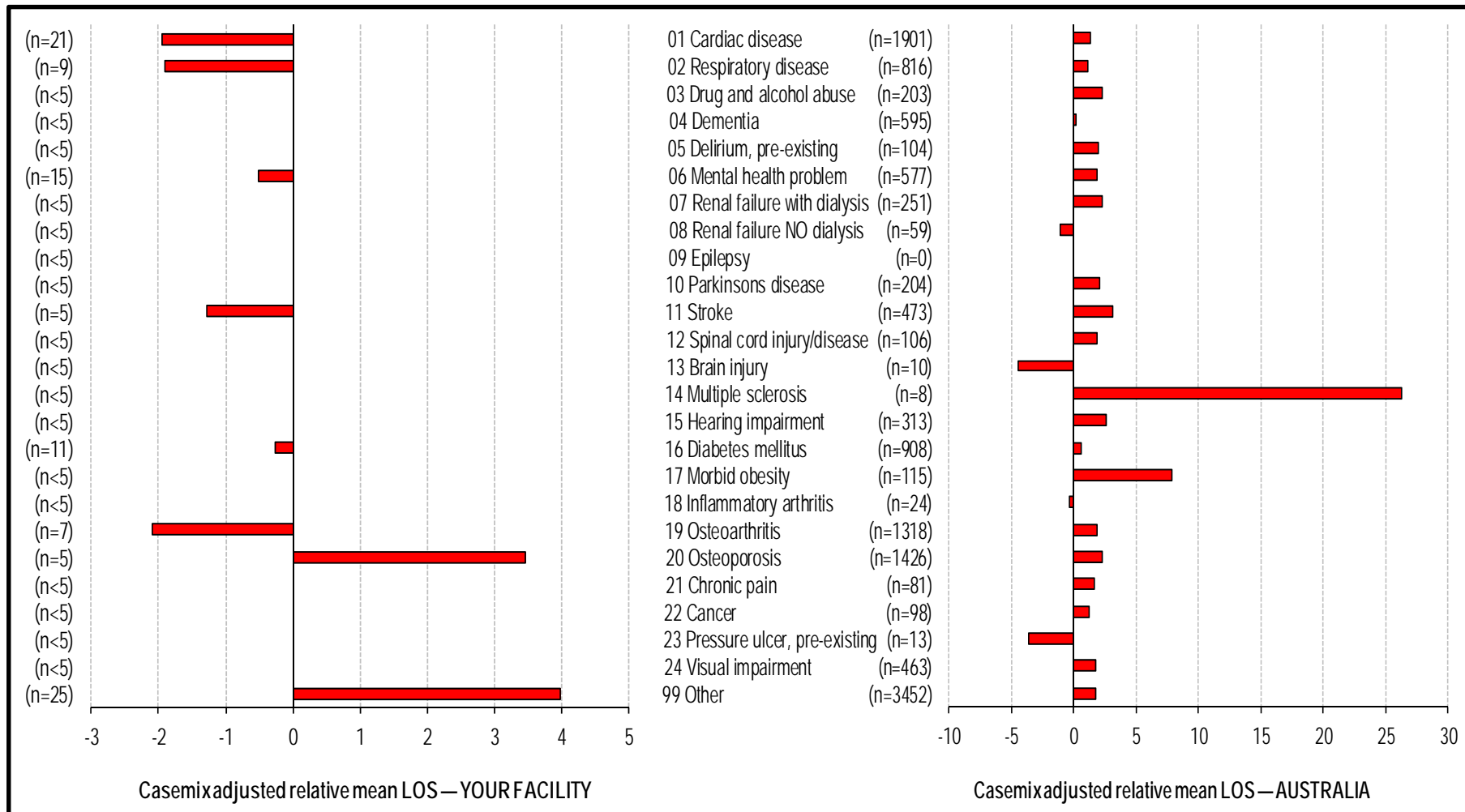
NOTE: Includes only completed episodes with valid FIM scores and LOS; where n<5 the casemix-adjusted relative mean will be zero

Casemix-adjusted relative mean LOS and FIM change by number of comorbidities – NATIONAL



NOTE: Includes only completed episodes with valid FIM scores and LOS; where n<5 the casemix-adjusted relative mean will be zero

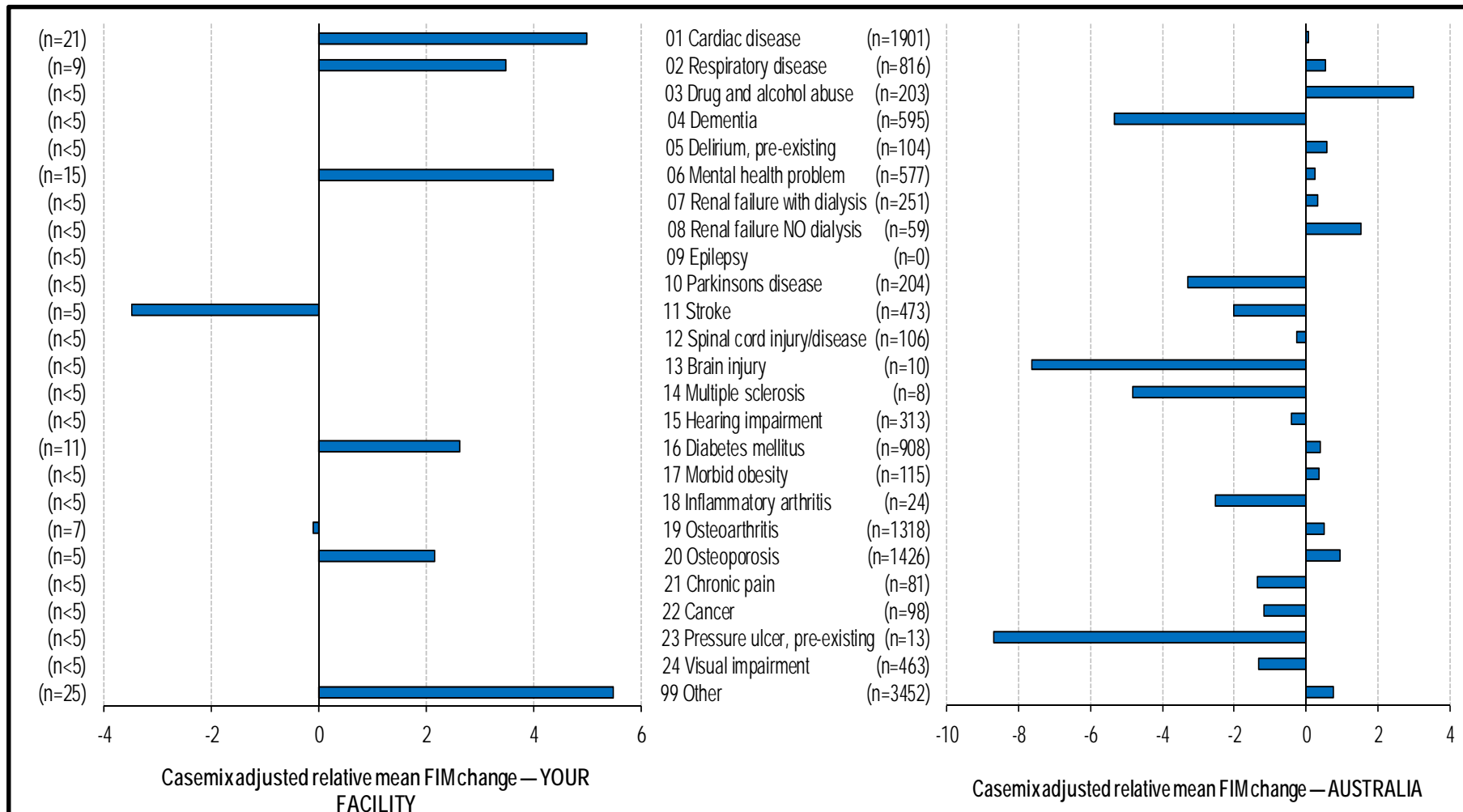
Casemix-adjusted relative mean LOS by type of comorbidity



* No data included where number of episodes <5

NOTE: Includes only completed episodes with valid LOS

Casemix-adjusted relative mean FIM change by type of comorbidity

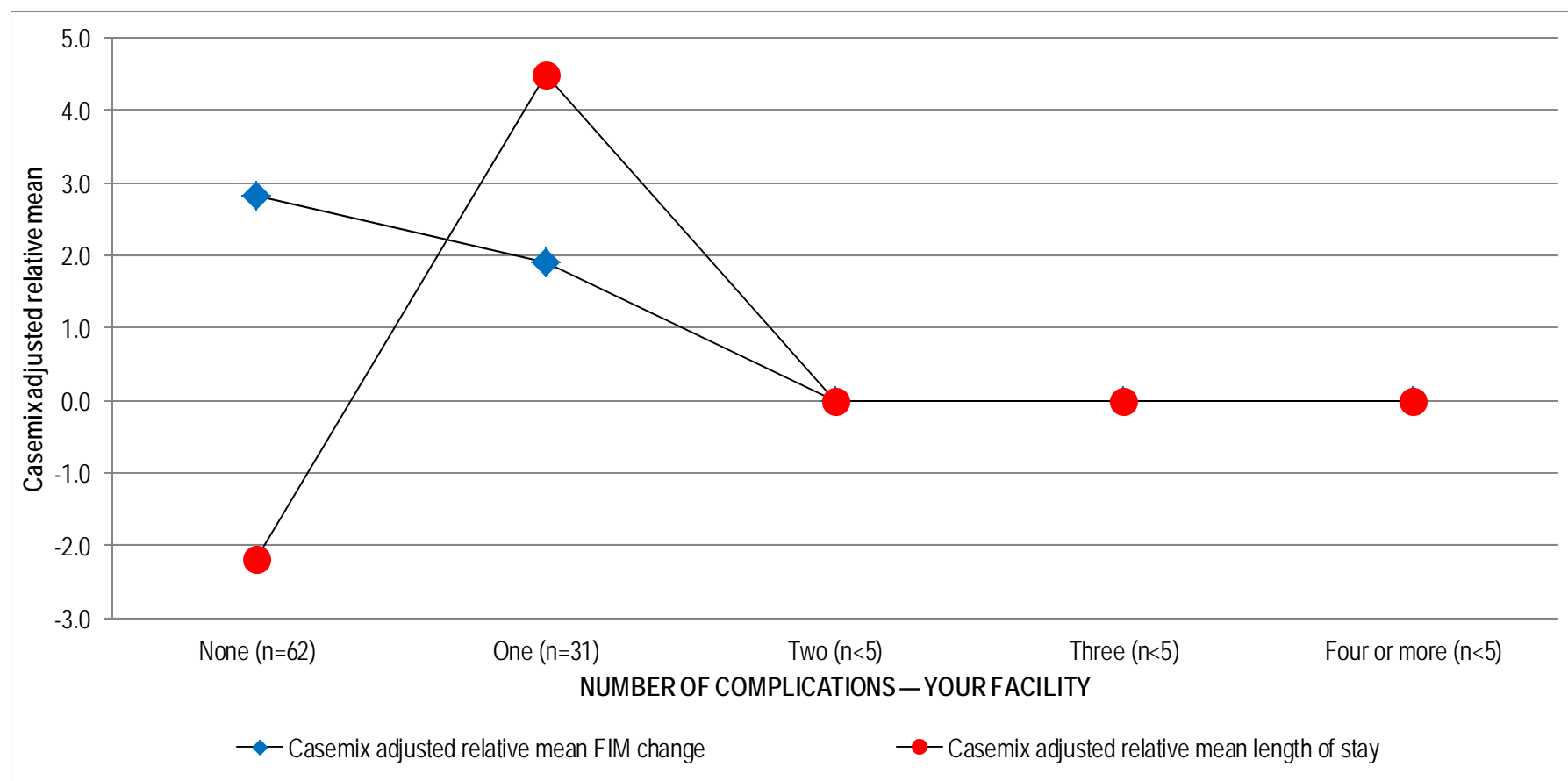


* No data included where number of episodes <5

NOTE: Includes only completed episodes with valid FIM scores

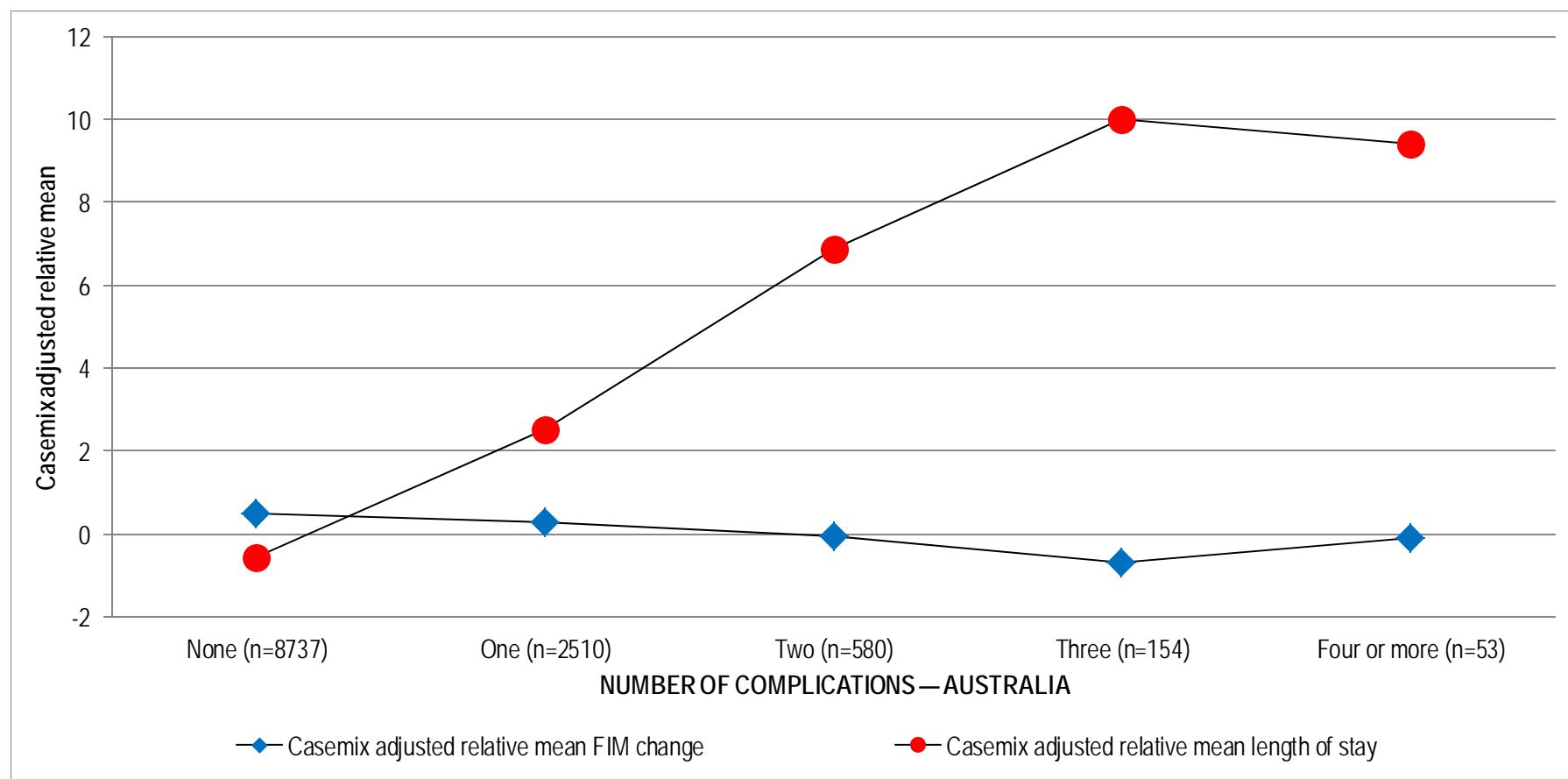
AROC Impairment Specific Report on Orthopaedic Fractures (Inpatient - pathway 3) — Anywhere Hospital — Jan-Dec 2012

Casemix-adjusted relative mean LOS and FIM change by number of complications – YOUR FACILITY



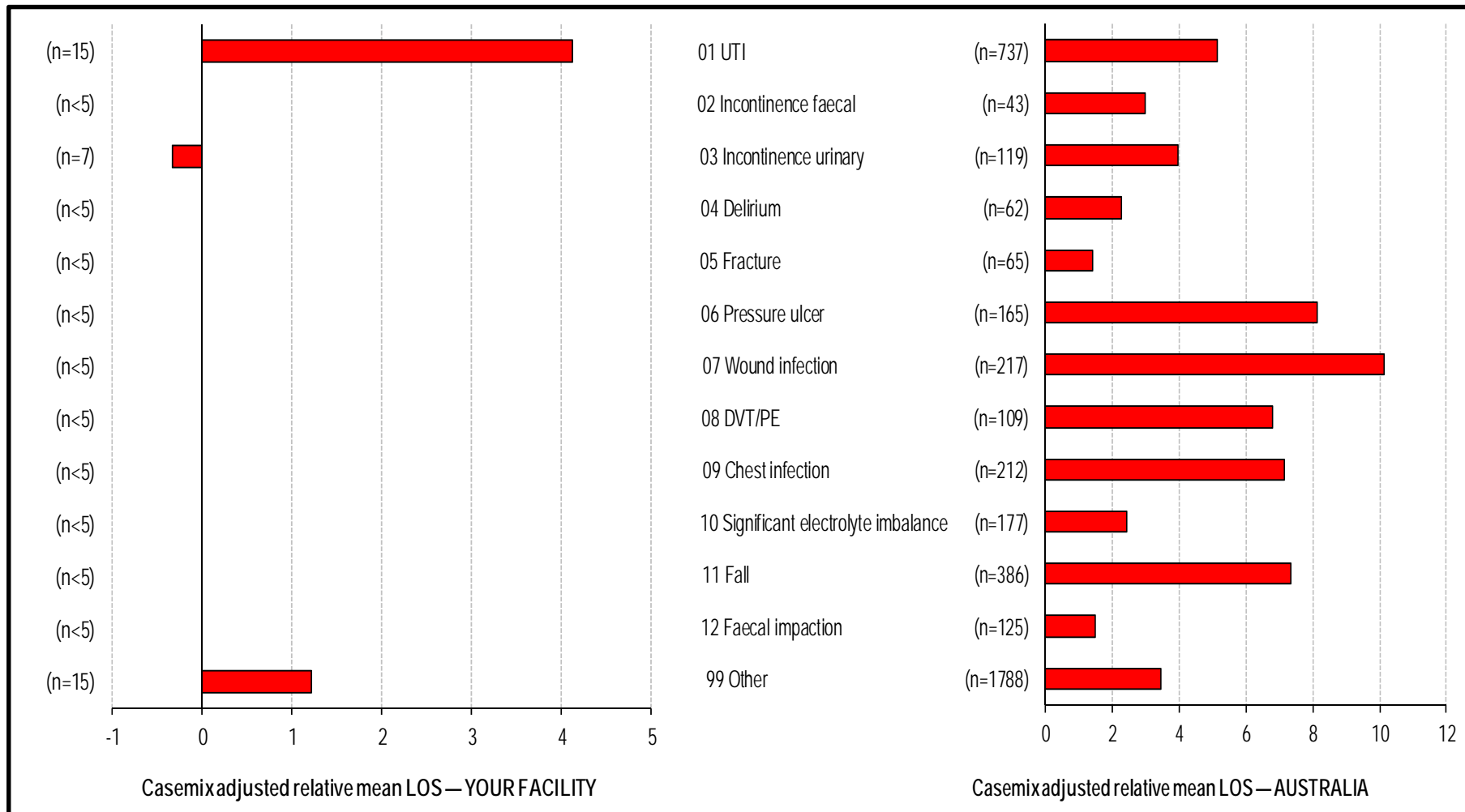
NOTE: Includes only completed episodes with valid FIM scores and LOS; where n<5 the casemix-adjusted relative mean will be zero

