The AROC Annual Report:

The state of rehabilitation in New Zealand in 2019

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Introduction

This is the seventh comprehensive annual report describing discharge episodes from subacute inpatient rehabilitation programs provided by New Zealand facilities that are members of the Australasian Rehabilitation Outcomes Centre (AROC).

The inaugural report was published in 2013 and described the 2012 data; this sixth instalment describes the 2018 data.

This report is the third to use the version 4 AN-SNAP classification (implemented in Australia in July 2016). For more information about AN-SNAP classification please refer to the AROC website: http://ahsri.uow.edu.au/aroc

This report also includes an extended times series analysis, looking at change in various rehabilitation measures over the most recent five years.

The provision of rehabilitation in New Zealand has grown over the past few years, with 2018 seeing a 3.8% real increase in inpatient episodes of rehabilitation provided.

Number of episodes by impairment group, 2019
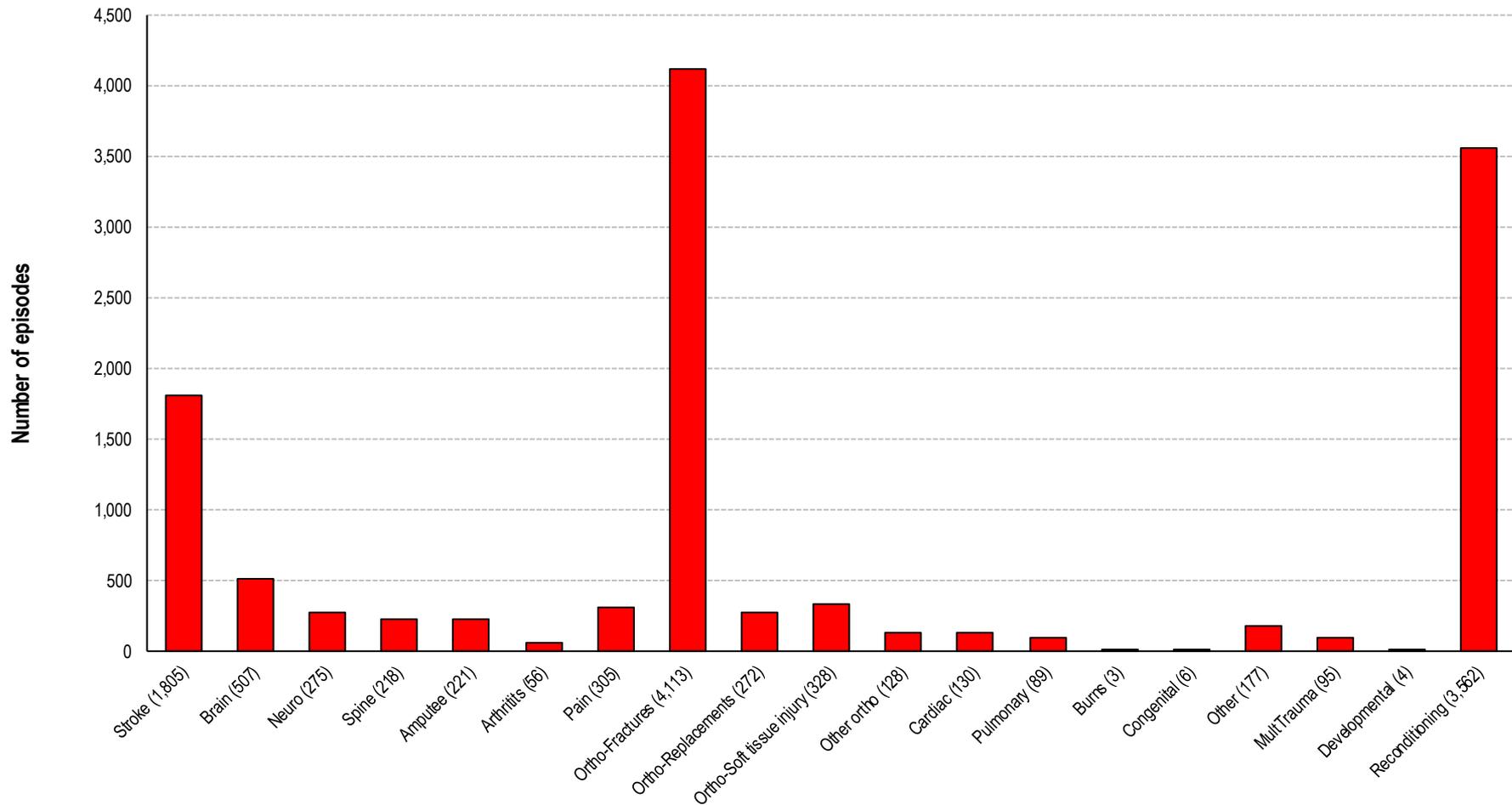
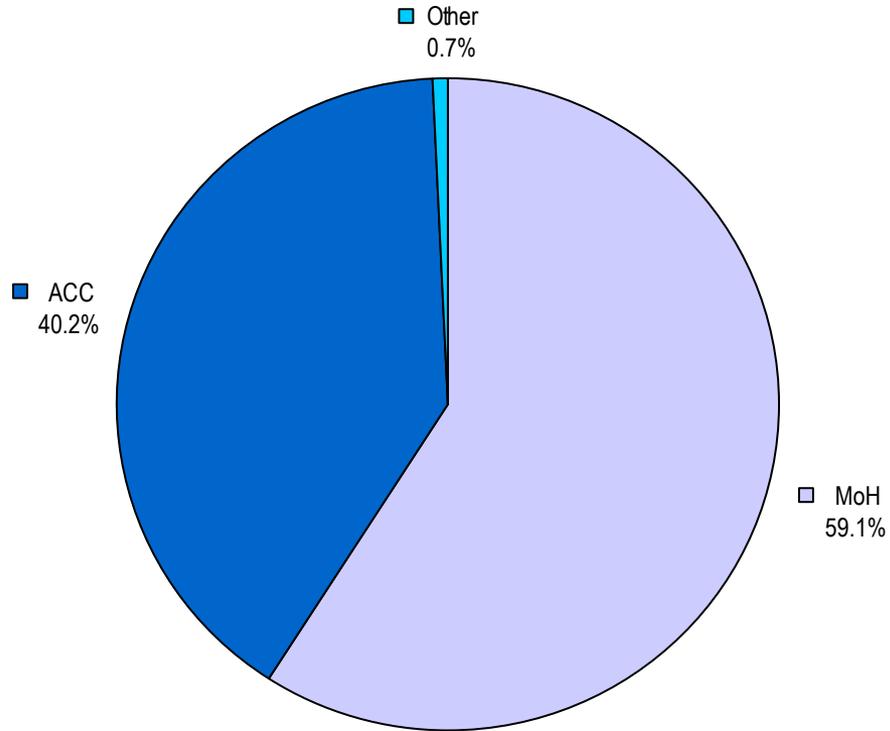# Funding source for rehabilitation in New Zealand, 2019

Changes in rehabilitation – compared to last year

The following figures look at changes in rehabilitation between last year and this year:

- The first figure considers the number of episodes within each impairment group and documents real changes in episode volume since last year.

- The second figure presents the key changes in rehabilitation outcome measures between last year and this year. The horizontal axis describes the difference between last year and this year averages, while last years actual values are presented on the left side of the graph.

Change in number of episodes by impairment group, 2018 to 2019

Percentage change in number of episodes

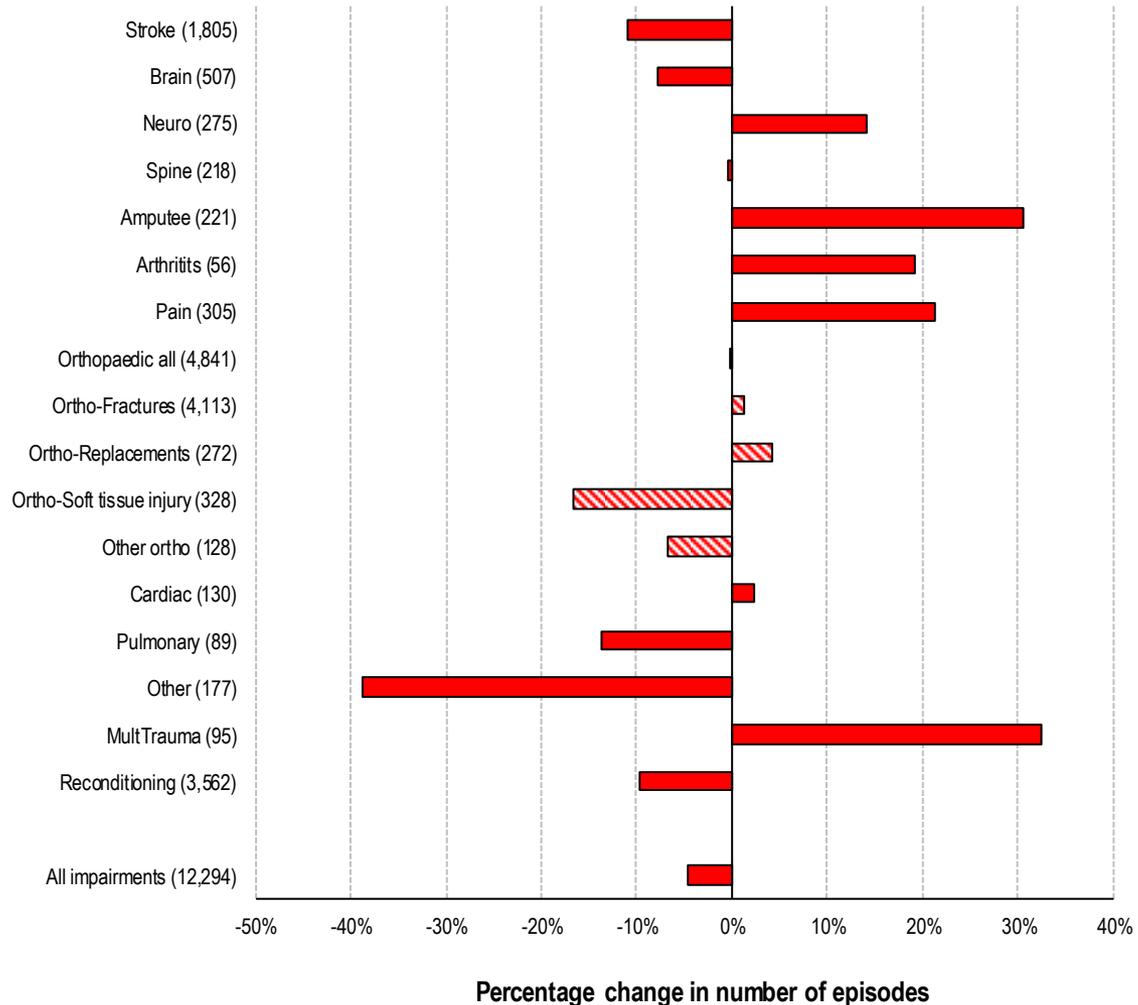# Change in outcome measures, 2018 to 2019

Difference from 2018 data
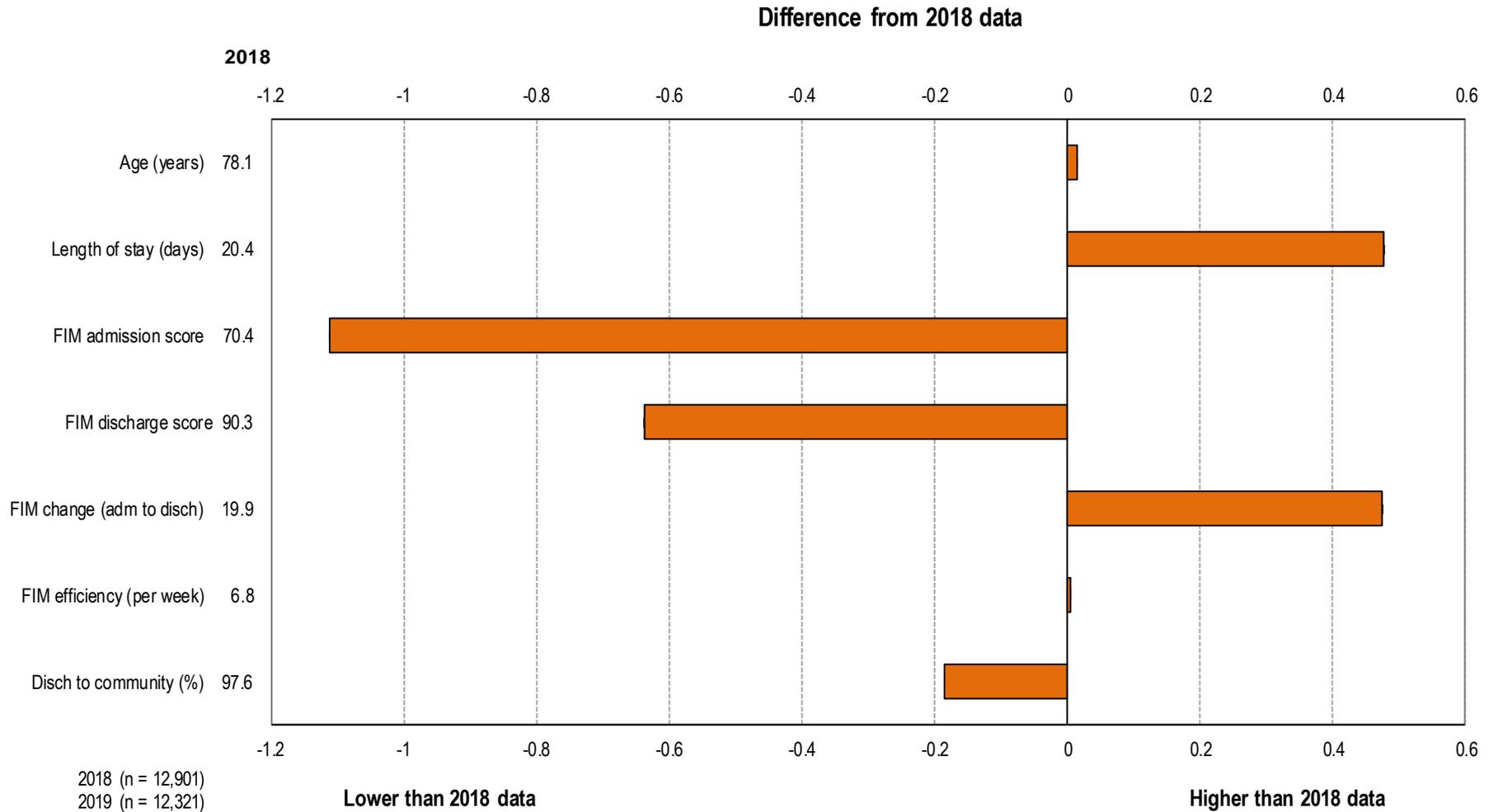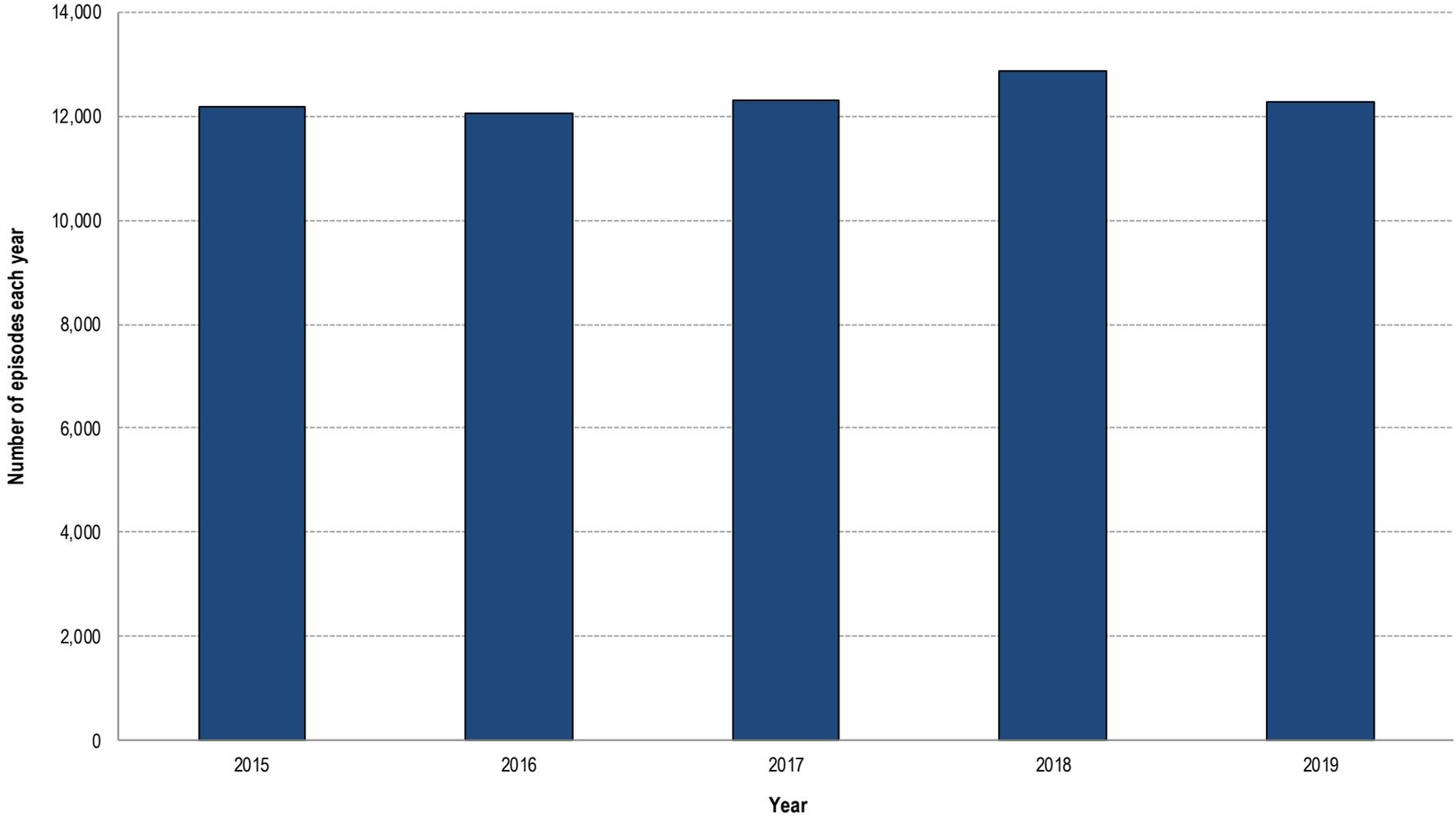
Changes in rehabilitation – compared to five years ago