Casemix-adjusted relative mean LOS and FIM change by number of complications – NATIONAL



NOTE: Includes only completed episodes with valid FIM scores and LOS; where n<5 the casemix-adjusted relative mean will be zero

Casemix-adjusted relative mean length of stay by type of complication



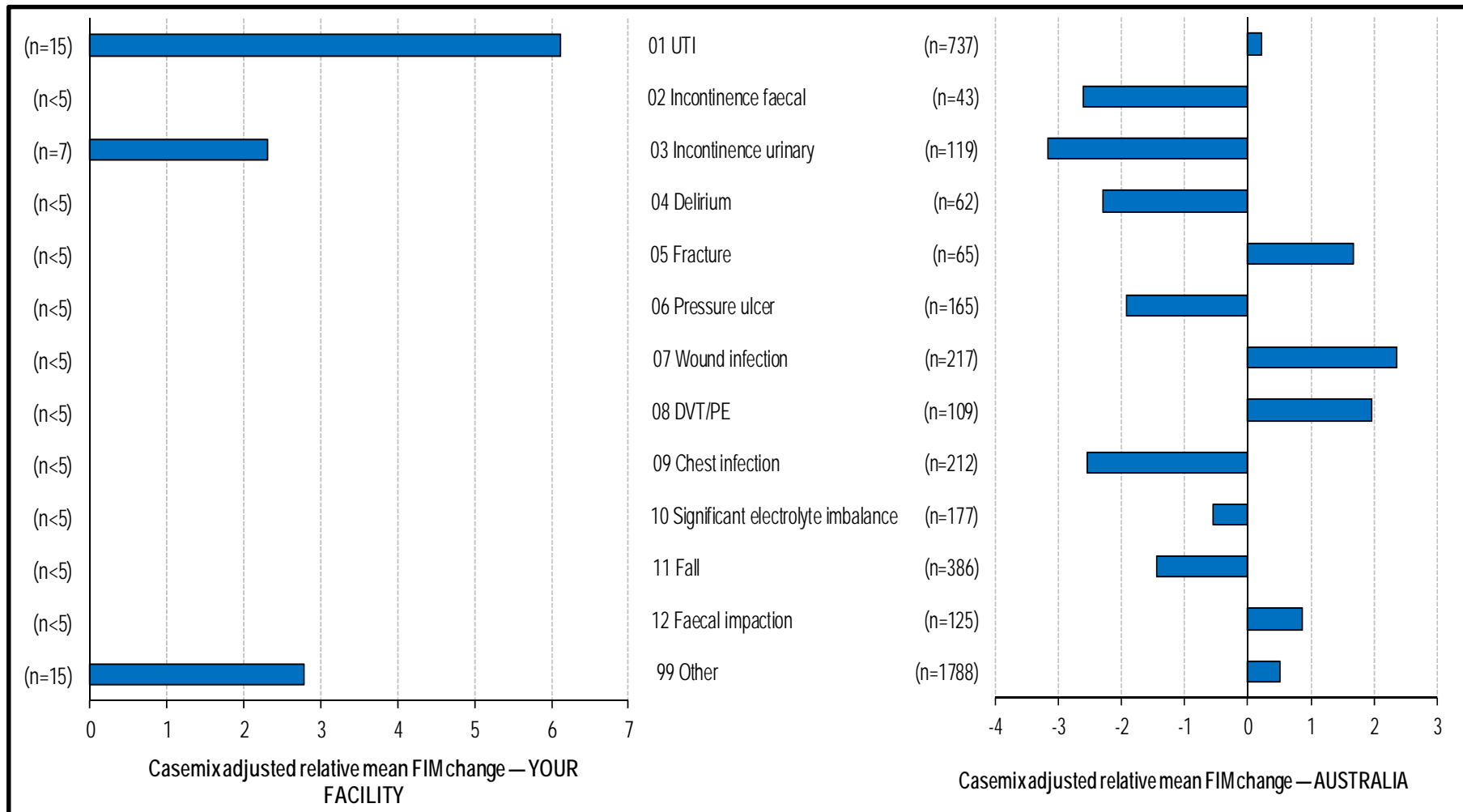
* No data included where number of episodes <5

NOTE: Includes only completed episodes with valid LOS

AROC Impairment Specific Report on Orthopaedic Fractures (Inpatient - pathway 3) — Anywhere Hospital — Jan-Dec 2012

Casemix-adjusted relative mean FIM change by type of complication

aroc
Australasian Rehabilitation Outcomes Centre



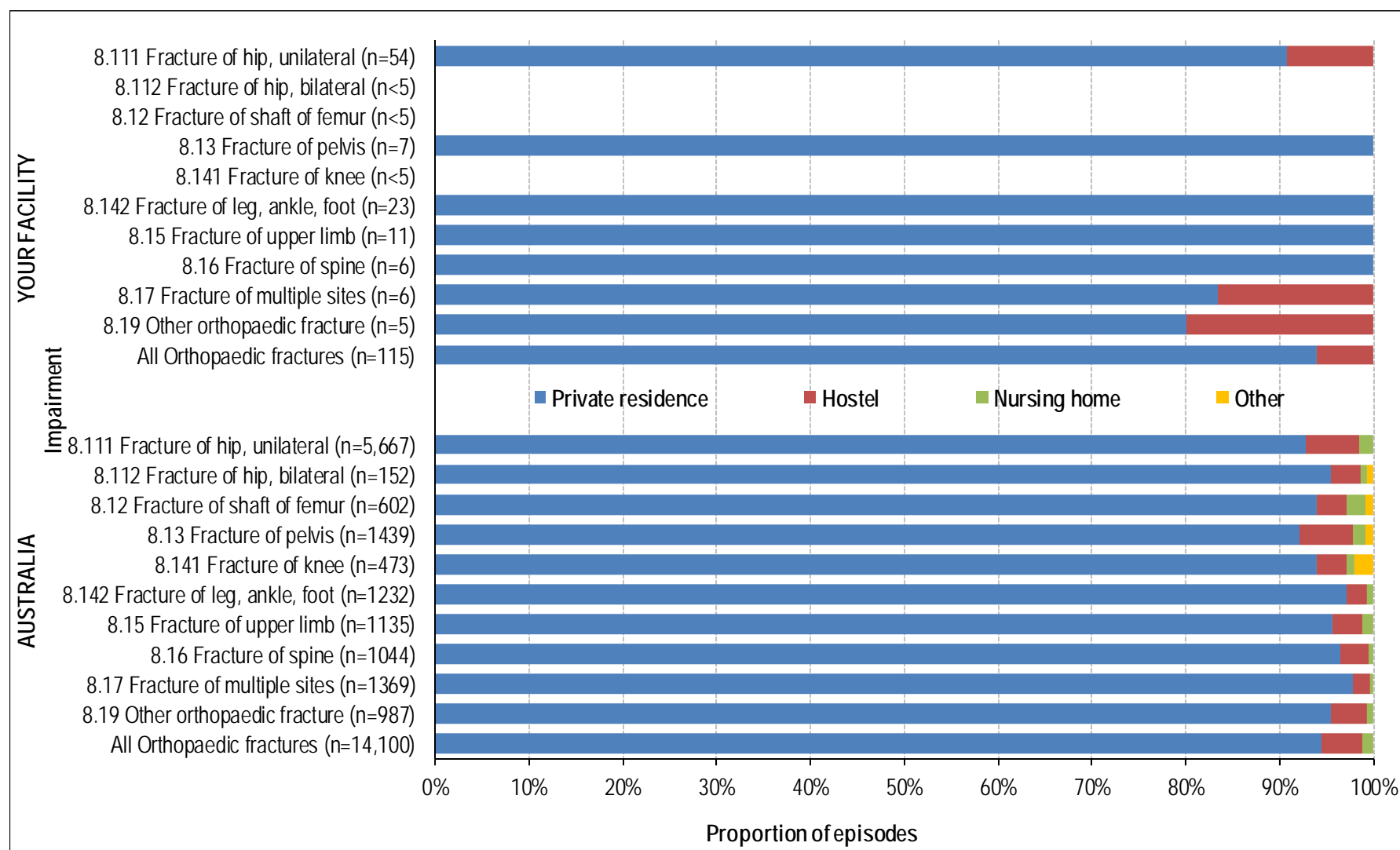
* No data included where number of episodes <5

NOTE: Includes only completed episodes with valid FIM scores

AROC Impairment Specific Report on Orthopaedic Fractures (Inpatient - pathway 3) — Anywhere Hospital — Jan-Dec 2012

Explanatory data

Type of accommodation prior to impairment

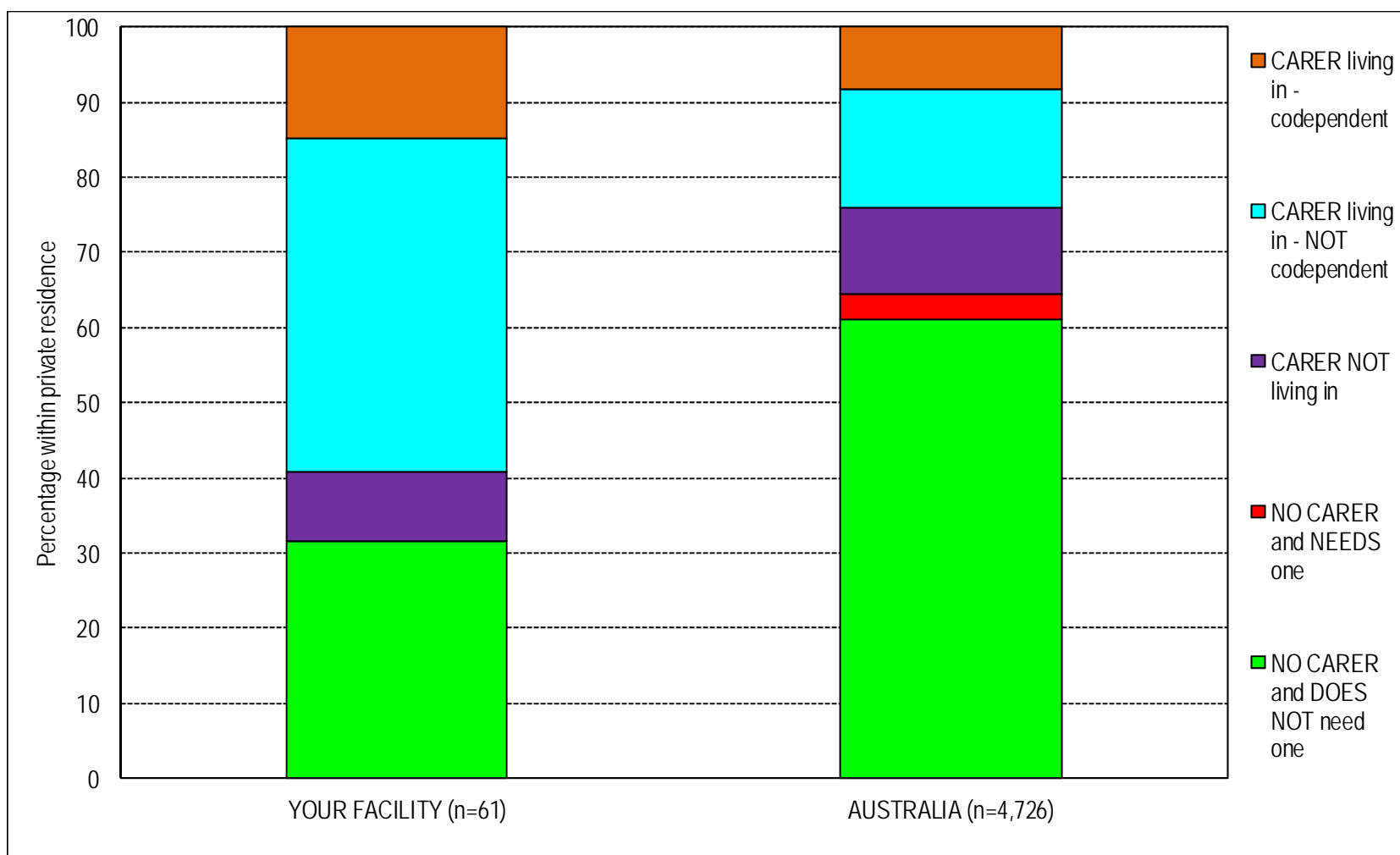


Type of accommodation prior to impairment

Impairment	YOUR FACILITY — N (%)					All episodes
	Private residence	Hostel	Nursing home	Other	Unknown	
8.111 Fracture of hip, unilateral	49 (90.7%)	5 (9.3%)	0 (0.0%)	0 (0.0%)	0	54 (100.0%)
8.112 Fracture of hip, bilateral	0 —	0 —	0 —	0 —	0	0 —
8.12 Fracture of shaft of femur	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	1 (100.0%)
8.13 Fracture of pelvis	7 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	7 (100.0%)
8.141 Fracture of knee	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	2 (100.0%)
8.142 Fracture of leg, ankle, foot	23 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	23 (100.0%)
8.15 Fracture of upper limb	11 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	11 (100.0%)
8.16 Fracture of spine	6 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	6 (100.0%)
8.17 Fracture of multiple sites	5 (83.3%)	1 (16.7%)	0 (0.0%)	0 (0.0%)	0	6 (100.0%)
8.19 Other orthopaedic fracture	4 (80.0%)	1 (20.0%)	0 (0.0%)	0 (0.0%)	0	5 (100.0%)
All Orthopaedic fractures	108 (93.9%)	7 (6.1%)	0 (0.0%)	0 (0.0%)	0	115 (100.0%)

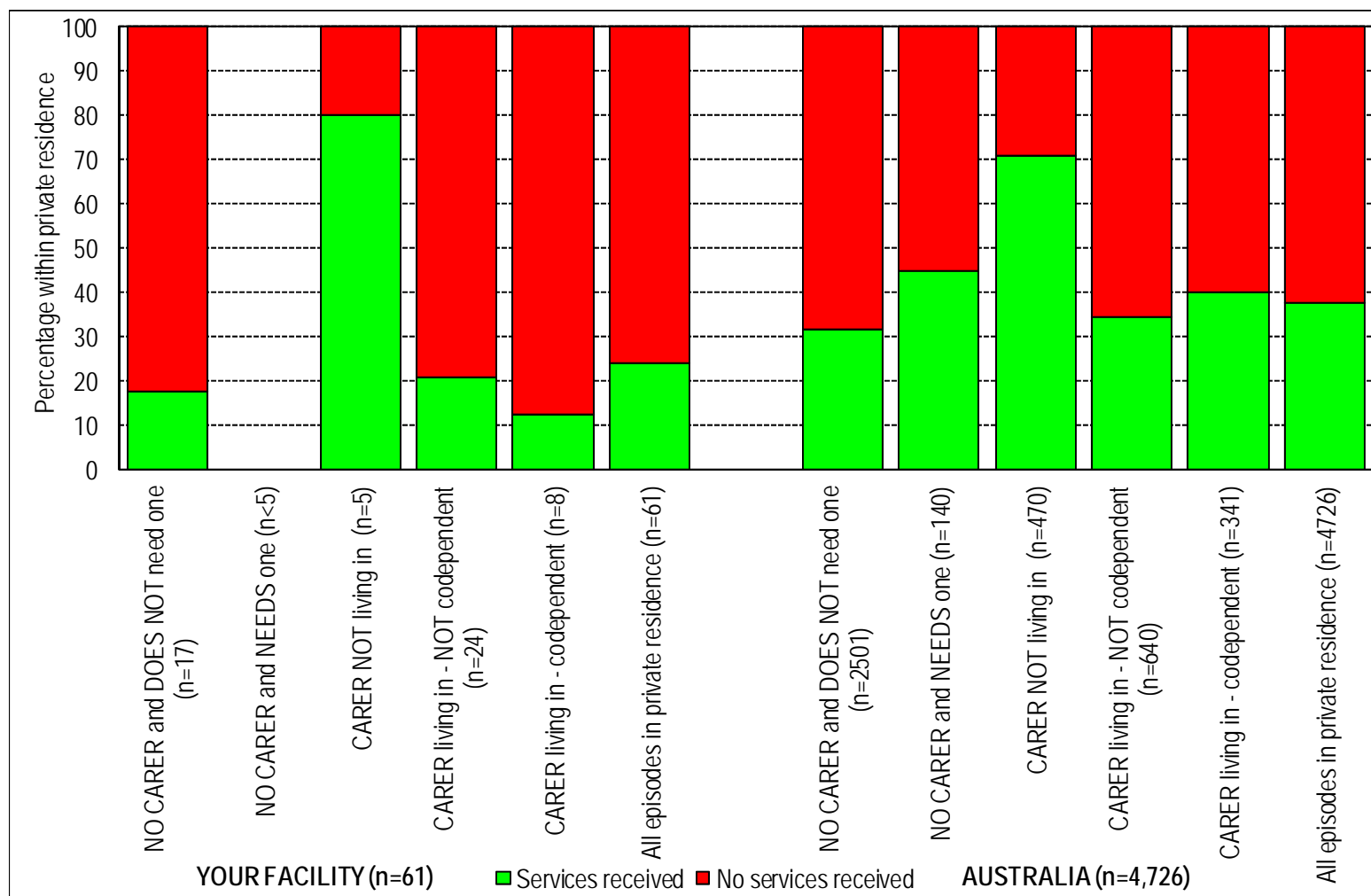
Impairment	AUSTRALIA — N (%)					All episodes
	Private residence	Hostel	Nursing home	Other	Unknown	
8.111 Fracture of hip, unilateral	5,174 (91.5%)	324 (5.7%)	84 (1.5%)	74 (1.3%)	11	5,667 (100.0%)
8.112 Fracture of hip, bilateral	145 (95.4%)	5 (3.3%)	1 (0.7%)	1 (0.7%)	0	152 (100.0%)
8.12 Fracture of shaft of femur	564 (93.8%)	20 (3.3%)	12 (2.0%)	5 (0.8%)	1	602 (100.0%)
8.13 Fracture of pelvis	1,318 (92.1%)	80 (5.6%)	21 (1.5%)	12 (0.8%)	8	1,439 (100.0%)
8.141 Fracture of knee	443 (93.9%)	15 (3.2%)	4 (0.8%)	10 (2.1%)	1	473 (100.0%)
8.142 Fracture of leg, ankle, foot	1,159 (94.7%)	26 (2.1%)	9 (0.7%)	30 (2.5%)	8	1,232 (100.0%)
8.15 Fracture of upper limb	1,070 (94.5%)	37 (3.3%)	13 (1.1%)	12 (1.1%)	3	1,135 (100.0%)
8.16 Fracture of spine	994 (95.6%)	31 (3.0%)	6 (0.6%)	9 (0.9%)	4	1,044 (100.0%)
8.17 Fracture of multiple sites	1,313 (96.3%)	26 (1.9%)	5 (0.4%)	19 (1.4%)	6	1,369 (100.0%)
8.19 Other orthopaedic fracture	921 (93.6%)	38 (3.9%)	7 (0.7%)	18 (1.8%)	3	987 (100.0%)
All Orthopaedic fractures	13,101 (93.2%)	602 (4.3%)	162 (1.2%)	190 (1.4%)	45	14,100 (100.0%)

Carer status prior to impairment



NOTE: Includes only those episodes coming from private residence and with known carer status

Any services received prior to impairment



NOTE: Includes only those episodes coming from private residence and with known carer status