The following figures look at changes in rehabilitation over the last 5 years:

- The first figure shows the total number of episodes each year over the past 5 years.

- The second figure outlines the changing proportion of episodes within each impairment group over the past five years as a proportion of all episodes each year.

- The third figure presents the key changes in rehabilitation outcome measures between five years ago and this year. The horizontal axis describes the difference between five years ago and this year averages, while the actual values from five years ago are presented on the left side of the graph.

- The remaining figures provide a graphical representation of the change in various rehabilitation measures over the most recent five years. Each bar (one per year) represents the difference, positive or negative, of that year's value to the value from five years ago. The value for the bar from five years ago will always be zero.
  - Age at admission
  - Admission to rehabilitation within a week of injury or onset of symptoms
  - Length of stay
  - Proportion of FIM assessments within three days of rehabilitation commencing
  - Admission FIM score as a proportion of the total score possible
  - FIM change as a proportion of the total change possible
  - FIM efficiency

Number of episodes each year - 2015 to 2019

Proportion of episodes by impairment group, 2015 to 2019
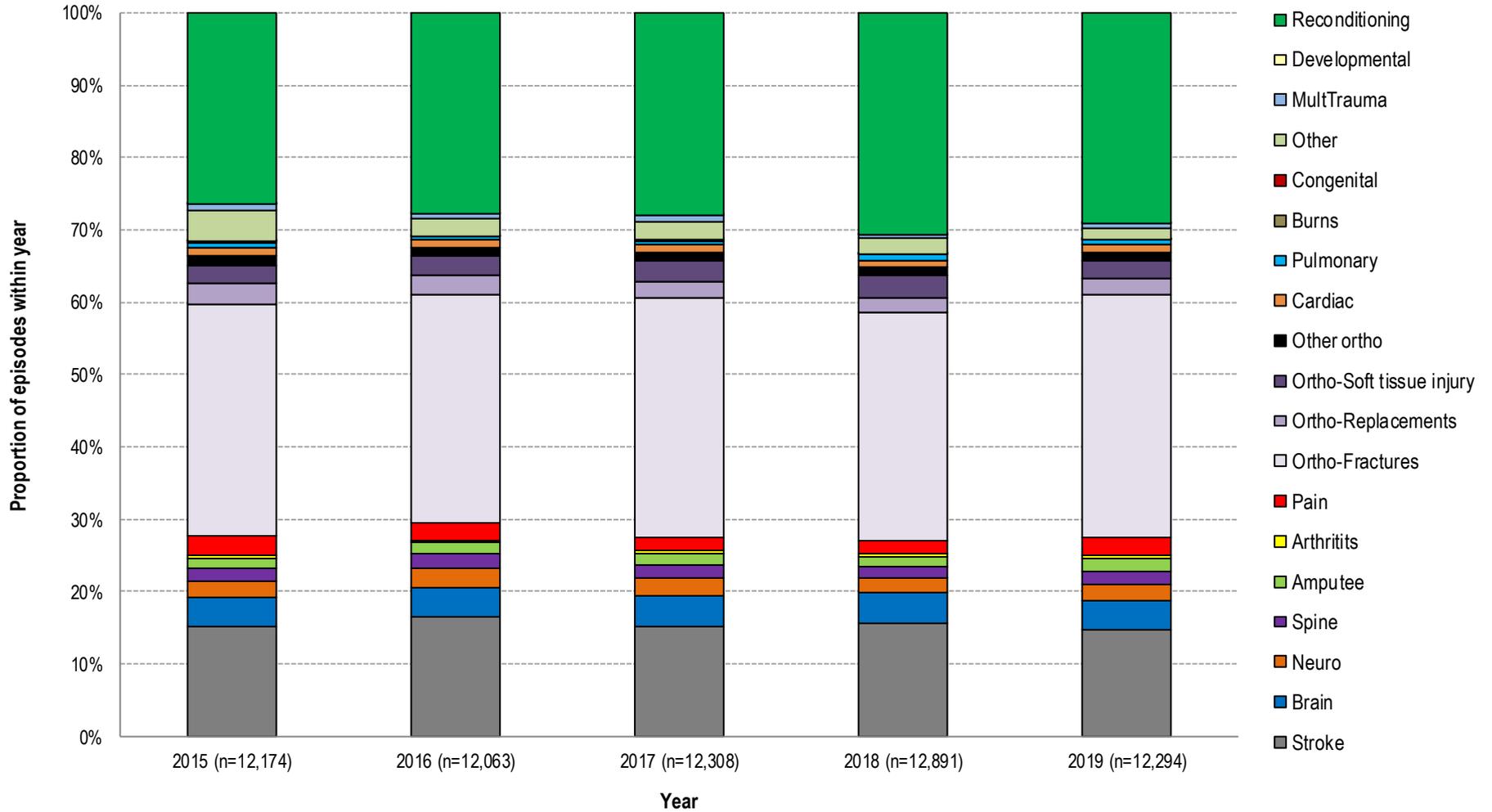
Change in outcome measures, 2015 to 2019

Difference from 2015 data

2015

	2015
Age (years)	77.9
Length of stay (days)	20.8
FIM admission score	73.6
FIM discharge score	91.7
FIM change (adm to disch)	18.1
FIM efficiency (per week)	6.1
Disch to community (%)	97.3

2015 (n = 12,190)
2019 (n = 12,321)

Lower than 2015 data   **Higher than 2015 data**
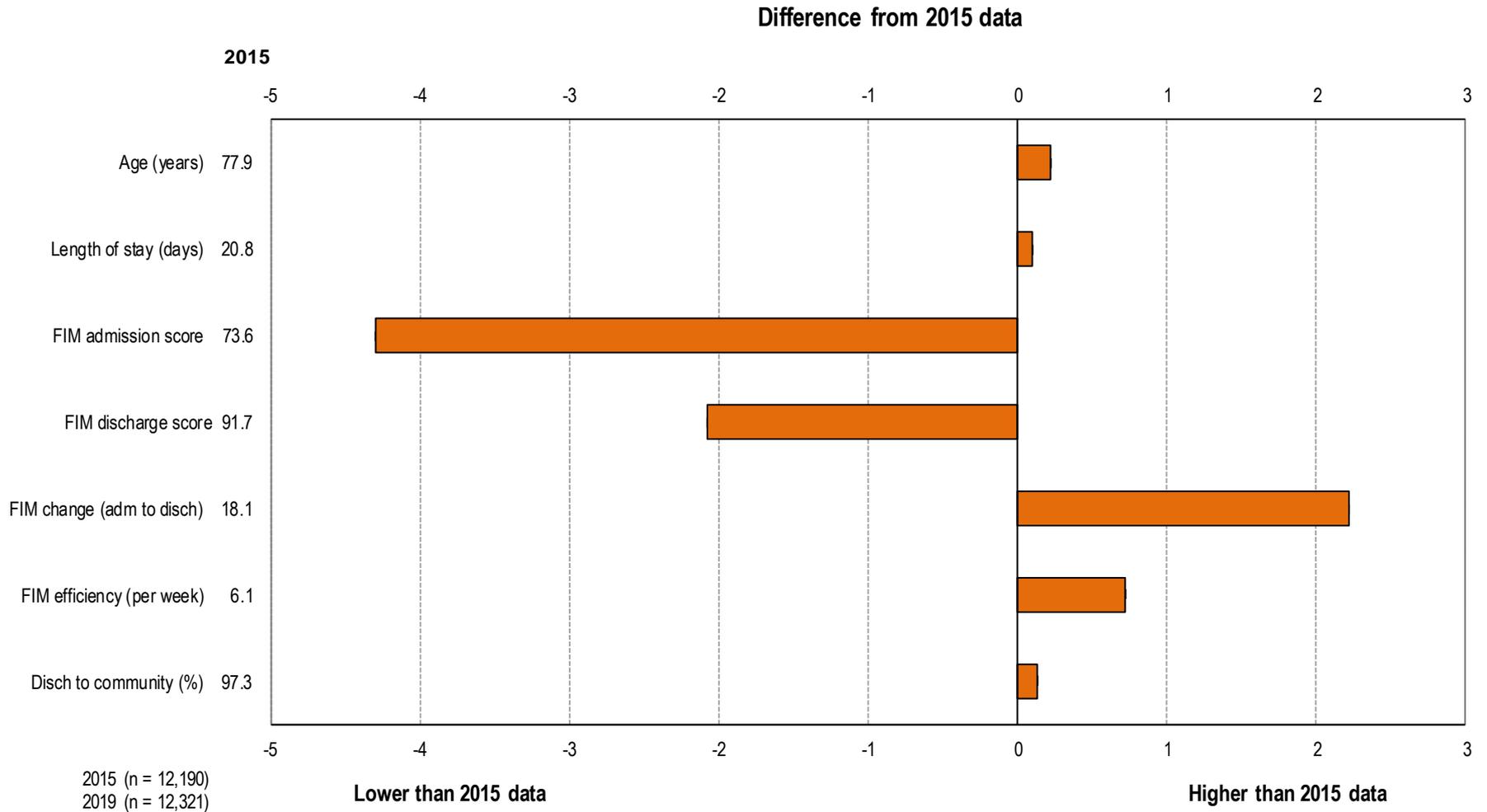
Average age compared to five years ago
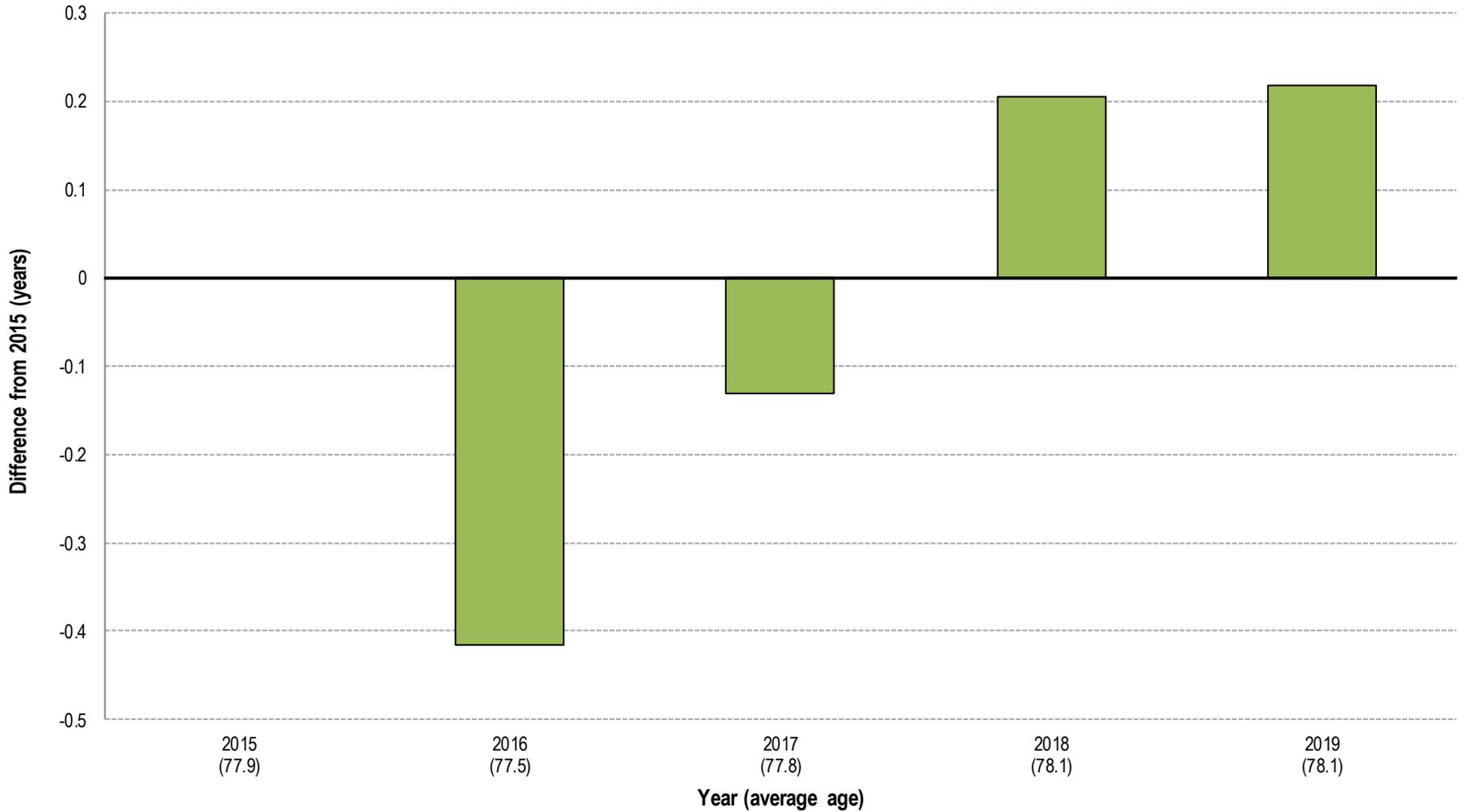
Over the last five years patients age has fluctuated very little.