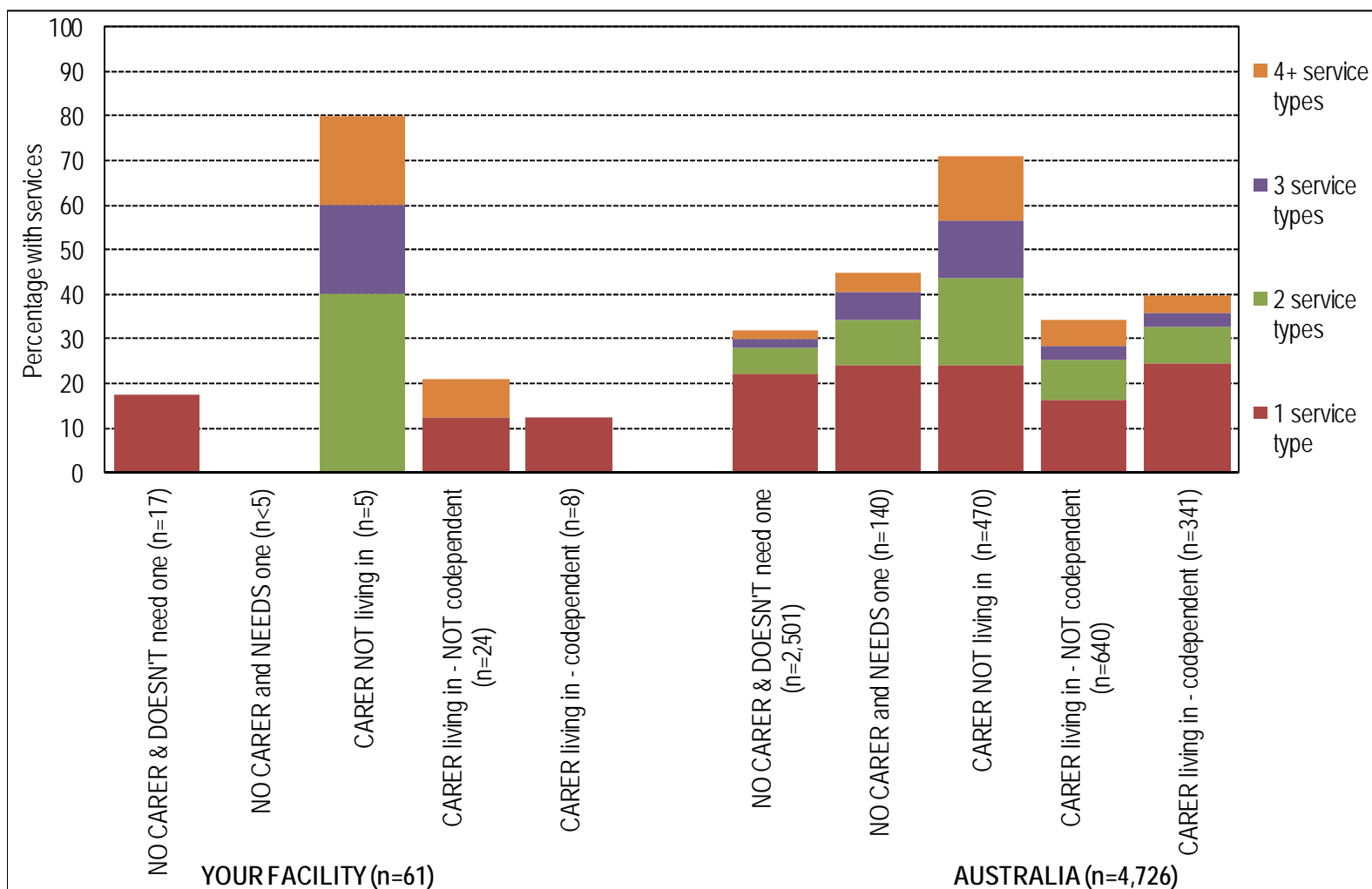
Carer status and any services received prior to impairment

Carer status prior to this impairment	YOUR FACILITY		AUSTRALIA	
	No.	%	No.	%
NO CARER and DOES NOT need one	17	31.5	2,501	61.1
NO CARER and NEEDS one	0	—	140	3.4
CARER NOT living in	5	9.3	470	11.5
CARER living in - NOT codependent	24	44.4	640	15.6
CARER living in - codependent	8	14.8	341	8.3
Missing	7		634	
All episodes in private residence	61	100.0	4,726	100.0

Carer status prior to this impairment	Any services received prior to this impairment?			
	YOUR FACILITY		AUSTRALIA	
	Yes (%)	No (%)	Yes (%)	No (%)
NO CARER and DOES NOT need one	17.6	82.4	31.7	68.3
NO CARER and NEEDS one	—	—	45.0	55.0
CARER NOT living in	80.0	20.0	70.9	29.1
CARER living in - NOT codependent	20.8	79.2	34.4	65.6
CARER living in - codependent	12.5	87.5	39.9	60.1
All episodes in private residence	24.1	75.9	37.8	62.2

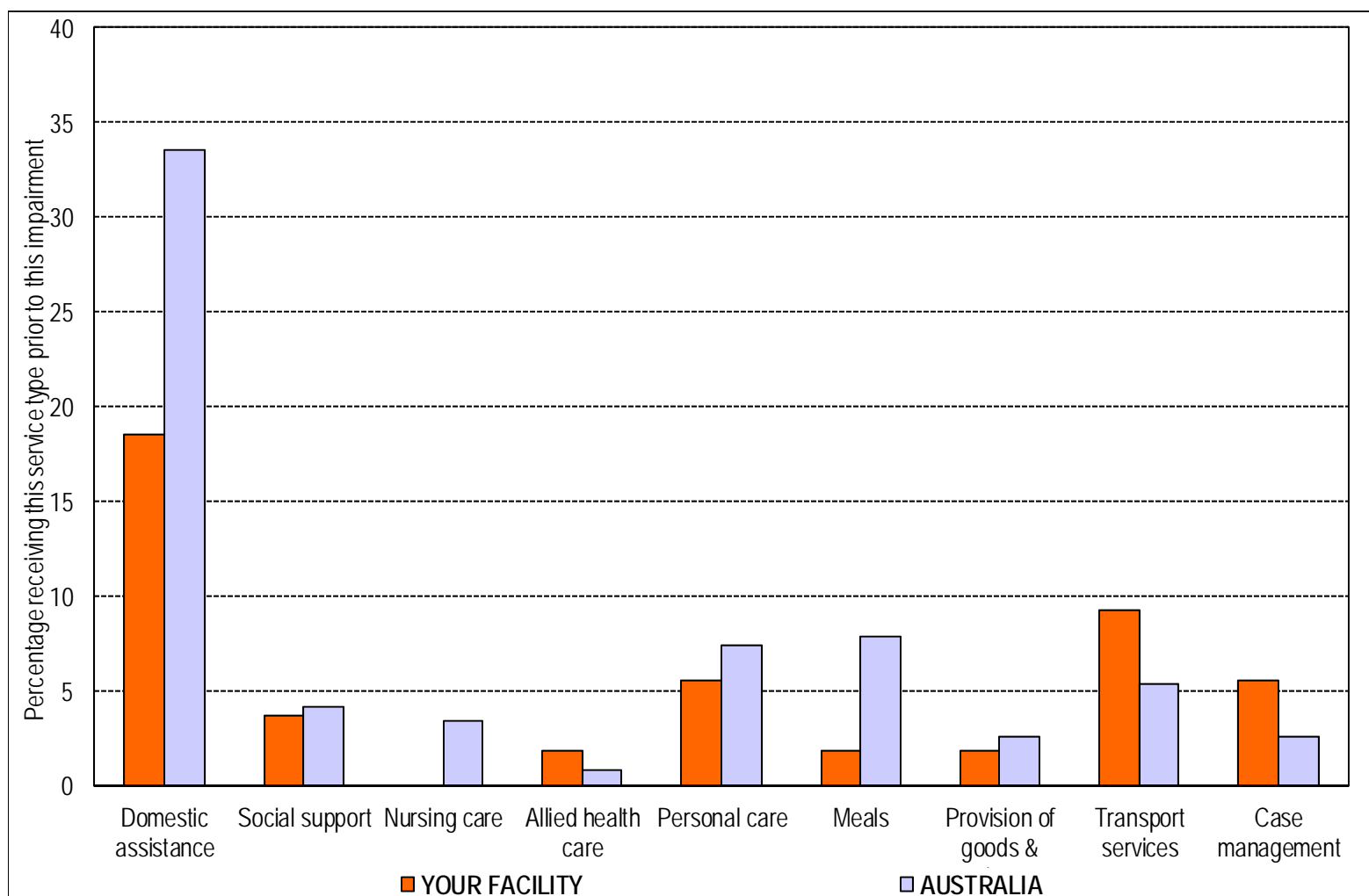
NOTE: Includes only those episodes coming from private residence and with known carer status

Number of services received prior to impairment



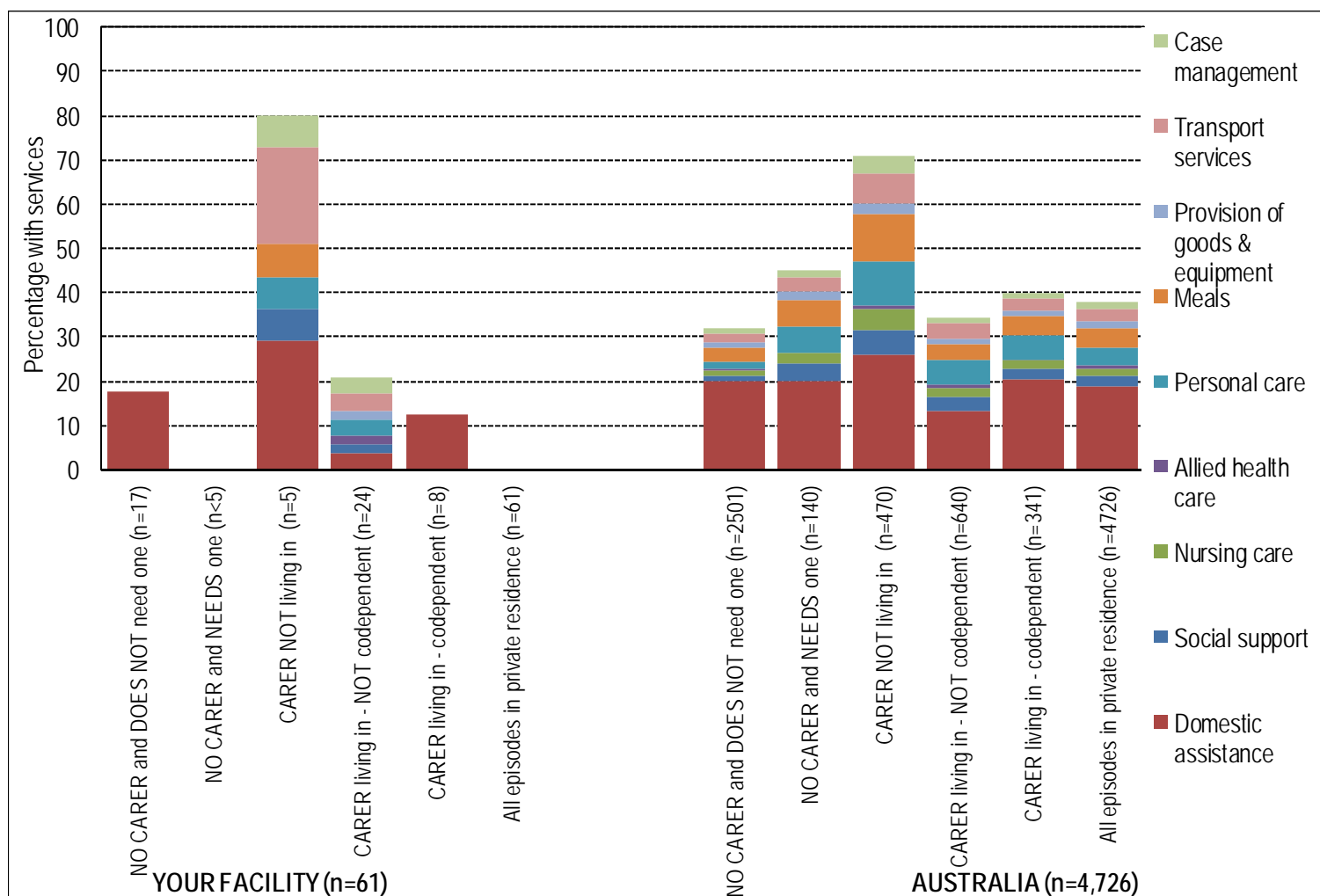
NOTE: Includes only those episodes coming from private residence and with known carer status

Type of services received prior to impairment



NOTE: Includes only those episodes coming from private residence and with known carer status

Type of services received prior to impairment



NOTE: Includes only those episodes coming from private residence and with known carer status

Number and type of services received prior to impairment – YOUR FACILITY

Services received prior to this impairment (NOTE: Accommodation prior is private residence)	Carer status prior to this impairment - YOUR FACILITY					
	NO CARER & DOESN'T need one	NO CARER and NEEDS one	CARER NOT living in	CARER living in - NOT codependent	CARER living in - codependent	All episodes in private residence
Number of episodes in private residence	17	0	5	24	8	
Percent of episodes receiving:						
No services	82.4	—	20.0	79.2	87.5	75.9
1 service type	17.6	—	0.0	12.5	12.5	13.0
2 service types	0.0	—	40.0	0.0	0.0	3.7
3 service types	0.0	—	20.0	0.0	0.0	1.9
4 or more service types	0.0	—	20.0	8.3	0.0	5.6
Service Type received						
Domestic assistance	17.6	—	80.0	8.3	12.5	18.5
Social support	0.0	—	20.0	4.2	0.0	3.7
Nursing care	0.0	—	0.0	0.0	0.0	0.0
Allied health care	0.0	—	0.0	4.2	0.0	1.9
Personal care	0.0	—	20.0	8.3	0.0	5.6
Meals	0.0	—	20.0	0.0	0.0	1.9
Provision of goods & equipment	0.0	—	0.0	4.2	0.0	1.9
Transport services	0.0	—	60.0	8.3	0.0	9.3
Case management	0.0	—	20.0	8.3	0.0	5.6

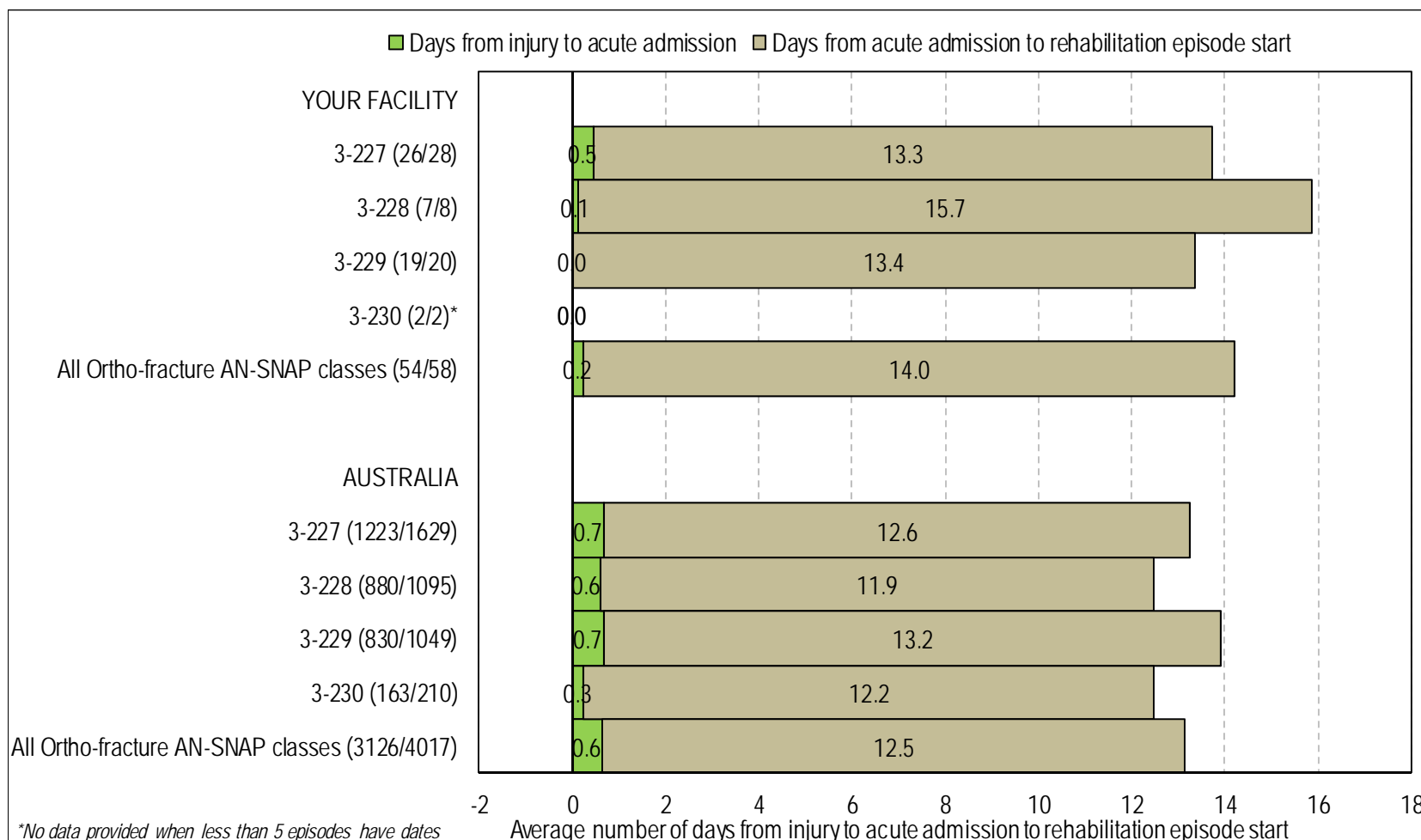
NOTE: Includes only those episodes coming from private residence and with known carer status

Number and type of services received prior to impairment – NATIONAL

Services received prior to this impairment (NOTE: Accommodation prior is private residence)	Carer status prior to this impairment - AUSTRALIA					
	NO CARER & DOESN'T need one	NO CARER and NEEDS one	CARER NOT living in	CARER living in - NOT codependent	CARER living in - codependent	All episodes in private residence
Number of episodes in private residence	2,501	140	470	640	341	
Percent of episodes receiving:						
No services	68.3	55.0	29.1	65.6	60.1	62.2
1 service type	22.4	24.3	24.0	16.4	24.3	21.9
2 service types	5.6	10.0	19.6	8.8	8.2	8.1
3 service types	2.2	6.4	13.0	3.1	3.2	3.8
4 or more service types	1.6	4.3	14.3	6.1	4.1	3.9
Service Type received						
Domestic assistance	28.9	37.9	62.3	27.2	37.2	33.6
Social support	1.5	7.1	12.8	7.3	4.1	4.2
Nursing care	1.7	5.0	11.3	4.1	3.2	3.4
Allied health care	0.5	0.0	1.9	1.7	0.6	0.9
Personal care	2.6	10.7	24.5	10.8	9.7	7.4
Meals	4.4	11.4	24.7	8.0	7.9	7.8
Provision of goods & equipment	1.8	4.3	6.4	2.5	2.3	2.6
Transport services	2.8	5.7	16.0	7.2	4.7	5.4
Case management	1.3	2.9	9.4	2.7	2.3	2.6