Admission to rehabilitation within a week of injury or onset of symptoms compared to five years ago
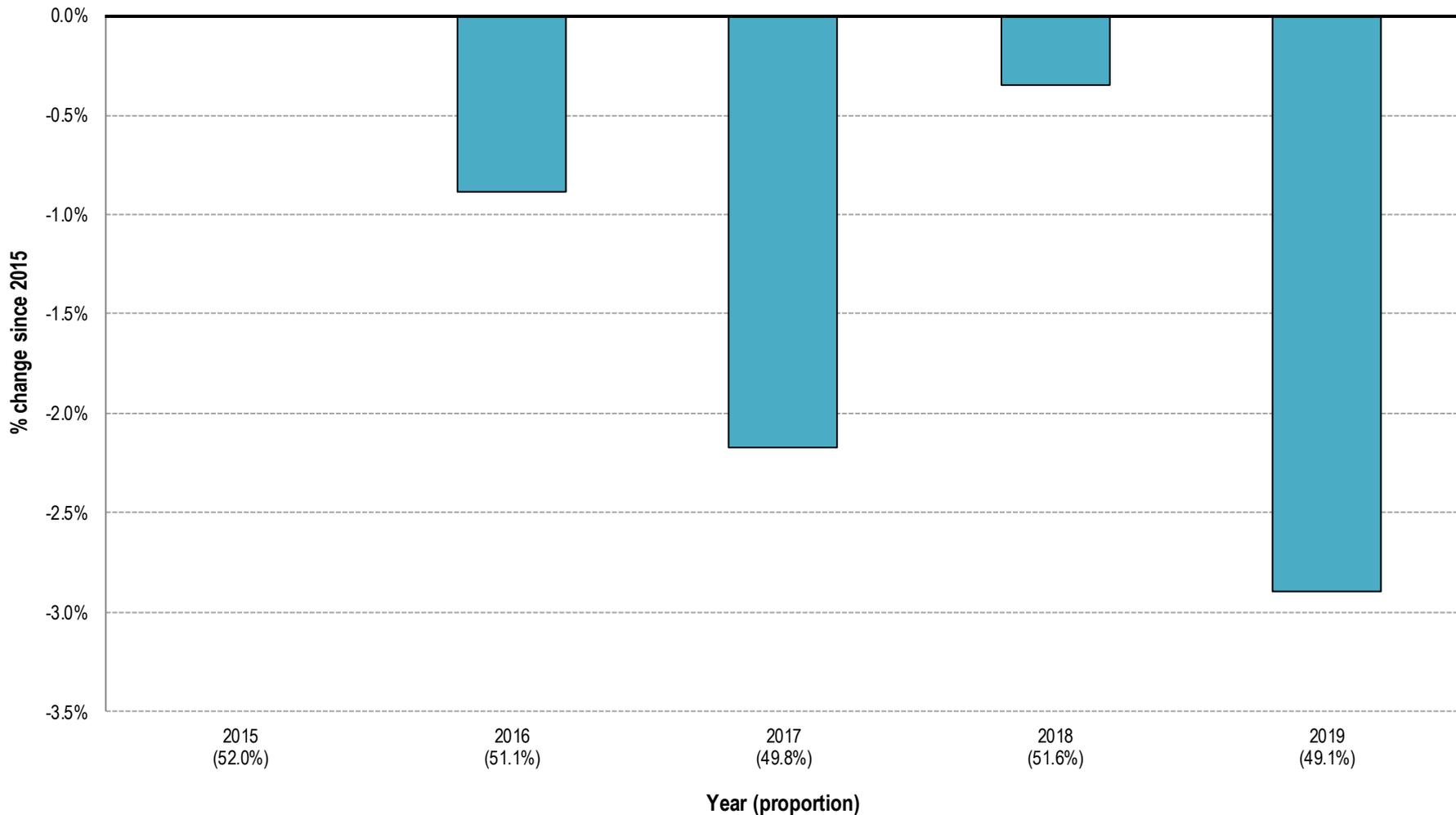
Over the last five years half of all patients commenced rehabilitation within a week after their injury / onset of symptoms; the proportion has decreased slightly over time with 3% fewer patients in 2019 admitted to rehabilitation within a week of onset compared to in 2015.

Length of stay compared to five years ago
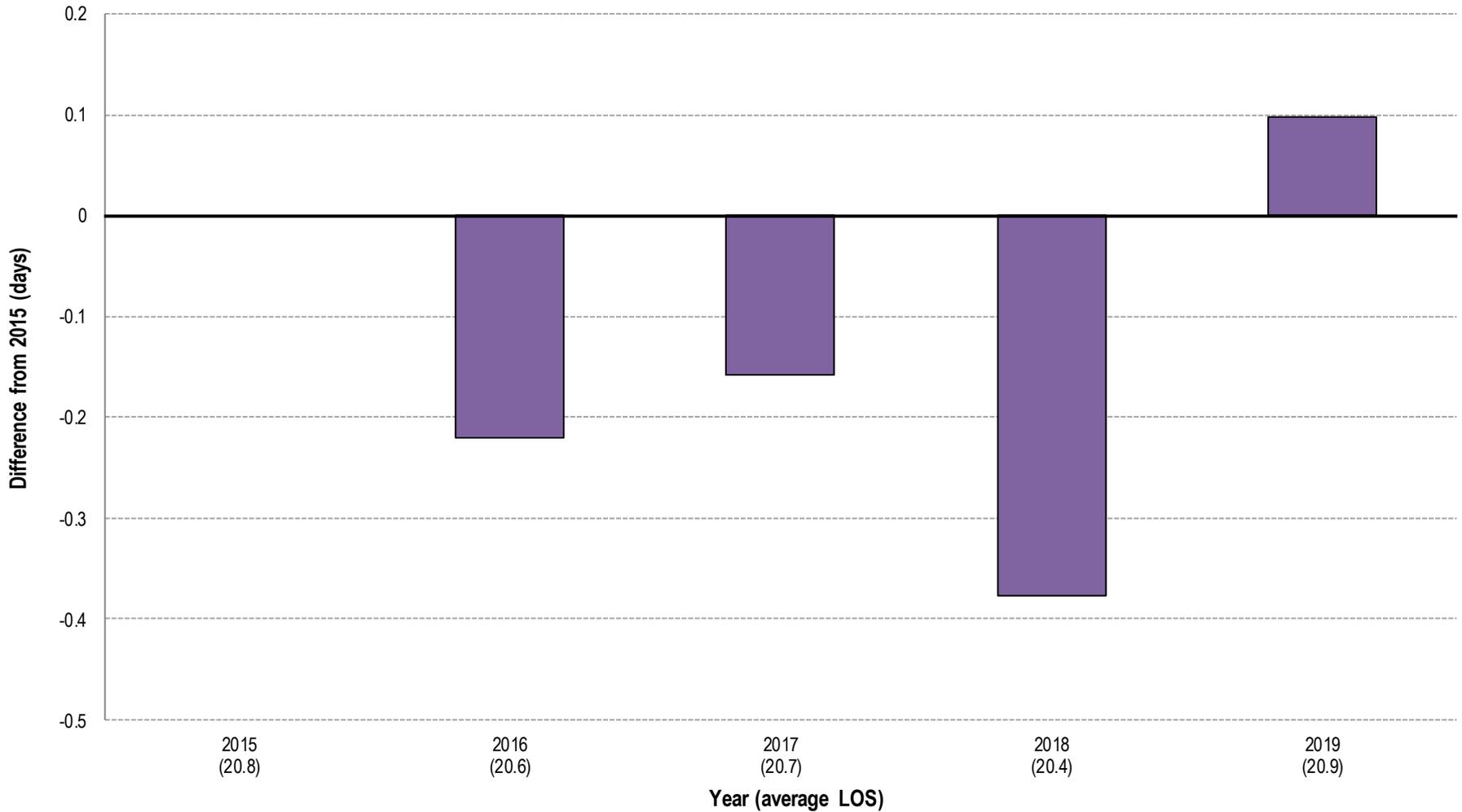
Over the last five years rehabilitation length of stay (LOS) has been consistently around 20-21 days.