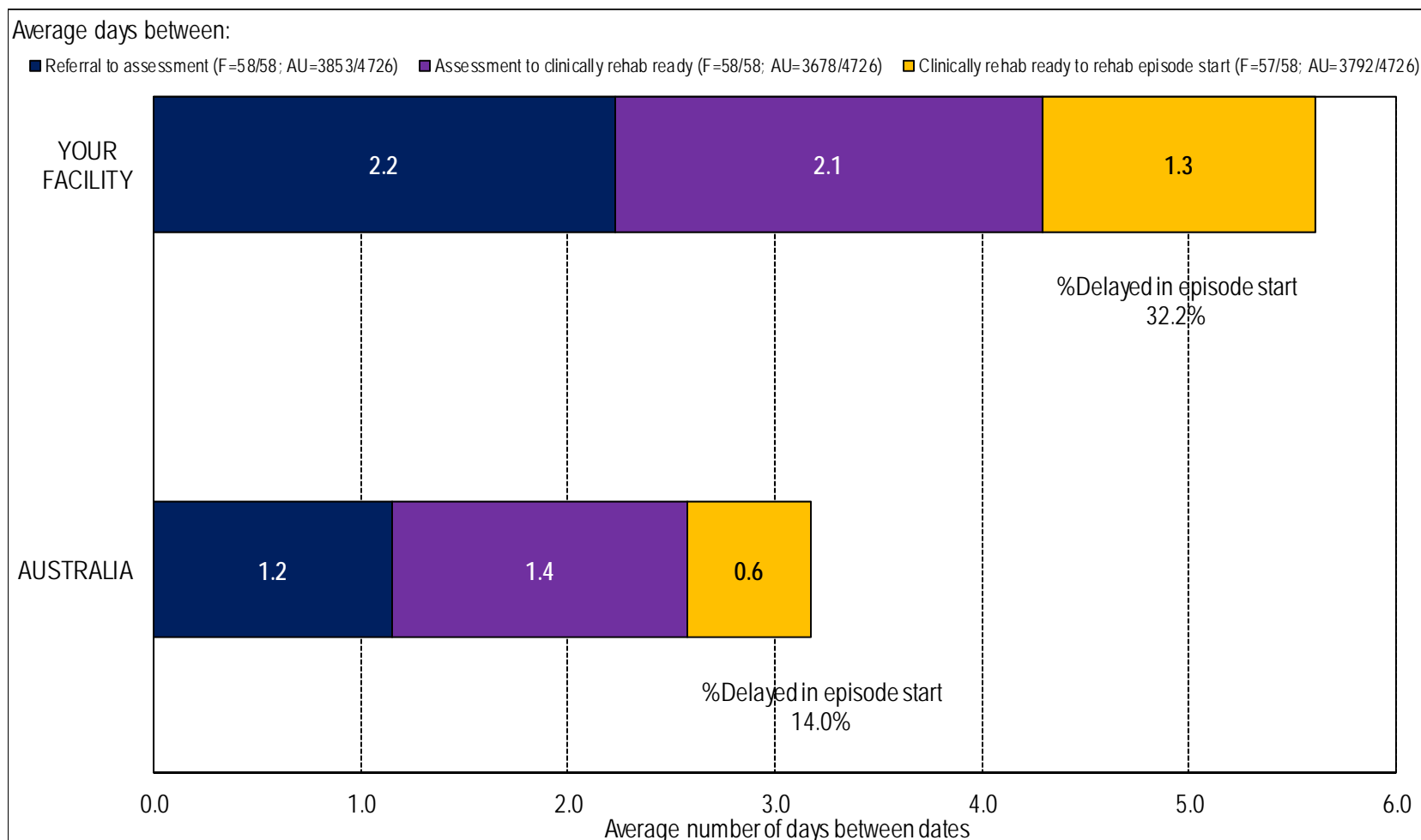
NOTE: Includes only those episodes coming from private residence and with known carer status

Days from injury to episode start with an acute admission by AN-SNAP class

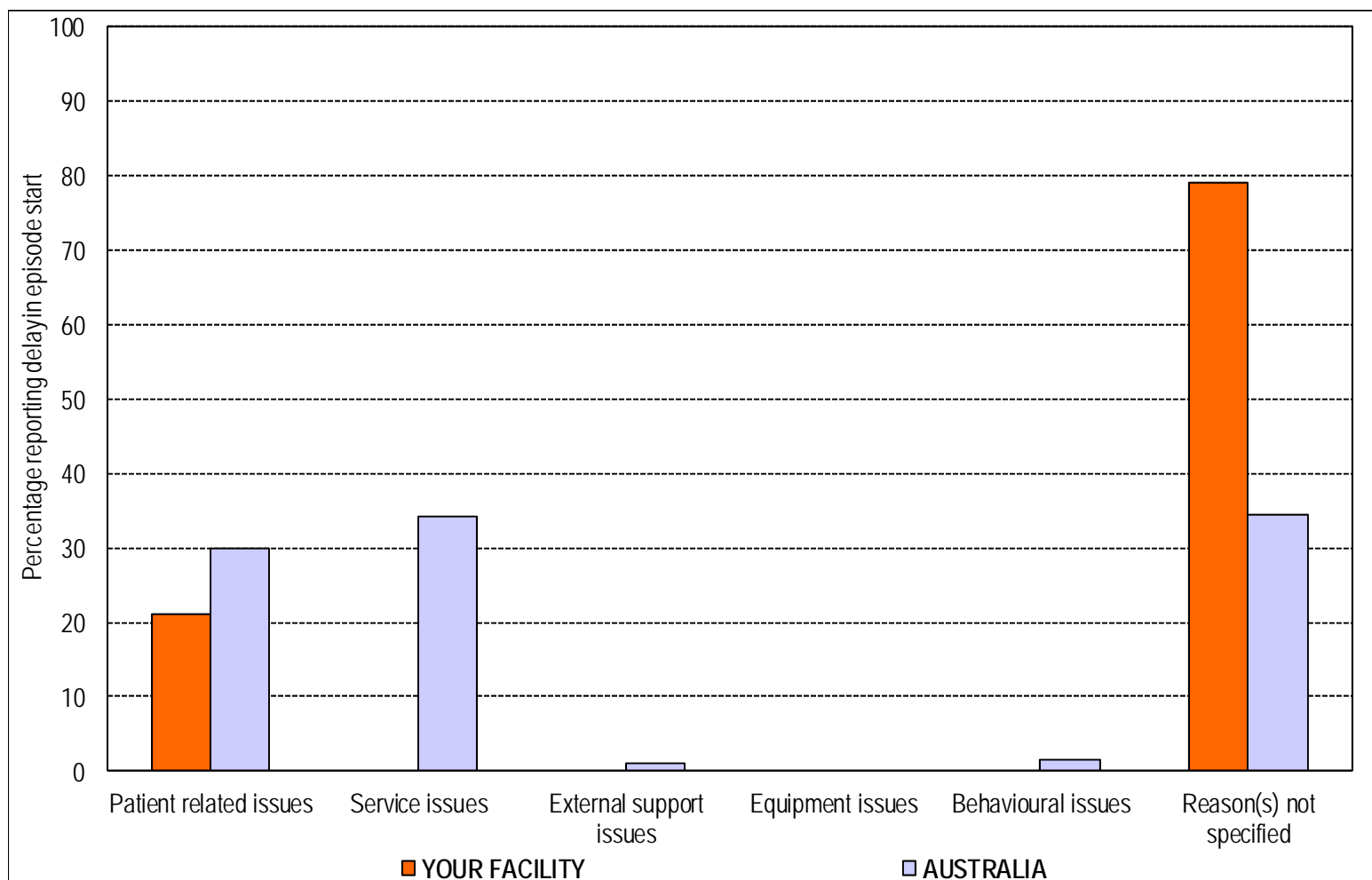


NOTE: Includes first admissions only

Days from referral to rehabilitation episode start



Type of delay in episode start

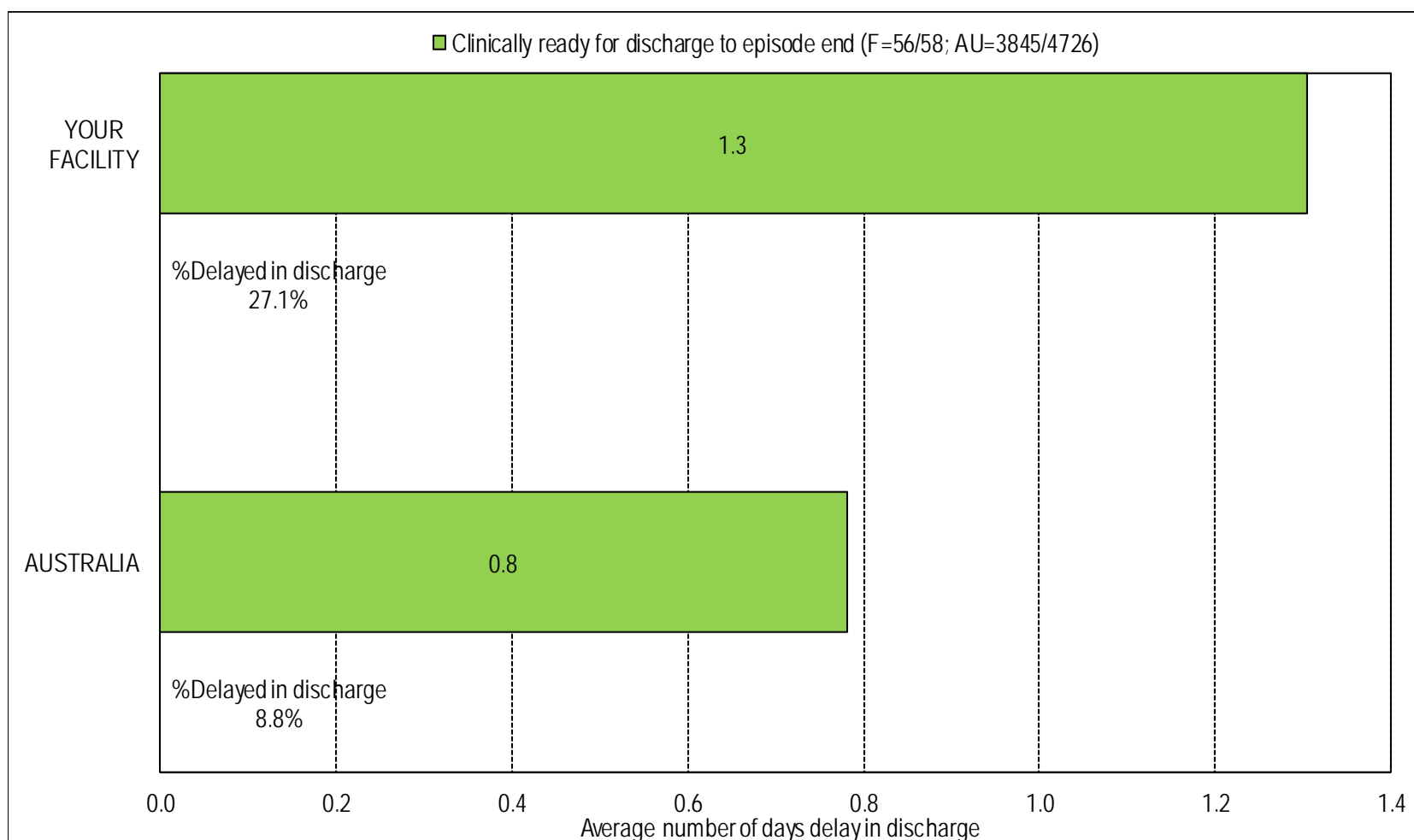


Delays in episode start

Delay in episode start	YOUR FACILITY		AUSTRALIA	
	No.	%	No.	%
No delay	40	67.8	3,732	86.0
Delay in episode start	19	32.2	606	14.0
Missing	2		388	
All episodes in private residence	61	100.0	4,726	100.0

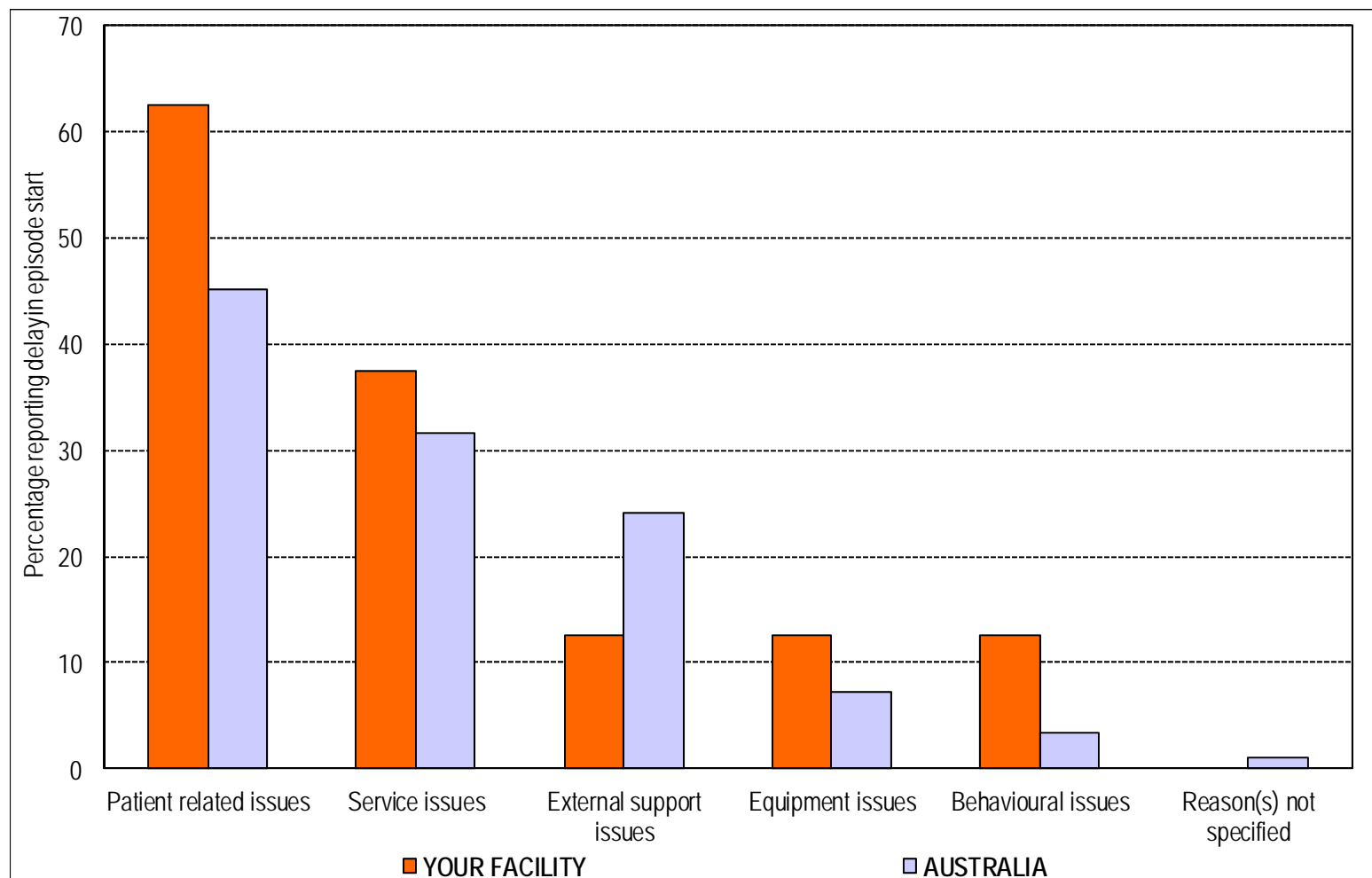
Reasons for delay in episode start	YOUR FACILITY		AUSTRALIA	
	No.	%	No.	%
Patient related issues	4	21.1	181	29.9
Service issues	0	0.0	207	34.2
External support issues	0	0.0	6	1.0
Equipment issues	0	0.0	0	0.0
Behavioural issues	0	0.0	9	1.5
Reason(s) not specified	15	78.9	209	34.5

Days from clinically ready to discharge



NOTE: Includes completed episodes only

Type of delay in episode end



NOTE: Includes completed episodes only

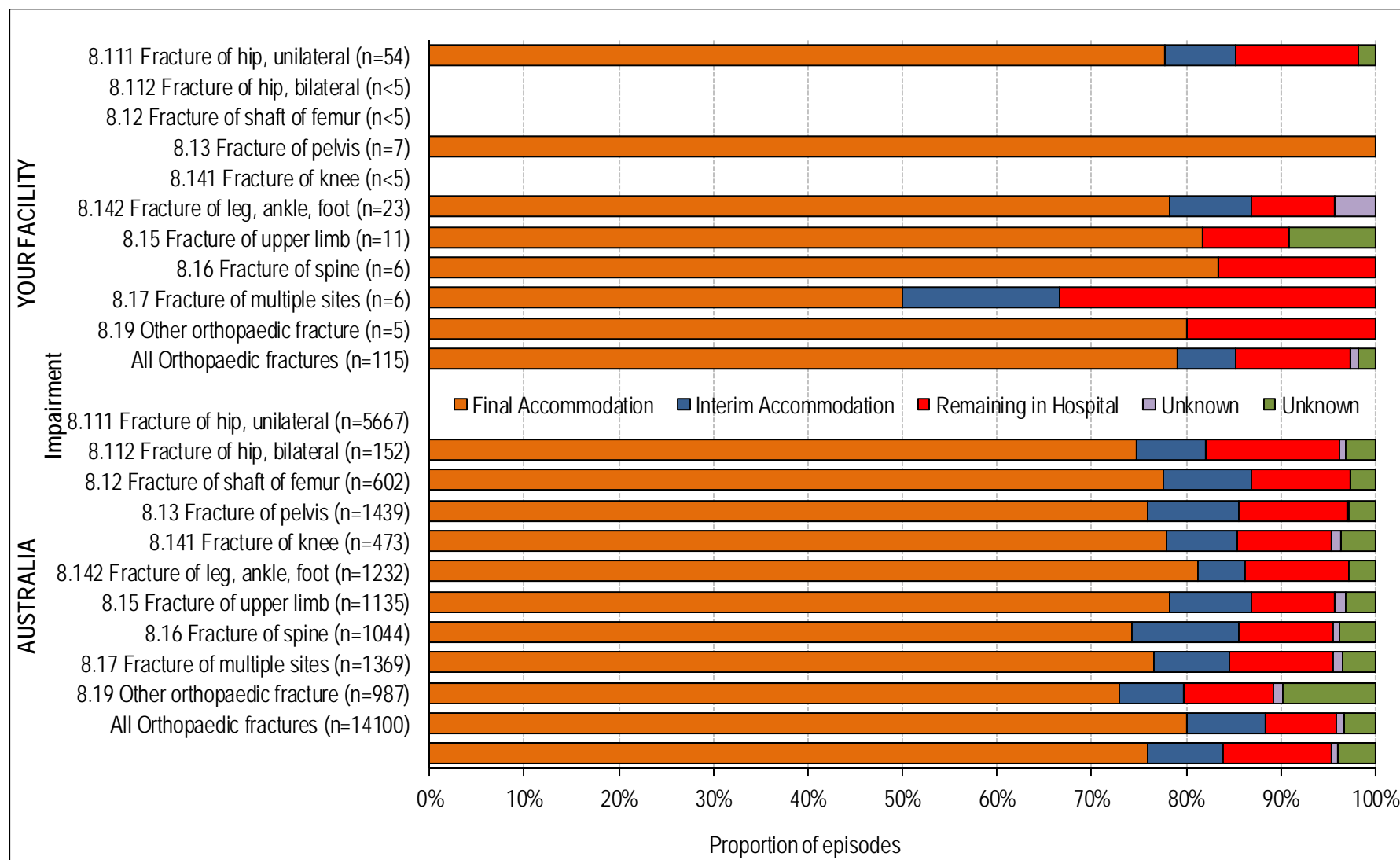
Delays in episode end

Delay in discharge	YOUR FACILITY		AUSTRALIA	
	No.	%	No.	%
No delay	43	72.9	3,976	91.2
Delay in discharge	16	27.1	386	8.8
Missing	2		364	
All episodes	61	100.0	4,726	100.0

Reasons for delay in discharge	YOUR FACILITY		AUSTRALIA	
	No.	%	No.	%
Patient related issues	10	62.5	174	45.1
Service issues	6	37.5	122	31.6
External support issues	2	12.5	93	24.1
Equipment issues	2	12.5	28	7.3
Behavioural issues	2	12.5	13	3.4
Reason(s) not specified	0	0.0	4	1.0

NOTE: Includes completed episodes only

Mode of episode end by impairment code

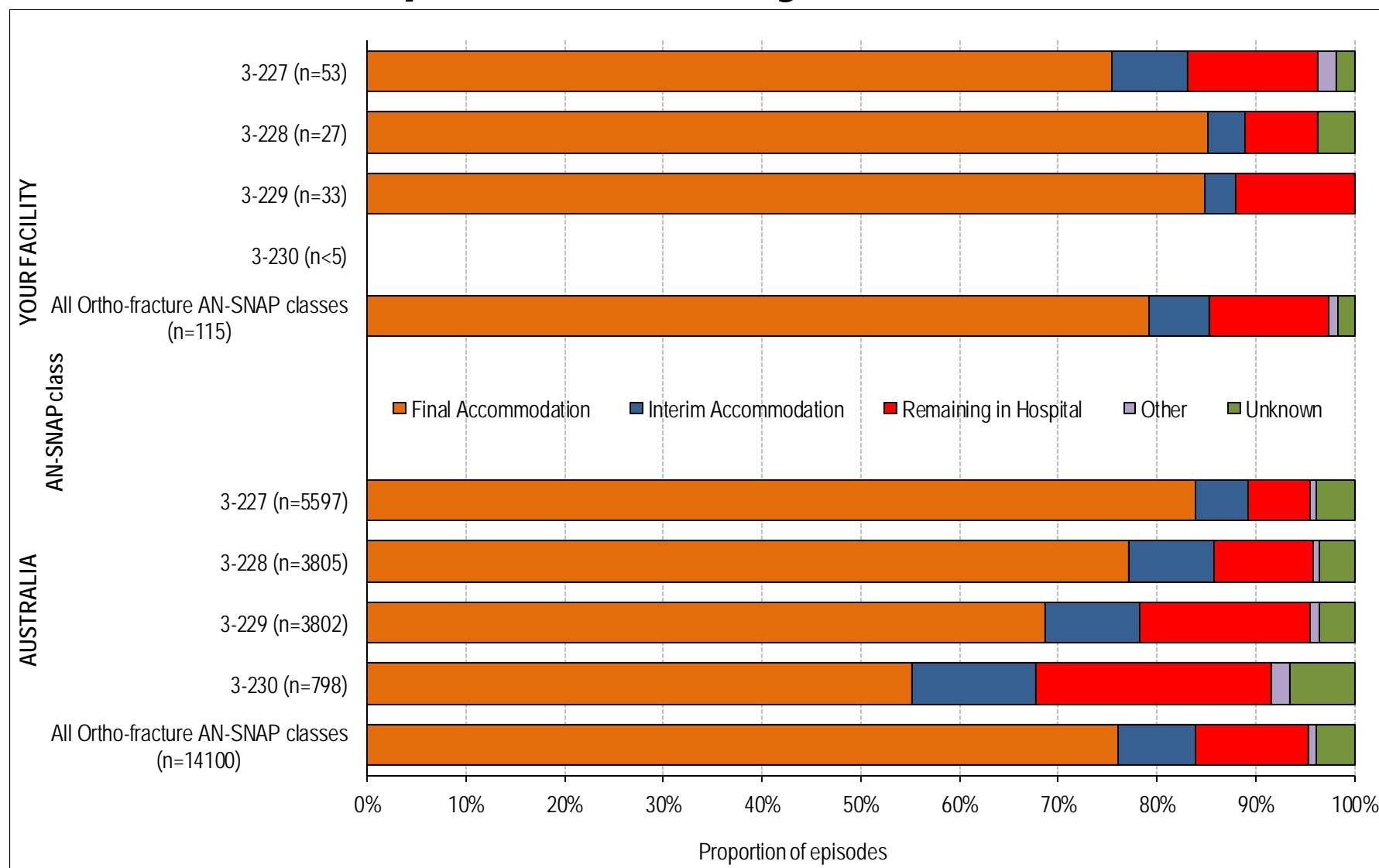


Mode of episode end by impairment code

Impairment	YOUR FACILITY					AUSTRALIA				
	Final Accom	Interim Accom	Remaining in Hospital	Other	Unknown	Final Accom	Interim Accom	Remaining in Hospital	Other	Unknown
8.111 Fracture of hip, unilateral	42	4	7	0	1	4,240	408	799	43	177
8.112 Fracture of hip, bilateral	0	0	0	0	0	118	14	16	0	4
8.12 Fracture of shaft of femur	1	0	0	0	0	457	58	69	1	17
8.13 Fracture of pelvis	7	0	0	0	0	1,122	107	144	13	53
8.141 Fracture of knee	2	0	0	0	0	384	24	52	0	13
8.142 Fracture of leg, ankle, foot	18	2	2	1	0	963	108	108	14	39
8.15 Fracture of upper limb	9	0	1	0	1	842	129	114	6	44
8.16 Fracture of spine	5	0	1	0	0	800	83	114	10	37
8.17 Fracture of multiple sites	3	1	2	0	0	999	92	131	12	135
8.19 Other orthopaedic fracture	4	0	1	0	0	791	82	73	8	33
All Orthopaedic fractures	91	7	14	1	2	10,716	1,105	1,620	107	552

Impairment	YOUR FACILITY					AUSTRALIA				
	Final Accom	Interim Accom	Remaining in Hospital	Other	Unknown	Final Accom	Interim Accom	Remaining in Hospital	Other	Unknown
8.111 Fracture of hip, unilateral	77.8	7.4	13.0	0.0	1.9	74.8	7.2	14.1	0.8	3.1
8.112 Fracture of hip, bilateral	—	—	—	—	—	77.6	9.2	10.5	0.0	2.6
8.12 Fracture of shaft of femur	—	—	—	—	—	75.9	9.6	11.5	0.2	2.8
8.13 Fracture of pelvis	100.0	0.0	0.0	0.0	0.0	78.0	7.4	10.0	0.9	3.7
8.141 Fracture of knee	—	—	—	—	—	81.2	5.1	11.0	0.0	2.7
8.142 Fracture of leg, ankle, foot	78.3	8.7	8.7	4.3	0.0	78.2	8.8	8.8	1.1	3.2
8.15 Fracture of upper limb	81.8	0.0	9.1	0.0	9.1	74.2	11.4	10.0	0.5	3.9
8.16 Fracture of spine	83.3	0.0	16.7	0.0	0.0	76.6	8.0	10.9	1.0	3.5
8.17 Fracture of multiple sites	50.0	16.7	33.3	0.0	0.0	73.0	6.7	9.6	0.9	9.9
8.19 Other orthopaedic fracture	80.0	0.0	20.0	0.0	0.0	80.1	8.3	7.4	0.8	3.3
All Orthopaedic fractures	79.1	6.1	12.2	0.9	1.7	76.0	7.8	11.5	0.8	3.9

Mode of episode end by AN-SNAP class

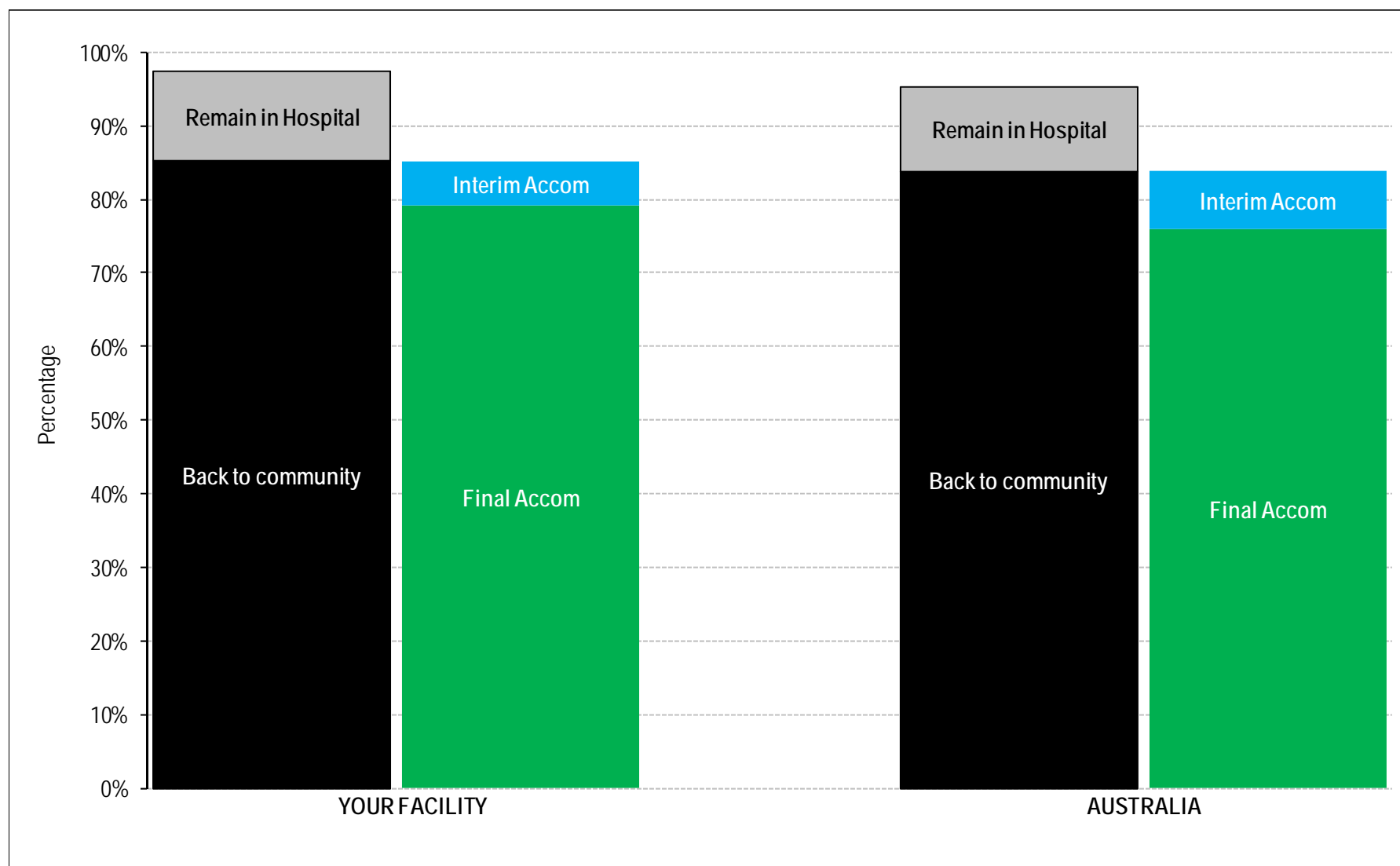


Mode of episode end by AN-SNAP class

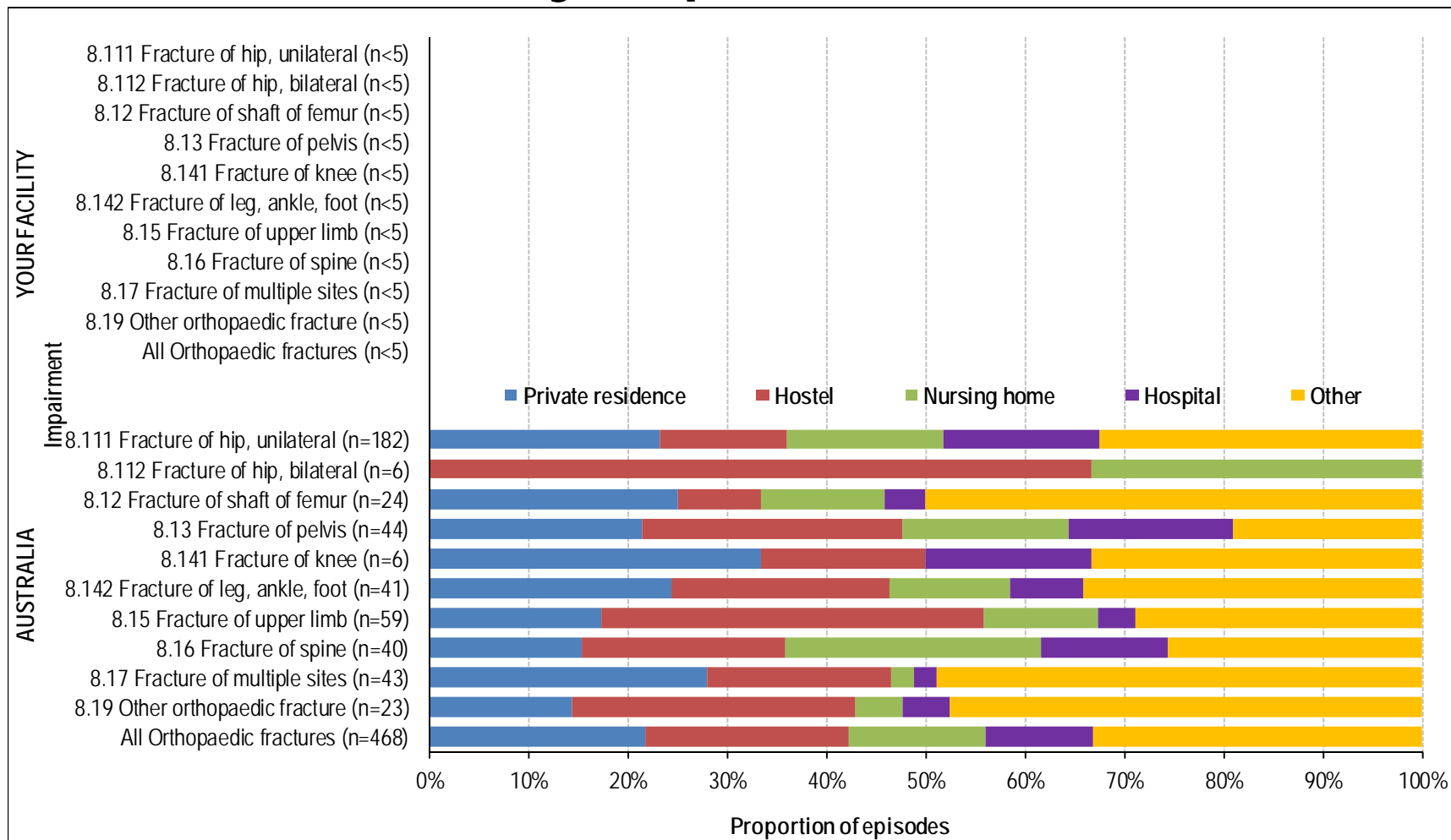
AN-SNAP class	YOUR FACILITY					AUSTRALIA				
	Final Accom	Interim Accom	Remaining in Hospital	Other	Unknown	Final Accom	Interim Accom	Remaining in Hospital	Other	Unknown
3-227 (motor 58-91)	40	4	7	1	1	4,696	301	348	32	220
3-228 (motor 48-57)	23	1	2	0	1	2,934	328	380	27	136
3-229 (motor 14-47, cognition 19-35)	28	1	4	0	0	2,609	363	660	33	137
3-230 (motor 14-47, cognition 5-18)	0	1	1	0	0	441	100	190	15	52
All Ortho-fracture AN-SNAP classes	91	7	14	1	2	10,716	1,105	1,620	107	552

AN-SNAP class	YOUR FACILITY					AUSTRALIA				
	Final Accom	Interim Accom	Remaining in Hospital	Other	Unknown	Final Accom	Interim Accom	Remaining in Hospital	Other	Unknown
3-227 (motor 58-91)	75.5	7.5	13.2	1.9	1.9	83.9	5.4	6.2	0.6	3.9
3-228 (motor 48-57)	85.2	3.7	7.4	0.0	3.7	77.1	8.6	10.0	0.7	3.6
3-229 (motor 14-47, cognition 19-35)	84.8	3.0	12.1	0.0	0.0	68.6	9.5	17.4	0.9	3.6
3-230 (motor 14-47, cognition 5-18)	0.0	50.0	50.0	0.0	0.0	55.3	12.5	23.8	1.9	6.5
All Ortho-fracture AN-SNAP classes	79.1	6.1	12.2	0.9	1.7	76.0	7.8	11.5	0.8	3.9

Mode of episode end



Interim accommodation post discharge by impairment



NOTE: Includes only those episodes with mode of episode end equal to interim accommodation – new to V4 dataset

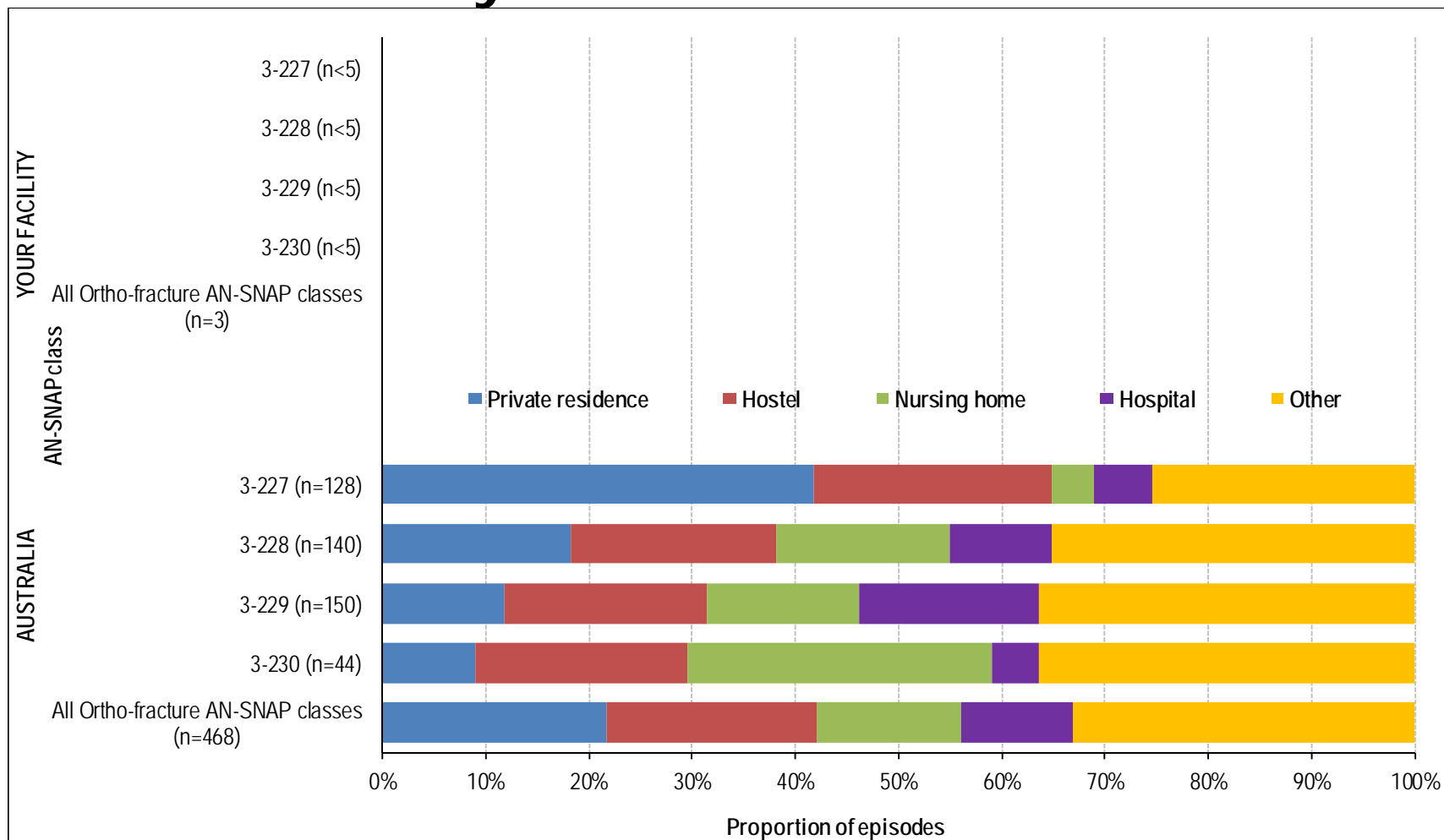
Interim accommodation post discharge by impairment