Timeliness of FIM assessment within 24 hours compared to five years ago
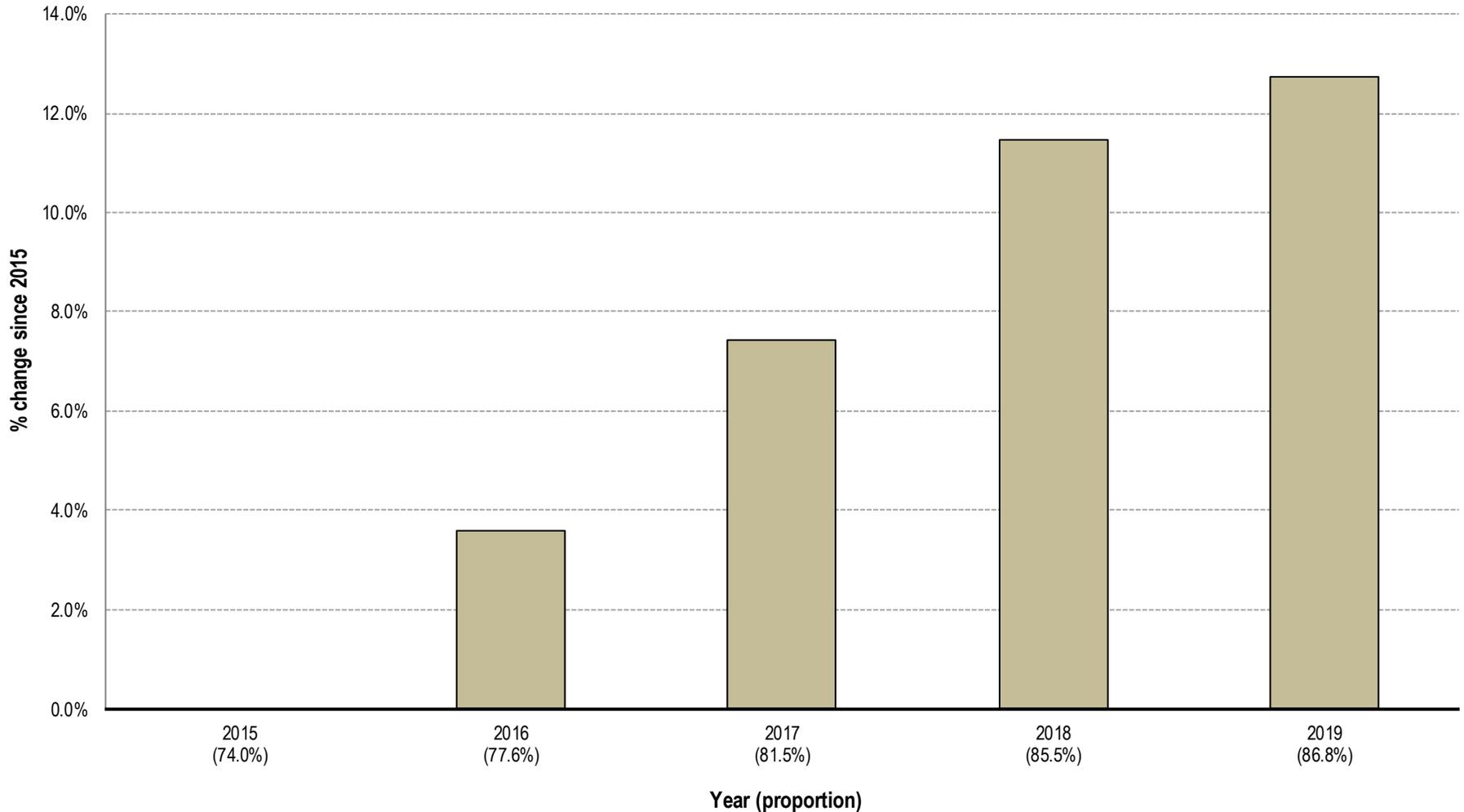
Over the last 5 years timeliness of FIM assessment has greatly increased, with nearly 13% more patients assessed for their functional ability within 24 hours of rehabilitation commencing in 2019 when compared to 2015.

FIM scores at admission as a proportion of total possible compared to five years ago
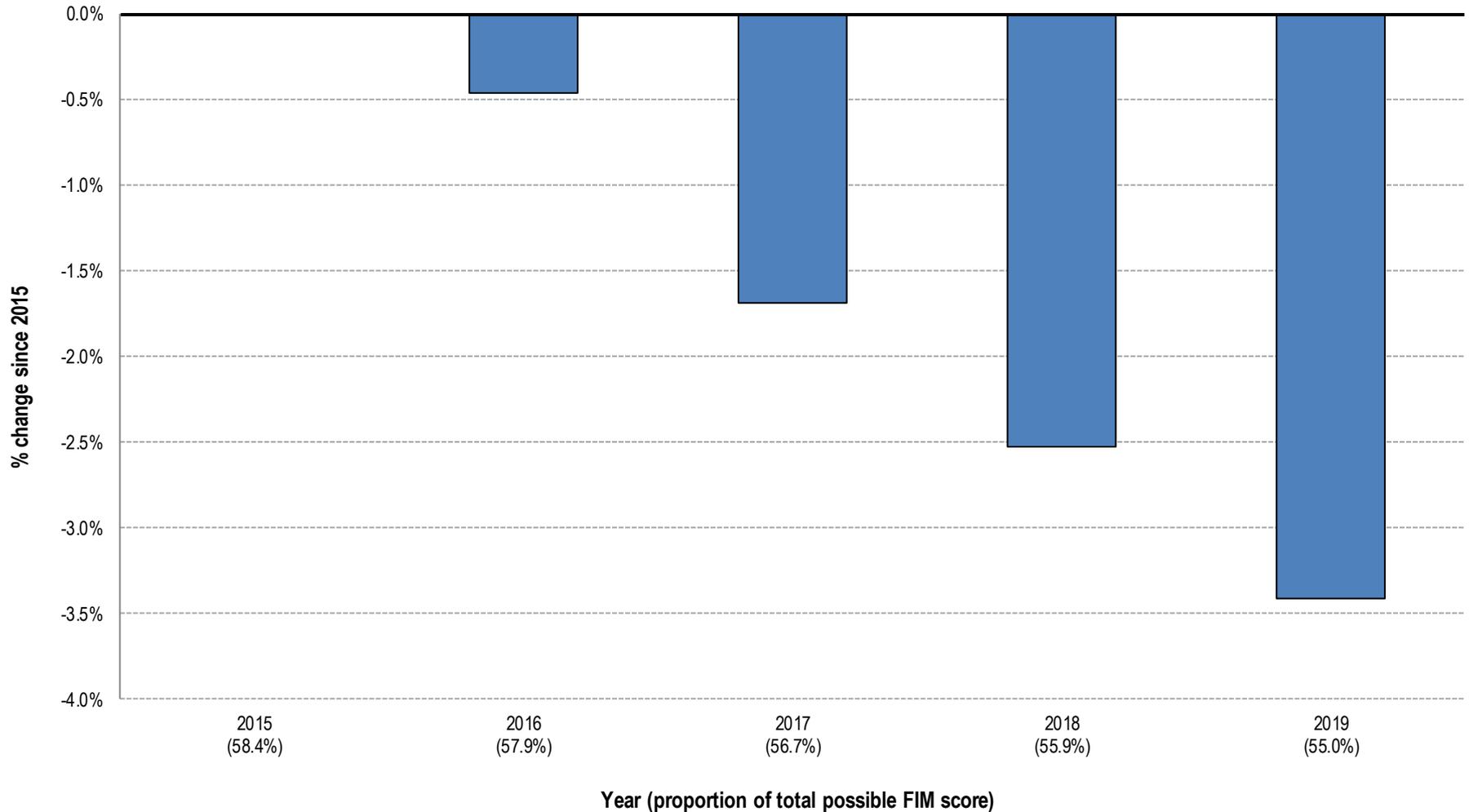
Over the last five years the FIM admission score has continued annually to decline slightly, being 3.4% lower in 2019 compared to in 2015.