Impairment	YOUR FACILITY — N (%)					All episodes**
	Private residence	Hostel	Nursing home	Hospital	Other	
8.111 Fracture of hip, unilateral	1 (50.0%)	0 (0.0%)	1 (50.0%)	0 (0.0%)	0 (0.0%)	2 (100.0%)
8.112 Fracture of hip, bilateral	0 —	0 —	0 —	0 —	0 —	0 —
8.12 Fracture of shaft of femur	0 —	0 —	0 —	0 —	0 —	0 —
8.13 Fracture of pelvis	0 —	0 —	0 —	0 —	0 —	0 —
8.141 Fracture of knee	0 —	0 —	0 —	0 —	0 —	0 —
8.142 Fracture of leg, ankle, foot	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
8.15 Fracture of upper limb	0 —	0 —	0 —	0 —	0 —	0 —
8.16 Fracture of spine	0 —	0 —	0 —	0 —	0 —	0 —
8.17 Fracture of multiple sites	0 —	0 —	0 —	0 —	0 —	0 —
8.19 Other orthopaedic fracture	0 —	0 —	0 —	0 —	0 —	0 —
All Orthopaedic fractures	2 (66.7%)	0 (0.0%)	1 (33.3%)	0 (0.0%)	0 (0.0%)	3 (100.0%)

Impairment	AUSTRALIA — N (%)					All episodes**
	Private residence	Hostel	Nursing home	Hospital	Other	
8.111 Fracture of hip, unilateral	40 (22.2%)	22 (12.2%)	27 (15.0%)	27 (15.0%)	56 (31.1%)	182 (104.7%)
8.112 Fracture of hip, bilateral	0 (0.0%)	4 (66.7%)	2 (33.3%)	0 (0.0%)	0 (0.0%)	6 (100.0%)
8.12 Fracture of shaft of femur	6 (25.0%)	2 (8.3%)	3 (12.5%)	1 (4.2%)	12 (50.0%)	24 (100.0%)
8.13 Fracture of pelvis	9 (20.5%)	11 (25.0%)	7 (15.9%)	7 (15.9%)	8 (18.2%)	44 (104.8%)
8.141 Fracture of knee	2 (33.3%)	1 (16.7%)	0 (0.0%)	1 (16.7%)	2 (33.3%)	6 (100.0%)
8.142 Fracture of leg, ankle, foot	10 (24.4%)	9 (22.0%)	5 (12.2%)	3 (7.3%)	14 (34.1%)	41 (100.0%)
8.15 Fracture of upper limb	9 (15.3%)	20 (33.9%)	6 (10.2%)	2 (3.4%)	15 (25.4%)	59 (113.5%)
8.16 Fracture of spine	6 (15.4%)	8 (20.5%)	10 (25.6%)	5 (12.8%)	10 (25.6%)	40 (100.0%)
8.17 Fracture of multiple sites	12 (27.9%)	8 (18.6%)	1 (2.3%)	1 (2.3%)	21 (48.8%)	43 (100.0%)
8.19 Other orthopaedic fracture	3 (13.0%)	6 (26.1%)	1 (4.3%)	1 (4.3%)	10 (43.5%)	23 (109.5%)
All Orthopaedic fractures	97 (21.7%)	91 (20.4%)	62 (13.9%)	48 (10.8%)	148 (33.2%)	468 (100.0%)

NOTE: Includes only those episodes with mode of episode end equal to interim accommodation – new to V4 dataset

Interim accommodation post discharge by AN-SNAP class



NOTE: Includes only those episodes with mode of episode end equal to interim accommodation – new to V4 dataset

Interim accommodation post discharge by AN-SNAP class

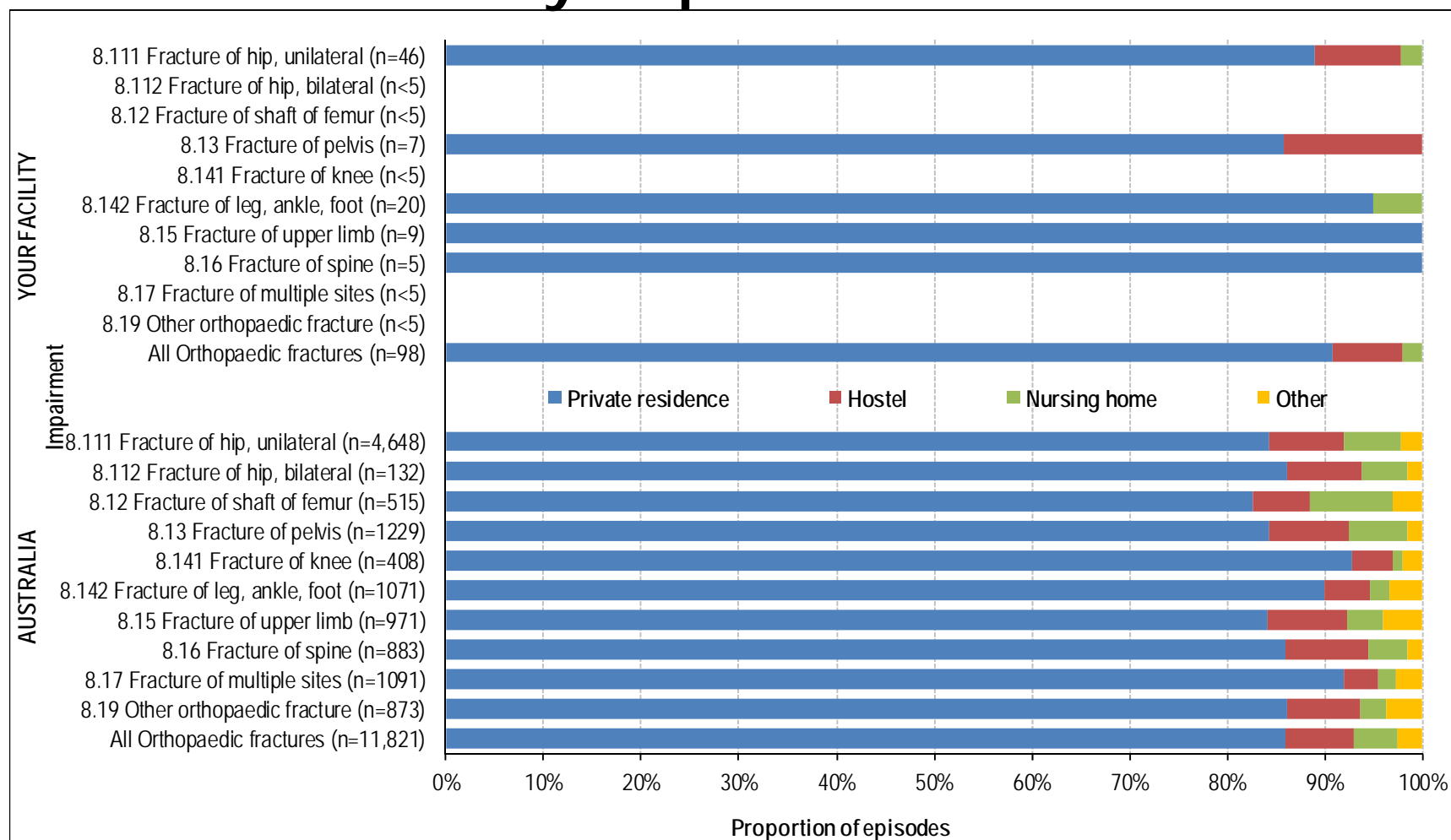
AN-SNAP class	YOUR FACILITY — N (%)					All episodes**
	Private residence	Hostel	Nursing home	Hospital	Other	
3-227 (motor 58-91)	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
3-228 (motor 48-57)	0 —	0 —	0 —	0 —	0 —	0 —
3-229 (motor 14-47, cognition 19-35)	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
3-230 (motor 14-47, cognition 5-18)	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
All Ortho-fracture AN-SNAP classes	2 (66.7%)	0 (0.0%)	1 (33.3%)	0 (0.0%)	0 (0.0%)	3 (-15.8%)

AN-SNAP class	AUSTRALIA — N (%)					All episodes**
	Private residence	Hostel	Nursing home	Hospital	Other	
3-227 (motor 58-91)	51 (39.8%)	28 (21.9%)	5 (3.9%)	7 (5.5%)	31 (24.2%)	128 (104.9%)
3-228 (motor 48-57)	24 (17.4%)	26 (18.8%)	22 (15.9%)	13 (9.4%)	46 (33.3%)	140 (105.3%)
3-229 (motor 14-47, cognition 19-35)	17 (11.4%)	28 (18.8%)	21 (14.1%)	25 (16.8%)	52 (34.9%)	150 (104.2%)
3-230 (motor 14-47, cognition 5-18)	4 (9.1%)	9 (20.5%)	13 (29.5%)	2 (4.5%)	16 (36.4%)	44 (100.0%)
All Ortho-fracture AN-SNAP classes	97 (21.7%)	91 (20.4%)	62 (13.9%)	48 (10.8%)	148 (33.2%)	468 (100.0%)

** There were 22 episodes in AUSTRALIA with unknown interim accommodation

NOTE: Includes only those episodes with mode of episode end equal to interim accommodation – new to V4 dataset

Final accommodation post discharge by impairment



NOTE: Includes only those episodes with mode of episode end equal to either final or interim accommodation

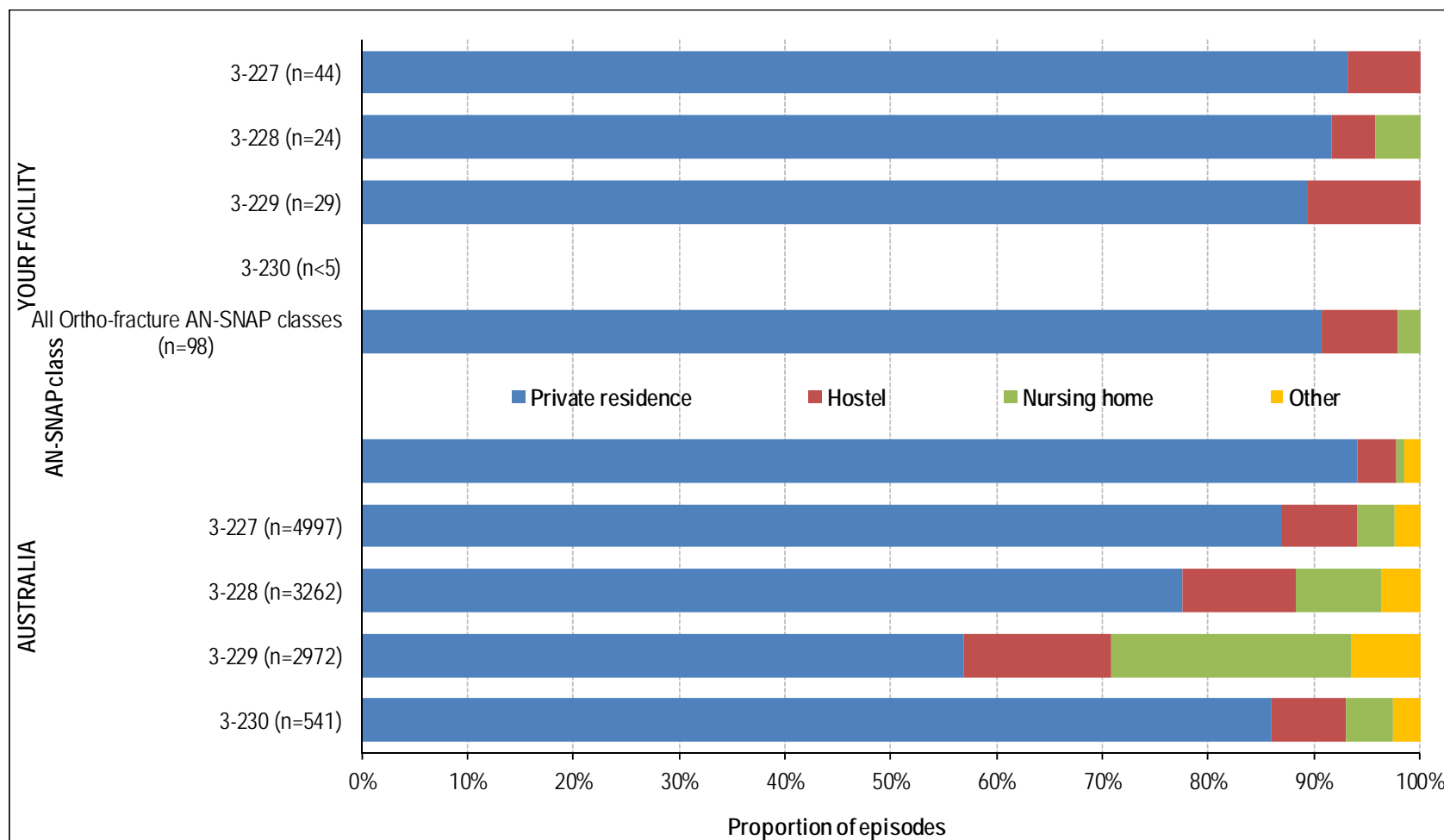
Final accommodation post discharge by impairment

Impairment	YOUR FACILITY — N (%)					All episodes
	Private residence	Hostel	Nursing home	Other	Unknown	
8.111 Fracture of hip, unilateral	40 (88.9%)	4 (8.9%)	1 (2.2%)	0 (0.0%)	1	46 (100.0%)
8.112 Fracture of hip, bilateral	0 —	0 —	0 —	0 —	0	0 —
8.12 Fracture of shaft of femur	1 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	1 (100.0%)
8.13 Fracture of pelvis	6 (85.7%)	1 (14.3%)	0 (0.0%)	0 (0.0%)	0	7 (100.0%)
8.141 Fracture of knee	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	2 (100.0%)
8.142 Fracture of leg, ankle, foot	19 (95.0%)	0 (0.0%)	1 (5.0%)	0 (0.0%)	0	20 (100.0%)
8.15 Fracture of upper limb	9 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	9 (100.0%)
8.16 Fracture of spine	5 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	5 (100.0%)
8.17 Fracture of multiple sites	3 (75.0%)	1 (25.0%)	0 (0.0%)	0 (0.0%)	0	4 (100.0%)
8.19 Other orthopaedic fracture	3 (75.0%)	1 (25.0%)	0 (0.0%)	0 (0.0%)	0	4 (100.0%)
All Orthopaedic fractures	88 (90.7%)	7 (7.2%)	2 (2.1%)	0 (0.0%)	1	98 (100.0%)

Impairment	AUSTRALIA — N (%)					All episodes
	Private residence	Hostel	Nursing home	Other	Unknown	
8.111 Fracture of hip, unilateral	3,853 (84.4%)	348 (7.6%)	261 (5.7%)	105 (2.3%)	81	4,648 (100.0%)
8.112 Fracture of hip, bilateral	112 (86.2%)	10 (7.7%)	6 (4.6%)	2 (1.5%)	2	132 (100.0%)
8.12 Fracture of shaft of femur	416 (82.7%)	29 (5.8%)	43 (8.5%)	15 (3.0%)	12	515 (100.0%)
8.13 Fracture of pelvis	1,024 (84.3%)	100 (8.2%)	73 (6.0%)	18 (1.5%)	14	1,229 (100.0%)
8.141 Fracture of knee	373 (92.8%)	17 (4.2%)	4 (1.0%)	8 (2.0%)	6	408 (100.0%)
8.142 Fracture of leg, ankle, foot	954 (89.9%)	49 (4.6%)	22 (2.1%)	36 (3.4%)	10	1,071 (100.0%)
8.15 Fracture of upper limb	801 (84.1%)	79 (8.3%)	35 (3.7%)	38 (4.0%)	18	971 (100.0%)
8.16 Fracture of spine	748 (85.9%)	74 (8.5%)	36 (4.1%)	13 (1.5%)	12	883 (100.0%)
8.17 Fracture of multiple sites	985 (92.0%)	37 (3.5%)	20 (1.9%)	29 (2.7%)	20	1,091 (100.0%)
8.19 Other orthopaedic fracture	748 (86.2%)	64 (7.4%)	24 (2.8%)	32 (3.7%)	5	873 (100.0%)
All Orthopaedic fractures	10,014 (86.0%)	807 (6.9%)	524 (4.5%)	296 (2.5%)	180	11,821 (100.0%)

NOTE: Includes only those episodes with mode of episode end equal to either final or interim accommodation

Final accommodation post discharge by AN-SNAP class



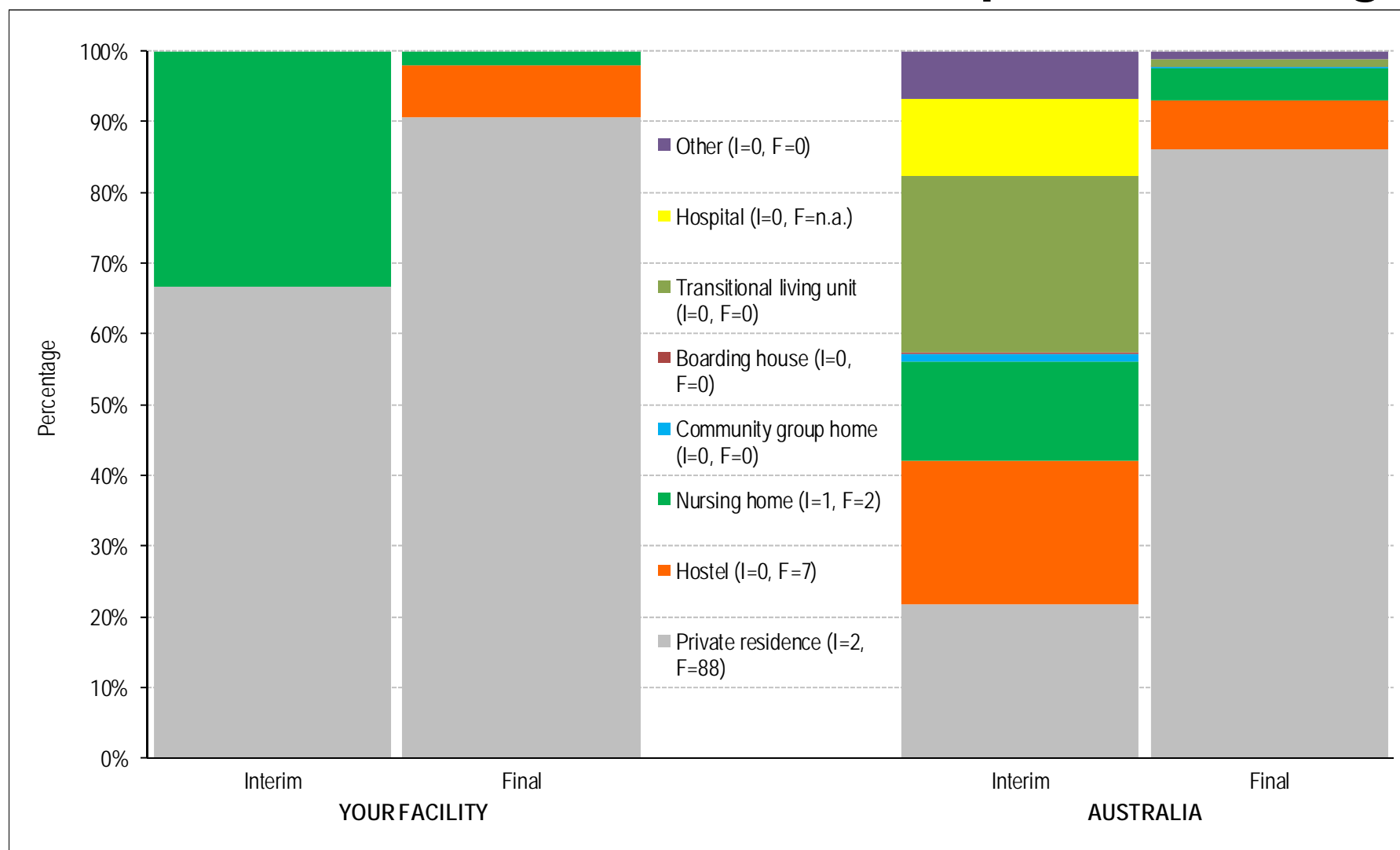
NOTE: Includes only those episodes with mode of episode end equal to either final or interim accommodation

Final accommodation post discharge by AN-SNAP class

AN-SNAP class	YOUR FACILITY — N (%)					All episodes
	Private residence	Hostel	Nursing home	Other	Unknown	
3-227 (motor 58-91)	41 (93.2%)	3 (6.8%)	0 (0.0%)	0 (0.0%)	0	44 (100.0%)
3-228 (motor 48-57)	22 (91.7%)	1 (4.2%)	1 (4.2%)	0 (0.0%)	0	24 (100.0%)
3-229 (motor 14-47, cognition 19-35)	25 (89.3%)	3 (10.7%)	0 (0.0%)	0 (0.0%)	1	29 (100.0%)
3-230 (motor 14-47, cognition 5-18)	0 (0.0%)	0 (0.0%)	1 (100.0%)	0 (0.0%)	0	1 (100.0%)
All Ortho-fracture AN-SNAP classes	88 (90.7%)	7 (7.2%)	2 (2.1%)	0 (0.0%)	1	98 (100.0%)
AN-SNAP class	AUSTRALIA — N (%)					All episodes
	Private residence	Hostel	Nursing home	Other	Unknown	
3-227 (motor 58-91)	4,644 (94.0%)	181 (3.7%)	40 (0.8%)	74 (1.5%)	58	4,997 (100.0%)
3-228 (motor 48-57)	2,789 (86.9%)	232 (7.2%)	112 (3.5%)	78 (2.4%)	51	3,262 (100.0%)
3-229 (motor 14-47, cognition 19-35)	2,265 (77.5%)	317 (10.8%)	235 (8.0%)	106 (3.6%)	49	2,972 (100.0%)
3-230 (motor 14-47, cognition 5-18)	297 (56.9%)	73 (14.0%)	118 (22.6%)	34 (6.5%)	19	541 (100.0%)
All Ortho-fracture AN-SNAP classes	10,014 (86.0%)	807 (6.9%)	524 (4.5%)	296 (2.5%)	180	11,821 (100.0%)

NOTE: Includes only those episodes with mode of episode end equal to either final or interim accommodation

Interim and final accommodation post discharge



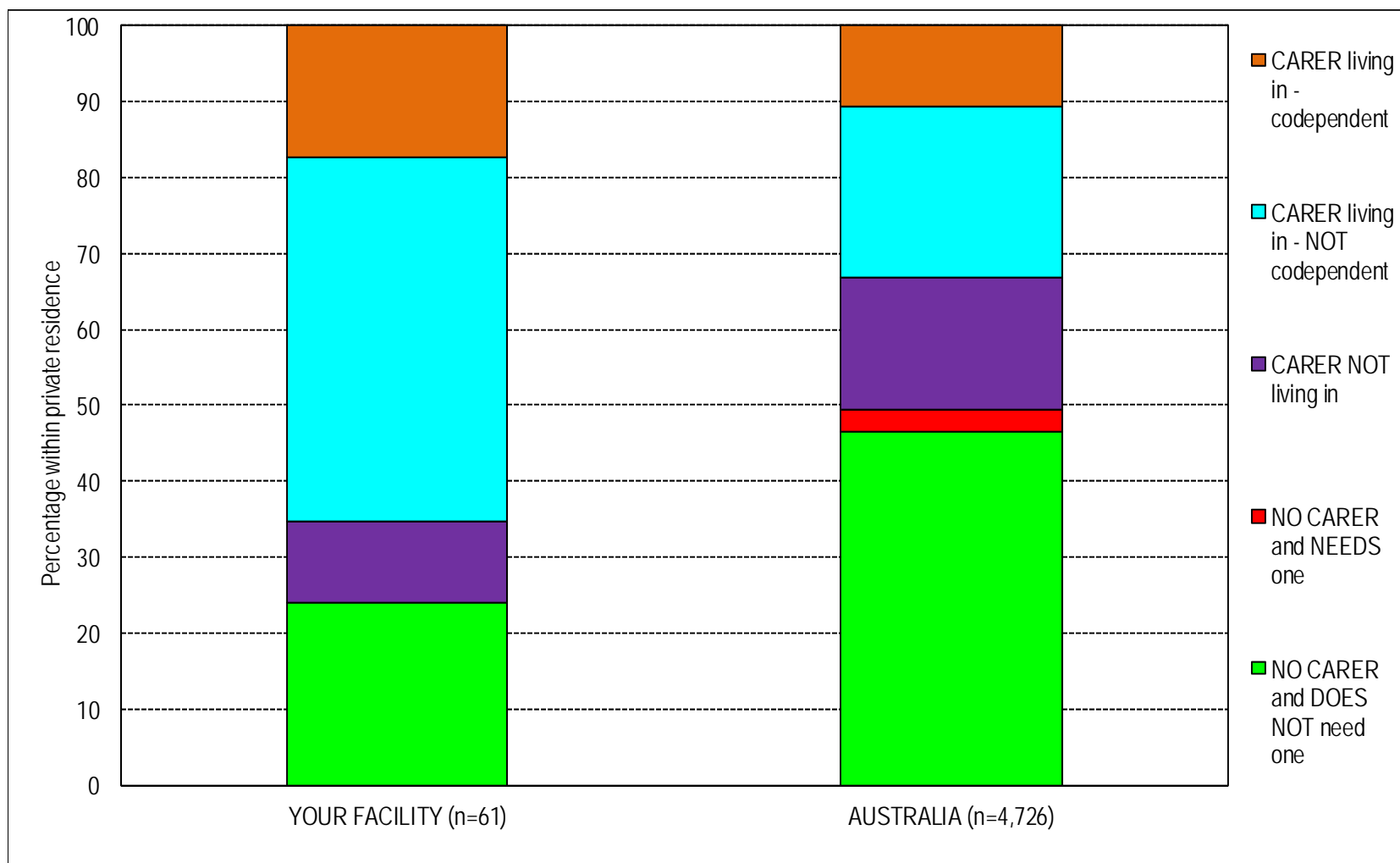
NOTE: Includes only those episodes with mode of episode end equal to either final or interim accommodation

Interim and final accommodation post discharge

ACCOMMODATION	YOUR FACILITY		AUSTRALIA	
	Interim (%)	Final (%)	Interim (%)	Final (%)
Private residence	2 (66.7%)	88 (90.7%)	97 (21.7%)	10,014 (86.0%)
Hostel	0 (0.0%)	7 (7.2%)	91 (20.4%)	807 (6.9%)
Nursing home	1 (33.3%)	2 (2.1%)	62 (13.9%)	524 (4.5%)
Community group home	0 (0.0%)	0 (0.0%)	5 (1.1%)	34 (0.3%)
Boarding house	0 (0.0%)	0 (0.0%)	1 (0.2%)	11 (0.1%)
Transitional living unit	0 (0.0%)	0 (0.0%)	112 (25.1%)	118 (1.0%)
Hospital	0 (0.0%)	n.a.	48 (10.8%)	n.a.
Other	0 (0.0%)	0 (0.0%)	30 (6.7%)	133 (1.1%)
Missing	0	1	22	180
All episodes	3 (100.0%)	98 (100.0%)	468 (100.0%)	11,821 (100.0%)

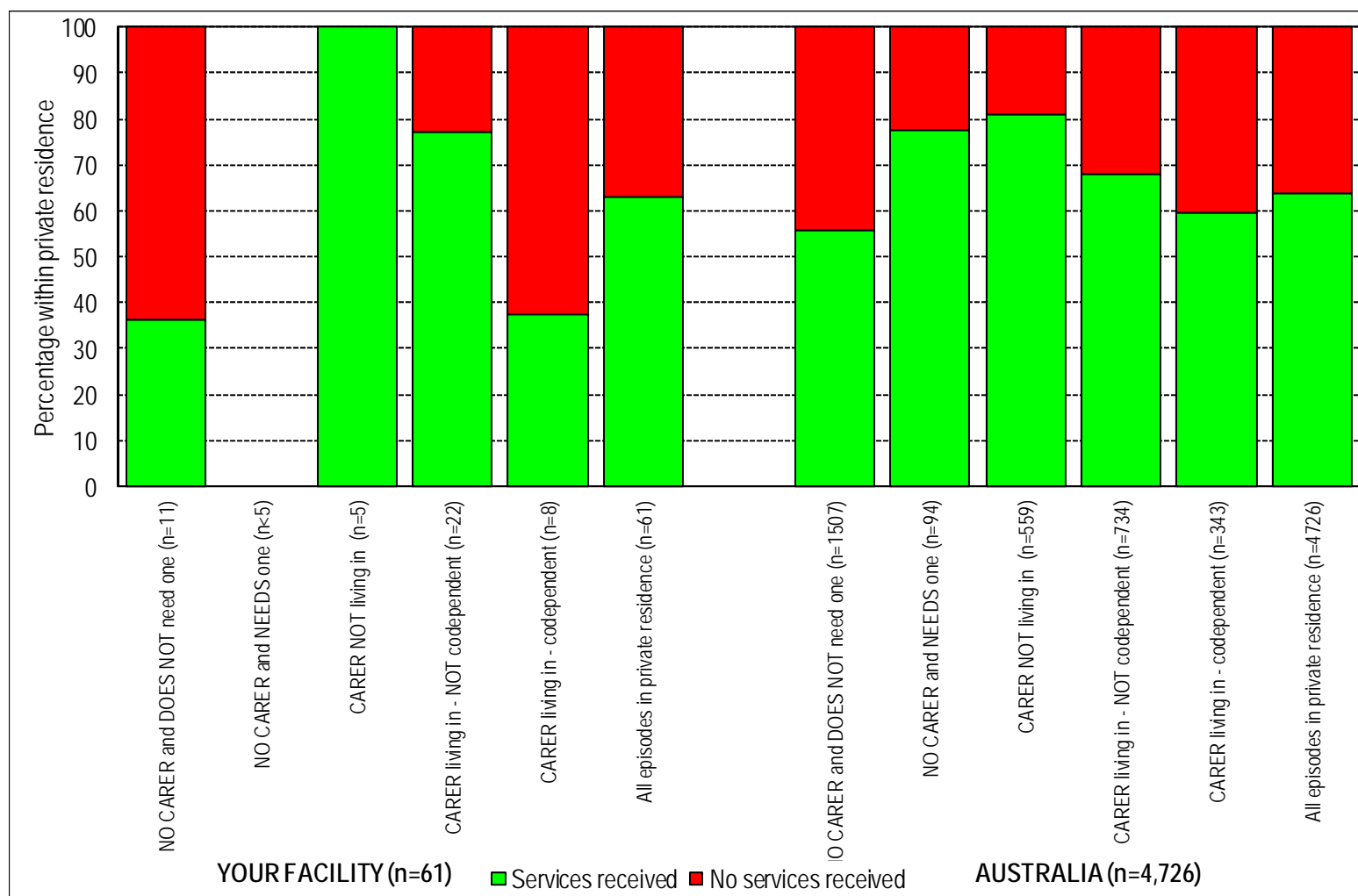
NOTE: Includes only those episodes with mode of episode end equal to either final or interim accommodation

Carer status post discharge



NOTE: Includes only those episodes whose final accommodation is private residence

Any services received post discharge



NOTE: Includes only those episodes whose final accommodation is private residence

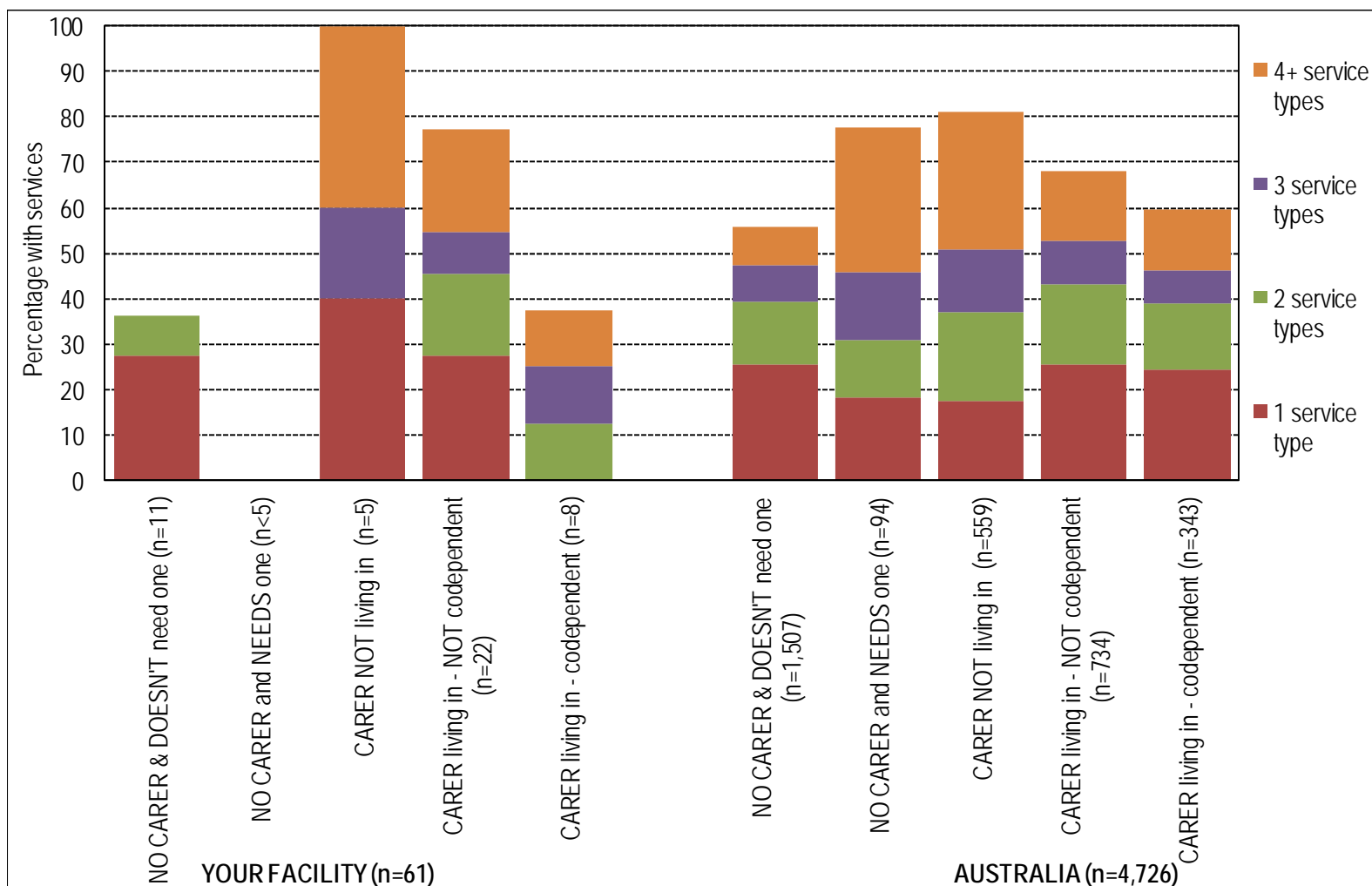
Carer status and any services received post discharge

Carer status post discharge	YOUR FACILITY		AUSTRALIA	
	No.	%	No.	%
NO CARER and DOES NOT need one	11	23.9	1,507	46.6
NO CARER and NEEDS one	0	—	94	2.9
CARER NOT living in	5	10.9	559	17.3
CARER living in - NOT codependent	22	47.8	734	22.7
CARER living in - codependent	8	17.4	343	10.6
Missing	15		1,489	
All episodes in private residence	61	100.0	4,726	100.0

Carer status post discharge	Any services received post discharge?			
	YOUR FACILITY		AUSTRALIA	
	Yes (%)	No (%)	Yes (%)	No (%)
NO CARER and DOES NOT need one	36.4	63.6	55.7	44.3
NO CARER and NEEDS one	—	—	77.7	22.3
CARER NOT living in	100.0	0.0	81.0	19.0
CARER living in - NOT codependent	77.3	22.7	68.1	31.9
CARER living in - codependent	37.5	62.5	59.5	40.5
All episodes in private residence	63.0	37.0	63.9	36.1

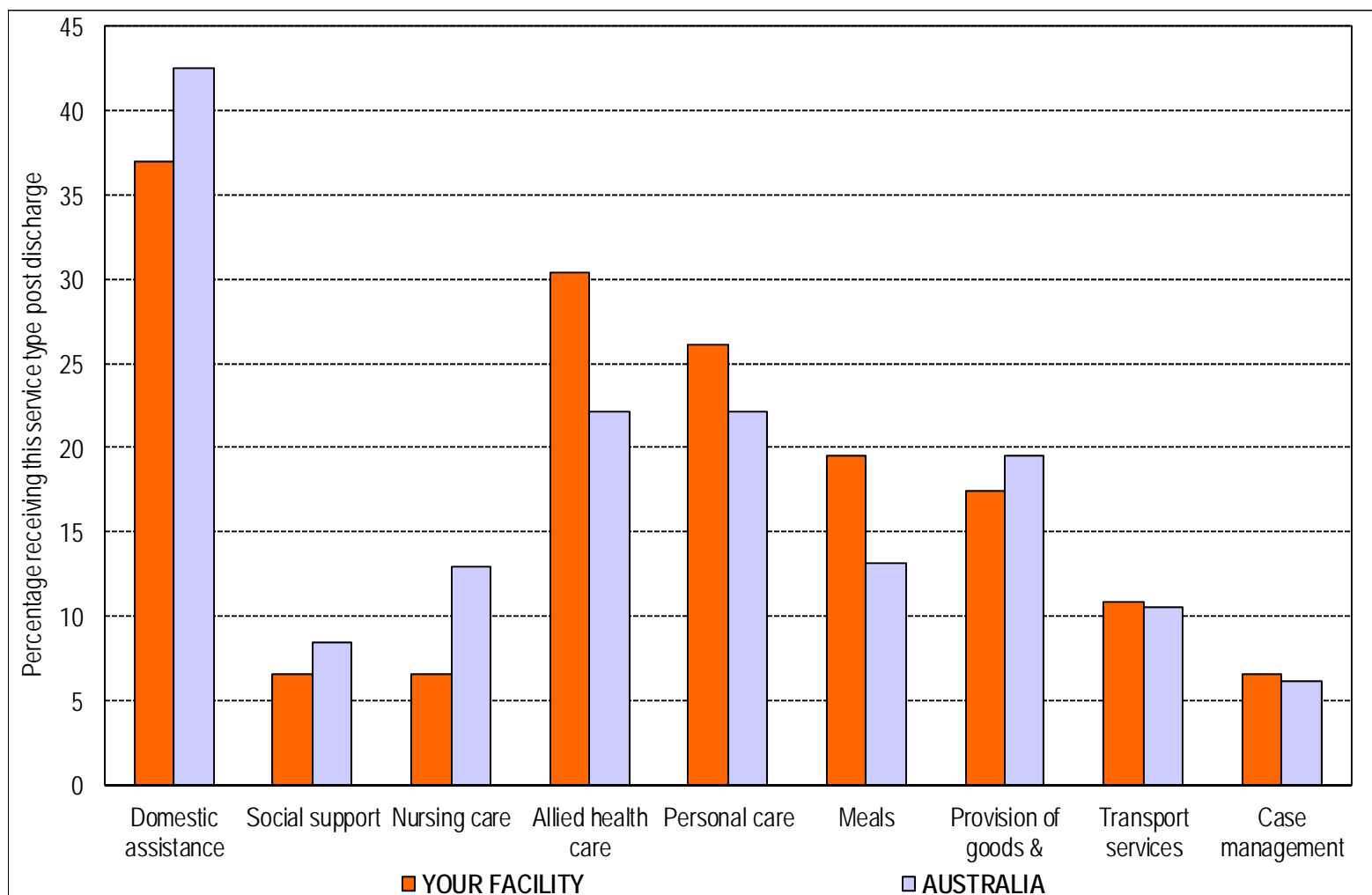
NOTE: Includes only those episodes whose final accommodation is private residence