Relative functional gain in FIM compared to five years ago
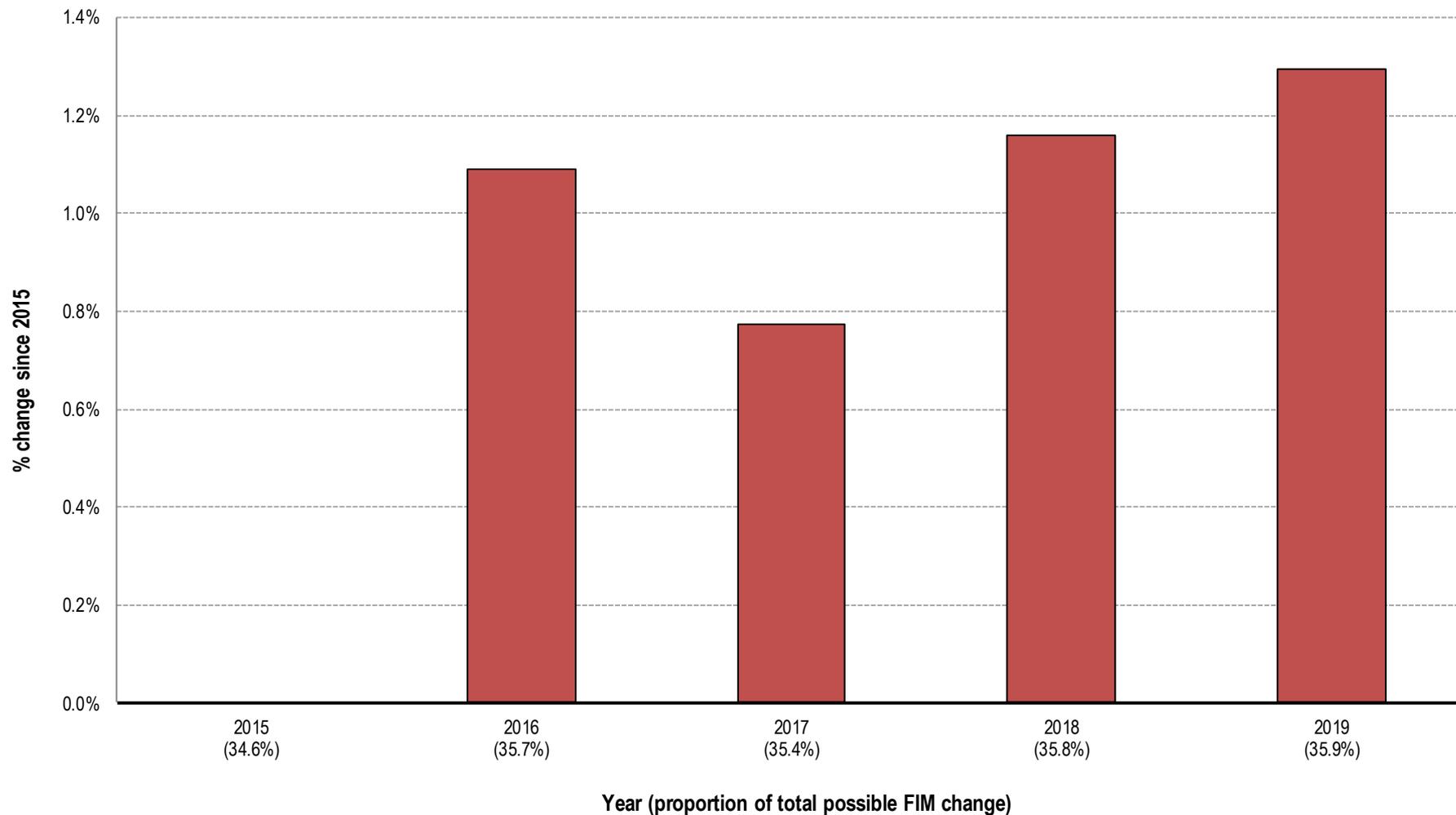
FIM Relative Functional Gain (RFG), or change in FIM score possible from admission to discharge has increased slightly over the last few years and was 1.3% higher in 2019 than it was in 2015. In 2019 35.9% of FIM relative functional gain was achieved.

FIM efficiency per week compared to five years ago
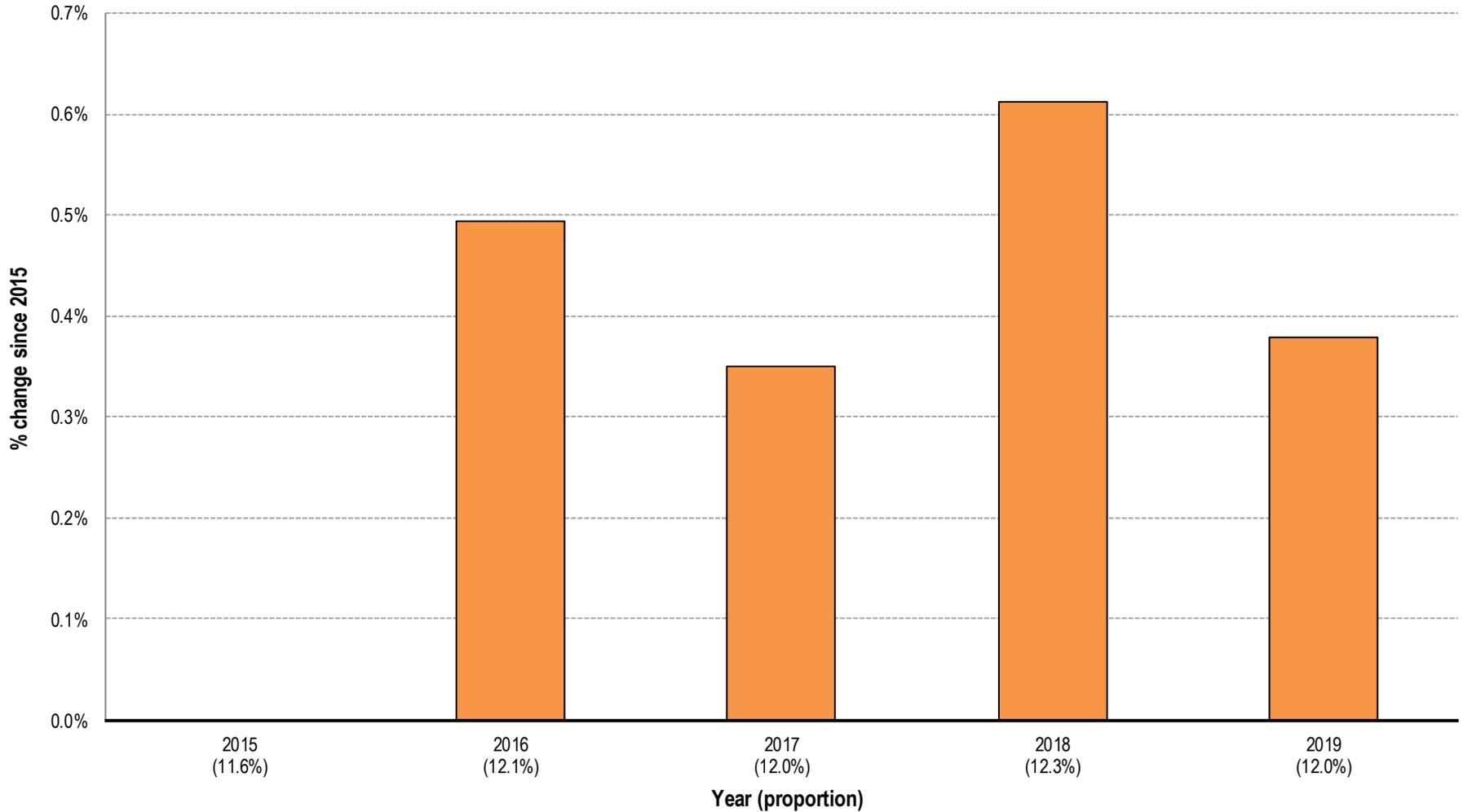
Over the last five years weekly FIM efficiency (change in FIM score possible from admission to discharge divided by length of stay x7) has been fluctuating close to 12%. This is in keeping with the observed LOS and FIM change over this period.

Outcomes by impairment

A series of figures and tables are provided for each impairment group; these outline the key descriptive data for this year, changes in episode volumes over the last 5 years, and changes in rehabilitation outcome measures between last year and this year:

- The first figure in each group outlines the number of episodes for each quarter over the past five years, and documents any changes in episode volume over time and/or seasonal trends.

- The second figure displays the proportion of episodes in each AN-SNAP class overt he last 5 years.

- The third is a table outlining key data for the respective impairment group by AN-SNAP class.

- The fourth figure provides a summary of the discharge destination of all episodes by AN-SNAP class.

- The fifth figure provides a graphical representation of length of stay (LOS) and improvement in the FIM (Functional Independence Measure) by AN-SNAP class.