Number of services received post discharge



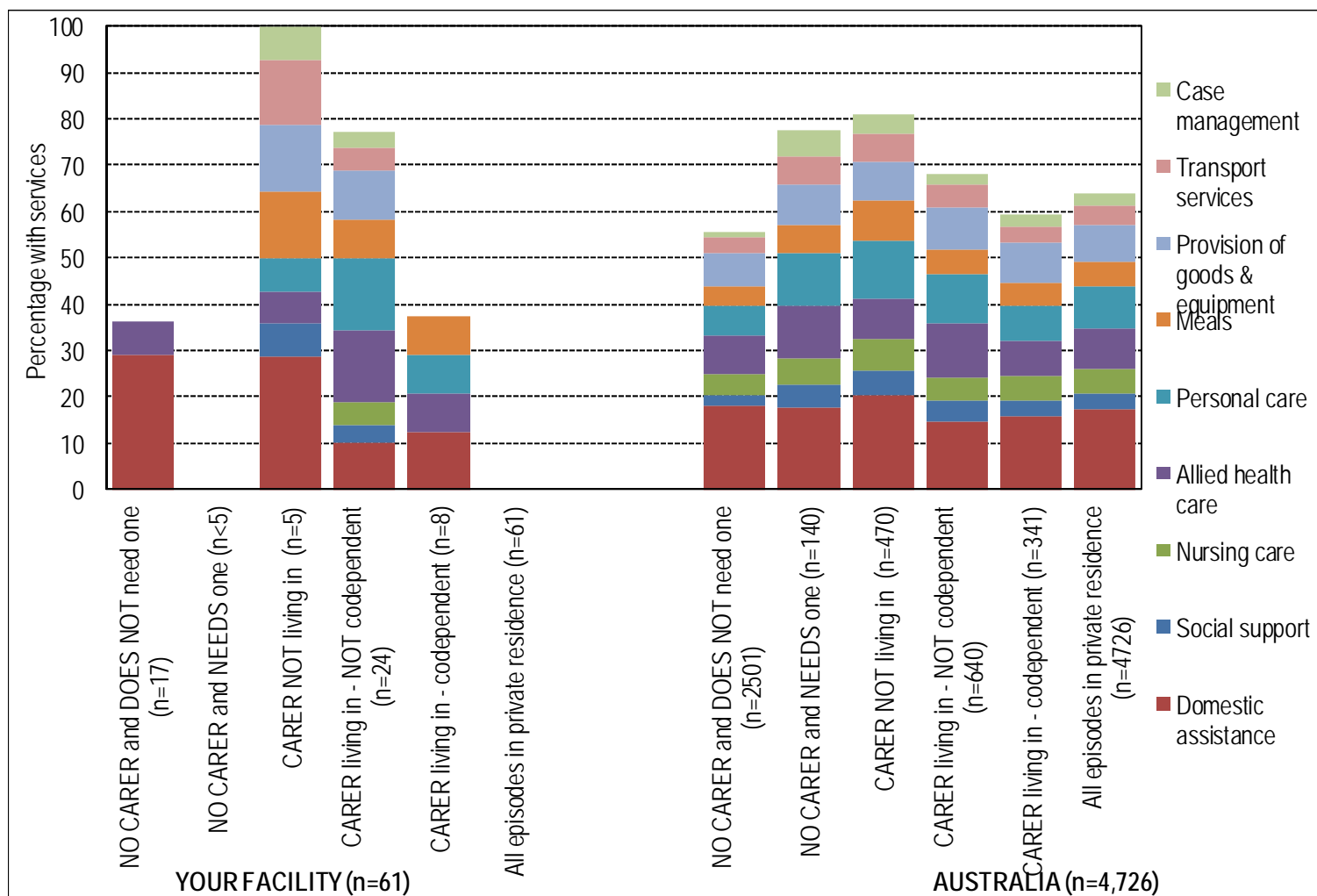
NOTE: Includes only those episodes whose final accommodation is private residence

Type of services received post discharge



NOTE: Includes only those episodes whose final accommodation is private residence

Type of services received post discharge



NOTE: Includes only those episodes whose final accommodation is private residence

Number and type of services received post discharge – YOUR FACILITY

Services received post discharge (NOTE: Discharge to private residence)	Carer status post discharge - YOUR FACILITY					
	NO CARER & DOESN'T need one	NO CARER and NEEDS one	CARER NOT living in	CARER living in - NOT codependent	CARER living in - codependent	All episodes in private residence
Number of episodes in private residence	11	0	5	22	8	
Percent of episodes receiving:						
No services	63.6	—	0.0	22.7	62.5	37.0
1 service type	27.3	—	40.0	27.3	0.0	26.1
2 service types	9.1	—	0.0	18.2	12.5	13.0
3 service types	0.0	—	20.0	9.1	12.5	8.7
4 or more service types	0.0	—	40.0	22.7	12.5	15.2
Service Type received						
Domestic assistance	36.4	—	80.0	27.3	37.5	37.0
Social support	0.0	—	20.0	9.1	0.0	6.5
Nursing care	0.0	—	0.0	13.6	0.0	6.5
Allied health care	9.1	—	20.0	40.9	25.0	30.4
Personal care	0.0	—	20.0	40.9	25.0	26.1
Meals	0.0	—	40.0	22.7	25.0	19.6
Provision of goods & equipment	0.0	—	40.0	27.3	0.0	17.4
Transport services	0.0	—	40.0	13.6	0.0	10.9
Case management	0.0	—	20.0	9.1	0.0	6.5

NOTE: Includes only those episodes whose final accommodation is private residence

Number and type of services received post discharge – NATIONAL

Services received post discharge (NOTE: Discharge to private residence)	Carer status post discharge - AUSTRALIA					
	NO CARER & DOESN'T need one	NO CARER and NEEDS one	CARER NOT living in	CARER living in - NOT codependent	CARER living in - codependent	All episodes in private residence
Number of episodes in private residence	1,507	94	559	734	343	
Percent of episodes receiving:						
No services	44.3	22.3	19.0	31.9	40.5	36.1
1 service type	25.5	18.1	17.4	25.3	24.2	23.8
2 service types	13.9	12.8	19.5	17.7	14.6	15.9
3 service types	7.8	14.9	14.1	9.7	7.3	9.5
4 or more service types	8.4	31.9	30.1	15.4	13.4	14.7
Service Type received						
Domestic assistance	37.6	56.4	63.5	36.1	37.9	42.5
Social support	4.1	14.9	15.9	10.8	7.6	8.4
Nursing care	9.6	18.1	21.1	12.9	12.5	12.9
Allied health care	17.4	35.1	26.5	28.6	18.1	22.2
Personal care	13.0	36.2	39.7	26.4	18.7	22.1
Meals	8.8	19.1	25.9	12.3	11.1	13.1
Provision of goods & equipment	14.4	27.7	26.5	22.9	21.3	19.6
Transport services	6.8	19.1	18.2	12.0	7.9	10.5
Case management	2.9	18.1	13.4	5.6	6.4	6.1

NOTE: Includes only those episodes whose final accommodation is private residence

Appendix 1: Glossary

AN-SNAP

The Australian National Sub-Acute and Non-Acute Patient Classification (AN-SNAP) is a casemix classification for sub-acute and non-acute care provided in a variety of treatment settings. Version 3, introduced in January 2012, is used in these reports; refer Appendix 3 for the full list of classes.

Change in FIM score

The change in functional status from the beginning to the end of the episode is measured by the change in FIM score. This is calculated as the FIM score at the end of the episode minus the FIM score at the start of the episode. In some instances the change in total FIM score (the sum of items 1 to 18) is calculated. In other cases either the change in FIM motor score (the sum of items 1 to 13) or the change in FIM cognition score (the sum of items 14 to 18) is calculated.

A higher FIM score corresponds to higher level of function while a lower FIM score represents less functional independence. This means that a positive value for the change in FIM score indicates functional improvement of the client during the episode. A negative value for the change in FIM score indicates a decline in functional independence during the episode.

Complete/incomplete episode

An episode is considered "complete" for the purpose of calculating outcome statistics in this report if (A) the mode of episode end was either 1 (discharged to usual accommodation) or 2 (discharged to interim accommodation) AND total FIM score at episode end was greater than 18, or (B) the mode of episode end was 7 (change of care type within sub-acute/non-acute care) AND length of stay greater than 6 days.

Glossary ... continued

FIM

The Functional Independence Measure (FIM) is used as a tool to assess the functional independence of patients at episode start and end. Details of the specific FIM instrument used in these reports can be found in "*UDSmr Adult FIM Workshop – Participant Manual, Version 5.1 (Australia). Buffalo, NY 14214: State University of New York at Buffalo; 2008.*"

Interquartile range (IQR)

The middle 50% of facilities, between the 25% percentile and the 75% percentile.

Length of stay (LOS)

The length of stay (LOS) of an episode is the number of days on which care has been provided. It is calculated as the end date minus the start date, minus the number of leave days during the episode.

Valid FIM score

Each of the 18 items on admission and discharge were answered with a valid response of 1-7.

Valid LOS

Completed episode with a length of stay ranging between 1 and 500 days.

Version 4 data set

Version 4 (V4) of the AROC dataset was introduced on 1 July 2012. V4 is designed as a bank of data items, combinations of which are used to describe 6 possible pathways of care (see the AROC website for more information about the different pathways). NOTE: This report utilises only Pathway 3 data (inpatient direct care).

Appendix 2: AROC impairment codes

Orthopaedic fractures

Haemorrhagic

- 1.11 Left body involvement
- 1.12 Right body involvement
- 1.13 Bilateral involvement
- 1.14 No paresis
- 1.19 Other Orthopaedic fractures

Ischaemic

- 1.21 Left body involvement (right brain)
- 1.22 Right body involvement (left brain)
- 1.23 Bilateral involvement
- 1.24 No paresis
- 1.29 Other Orthopaedic fractures

BRAIN DYSFUNCTION

Non-traumatic

- 2.11 Sub-arachnoid haemorrhage
- 2.12 Anoxic brain damage
- 2.13 Other non-traumatic brain dysfunction

Traumatic

- 2.21 Open injury
- 2.22 Closed injury

NEUROLOGICAL CONDITIONS

- 3.1 Multiple Sclerosis
- 3.2 Parkinsonism
- 3.3 Polyneuropathy
- 3.4 Guillian-Barre
- 3.5 Cerebral palsy
- 3.8 Neuromuscular disorders
- 3.9 Other neurological conditions

SPINAL CORD DYSFUNCTION

Non traumatic spinal cord dysfunction

- 4.111 Paraplegia, incomplete
- 4.112 Paraplegia, complete
- 4.1211 Quadriplegia, incomplete C1-4
- 4.1212 Quadriplegia, incomplete C5-8
- 4.1221 Quadriplegia, complete C1-4
- 4.1222 Quadriplegia, complete C5-8
- 4.13 Other non-traumatic spinal cord dysfunction

Traumatic spinal cord dysfunction

- 4.211 Paraplegia, incomplete
- 4.212 Paraplegia, complete
- 4.2211 Quadriplegia, incomplete C1-4
- 4.2212 Quadriplegia, incomplete C5-8
- 4.2221 Quadriplegia, complete C1-4
- 4.2222 Quadriplegia, complete C5-8
- 4.23 Other traumatic spinal cord dysfunction

AMPUTATION OF LIMB

Not resulting from trauma

- 5.11 Single upper above elbow
- 5.12 Single upper below elbow
- 5.13 Single lower above knee (includes through knee)
- 5.14 Single lower below knee
- 5.15 Double lower above knee (includes through knee)
- 5.16 Double lower above/below knee
- 5.17 Double lower below knee
- 5.18 Partial foot (single or double)
- 5.19 Other amputation not from trauma

AMPUTATION OF LIMB

Resulting from trauma

- 5.21 Single upper above elbow
- 5.22 Single upper below elbow
- 5.23 Single lower above knee (includes through knee)
- 5.24 Single lower below knee
- 5.25 Double lower above knee (includes through knee)
- 5.26 Double lower above/below knee
- 5.27 Double lower below knee
- 5.28 Partial foot (single or double)
- 5.29 Other amputation from trauma

ARTHRITIS

- 6.1 Rheumatoid arthritis
- 6.2 Osteoarthritis
- 6.9 Other arthritis

PAIN SYNDROMES

- 7.1 Neck pain
- 7.2 Back Pain
- 7.3 Extremity pain
- 7.4 Headache (includes migraine)
- 7.5 Multi-site pain
- 7.9 Other pain (includes abdo/chest wall)

AROC impairment codes...continued

ORTHOPAEDIC CONDITIONS

Fractures (includes dislocation)

- 8.111 Fracture of hip, unilateral (incl. #NOF)
- 8.112 Fracture of hip, bilateral (incl. #NOF)
- 8.12 Fracture of shaft of femur
- 8.13 Fracture of pelvis
- 8.141 Fracture of knee
- 8.142 Fracture of lower leg, ankle, foot
- 8.15 Fracture of upper limb
- 8.16 Fracture of spine
- 8.17 Fracture of multiple sites
- 8.19 Other orthopaedic fracture

Post Orthopaedic Surgery

- 8.211 Unilateral hip replacement
- 8.212 Bilateral hip replacement
- 8.221 Unilateral knee replacement
- 8.222 Bilateral knee replacement
- 8.231 Knee and hip replacement, same side
- 8.232 Knee and hip replacement, diff sides
- 8.24 Shoulder replacement
- 8.25 Post spinal surgery
- 8.26 Other orthopaedic surgery

Soft tissue injury

- 8.3 Soft tissue injury

CARDIAC

- 9.1 Following recent onset of new cardiac impairment
- 9.2 Chronic cardiac insufficiency
- 9.3 Heart and heart/lung transplant

PULMONARY

- 10.1 Chronic obstructive pulmonary disease
- 10.2 Lung transplant
- 10.9 Other pulmonary

BURNS

- 11 Burns

CONGENITAL DEFORMITIES

- 12.1 Spina bifida
- 12.9 Other congenital deformity

OTHER DISABLING IMPAIRMENTS

- 13.1 Lymphoedema
- 13.3 Conversion disorder
- 13.9 Other disabling impairments that cannot be classified into a specific group

MAJOR MULTIPLE TRAUMA

- 14.1 Brain + spinal cord injury
- 14.2 Brain + multiple fracture/amputation
- 14.3 Spinal cord + multi fracture/amputation
- 14.9 Other multiple trauma

DEVELOPMENTAL DISABILITIES

- 15.1 Developmental disabilities (excludes cerebral palsy)

RE-CONDITIONING/RESTORATIVE

- 16.1 Re-conditioning following surgery
- 16.2 Reconditioning following medical illness
- 16.3 Cancer rehabilitation

Appendix 3: AN-SNAP V3 overnight rehabilitation classes

Class	Description of AN-SNAP class
3-201	Rehabilitation, admit for assessment only
3-202	Brain, Neurological, Spinal & Major Multiple Trauma, FIM 13
3-203	All other impairments, FIM 13
3-204	Orthopaedic fractures , FIM motor 63-91, FIM cognition 20-35
3-205	Orthopaedic fractures , FIM motor 63-91, FIM cognition 5-19
3-206	Orthopaedic fractures, FIM motor 47-62, FIM cognition 16-35
3-207	Orthopaedic fractures, FIM motor 47-62, FIM cognition 5-15
3-208	Orthopaedic fractures, FIM motor 14-46, age>=75
3-209	Orthopaedic fractures, FIM motor 14-46, age<=74
3-210	Brain Dysfunction, FIM motor 56-91, FIM cognition 32-35
3-211	Brain Dysfunction, FIM motor 56-91, FIM cognition 24-31
3-212	Brain Dysfunction, FIM motor 56-91, FIM cognition 20-23
3-213	Brain Dysfunction, FIM motor 56-91, FIM cognition 5-19
3-214	Brain Dysfunction, FIM motor 24-55
3-215	Brain Dysfunction, FIM motor 14-23
3-216	Neurological, FIM motor 63-91
3-217	Neurological, FIM motor 49-62
3-218	Neurological, FIM motor 18-48
3-219	Neurological, FIM motor 14-17
3-220	Spinal Cord Dysfunction, FIM motor 81-91
3-221	Spinal Cord Dysfunction, FIM motor 47-80
3-222	Spinal Cord Dysfunction, FIM motor 14-46, age>=33
3-223	Spinal Cord Dysfunction, FIM motor 14-46, age<=32

Class	Description of AN-SNAP Classes
3-224	Amputation of limb, FIM motor 72-91
3-225	Amputation of limb, FIM motor 14-71
3-226	Pain Syndromes
3-227	Orthopaedic conditions, fractures, FIM motor 58-91
3-228	Orthopaedic conditions, fractures, FIM motor 48-57
3-229	Orthopaedic conditions, fractures, FIM motor 14-47, FIM cognition 19-35
3-230	Orthopaedic conditions, fractures, FIM motor 14-47, FIM cognition 5-18
3-231	Orthopaedic conditions, replacement, FIM motor 72-91
3-232	Orthopaedic conditions, replacement, FIM motor 49-71
3-233	Orthopaedic conditions, replacement, FIM motor 14-48
3-234	Orthopaedic conditions, all other, FIM motor 68-91
3-235	Orthopaedic conditions, all other, FIM motor 53-67
3-236	Orthopaedic conditions, all other, FIM motor 14-52
3-237	Cardiac
3-238	Major Multiple Trauma, FIM total 101-126
3-239	Major Multiple Trauma, FIM total 74-100 or Burns
3-240	Major Multiple Trauma, FIM total 44-73
3-241	Major Multiple Trauma, FIM total 19-43
3-242	All other impairments, FIM motor 67-91
3-243	All other impairments, FIM motor 53-66
3-244	All other impairments, FIM motor 25-52
3-245	All other impairments, FIM motor 14-24

NOTE: AN-SNAP classes for inpatient rehabilitation have not changed between V2 and V3.

Acknowledgements

- **AROC wish to acknowledge the valuable contributions made by:**
 - Members of the Management Advisory Group of the Australasian Rehabilitation Outcomes Centre
 - Members of the Scientific and Clinical Advisory Committee of the Australasian Rehabilitation Outcomes Centre
 - The many staff from the rehabilitation facilities who have spent a great deal of time and care to collect, collate and correct the data, without whose considerable effort these reports would not be possible.
- **Disclaimer**

AROC has made every effort to ensure that the data used in these reports are accurate. Data submitted to AROC are checked for anomalies and facilities are asked to re-submit data prior to the production of AROC reports. We have provided general guidelines on the interpretation of the information reported but would advise readers to use their professional judgement in considering all information contained in this report.
- **Copyright**

This work is copyright. It may be produced in whole or in part for study or training purposes subject to the inclusion of an acknowledgment of the source and no commercial usage or sale. Reproduction for purposes other than those above requires the written permission of AROC.
- **Suggested acknowledgement**

Anywhere Hospital AROC Impairment Specific Report on Orthopaedic Fractures (Inpatient - Pathway 3), January 2012 to December 2012. Australasian Rehabilitation Outcomes Centre (2013).

AROC Contact Details

Australasian Rehabilitation Outcomes Centre

Australian Health Services Research Institute

iC Enterprise 1, Innovation Campus

University of Wollongong NSW 2522

Phone: +61 2 4221 4411

Email: aroc@uow.edu.au

Web: ahsri.uow.edu.au/aroc