- Finally, the sixth figure presents the key changes in rehabilitation outcome measures between last year and this year. The horizontal axis describes the difference between last year and this year averages, while last years actual values are presented on the left side of the graph.

Stroke episodes over time

Number of episodes by quarter - Stroke
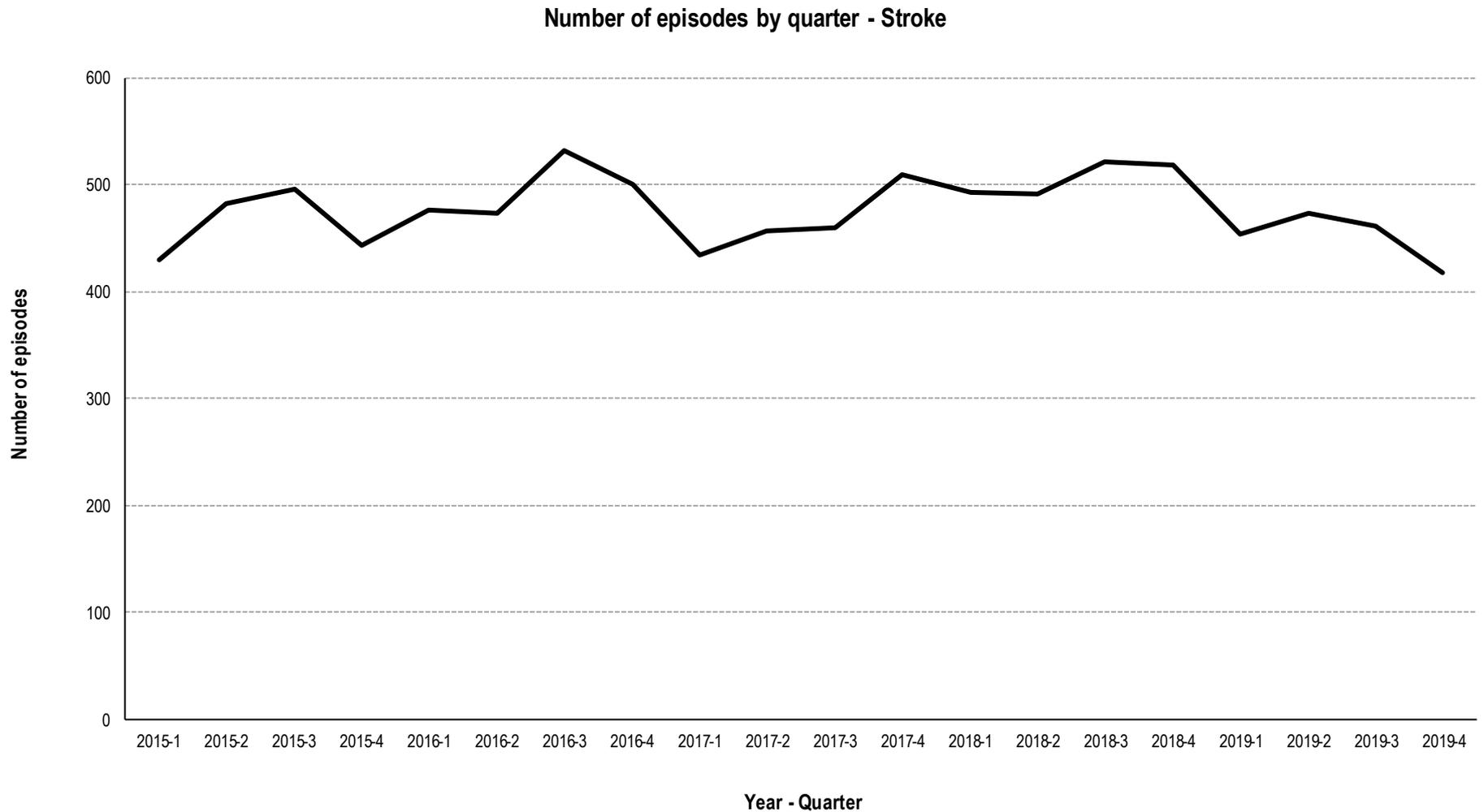
Stroke casemix over time
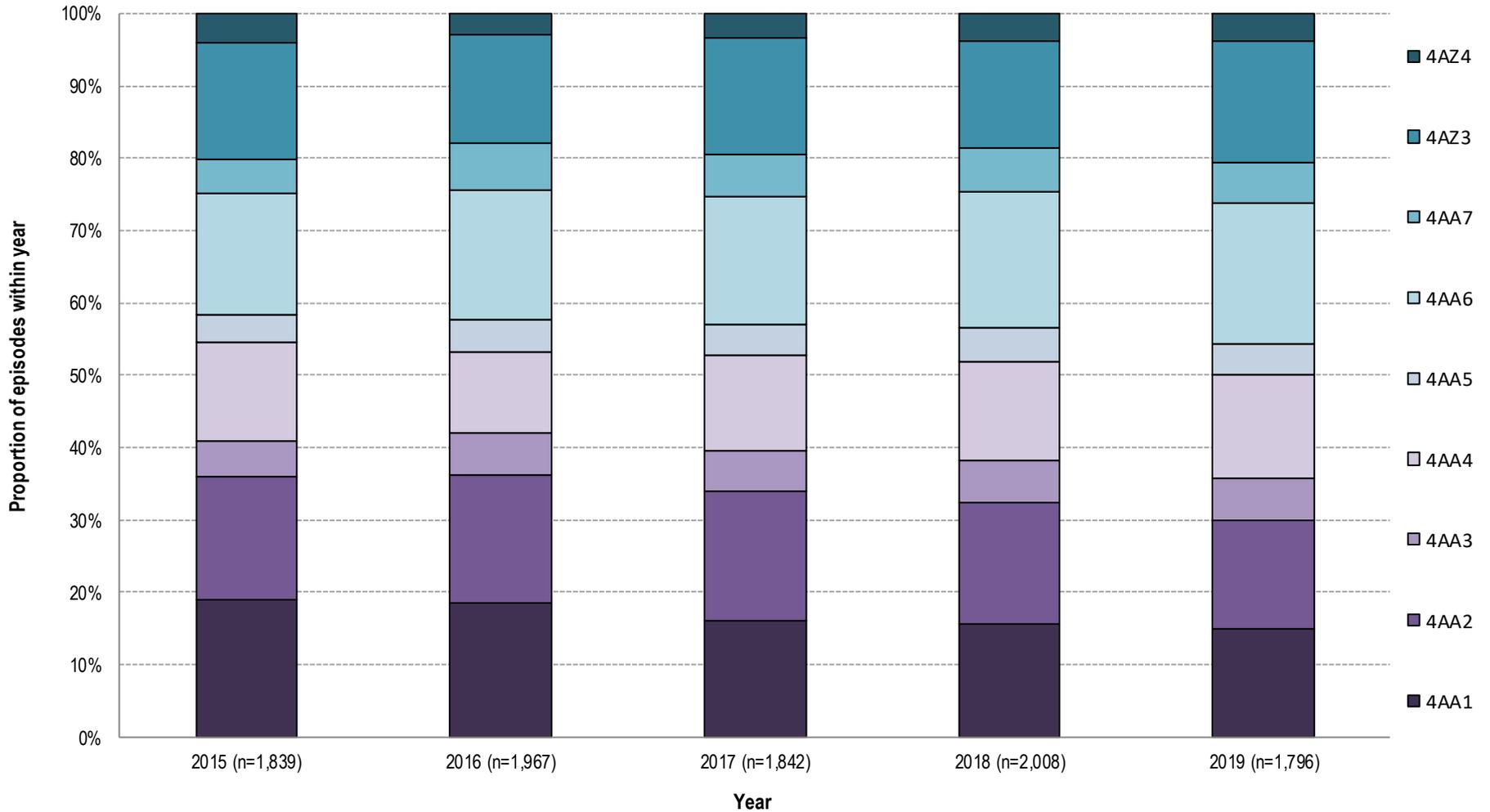
Stroke episodes in 2019

AN-SNAP class:	4AA1	4AA2	4AA3	4AA4	4AA5	4AA6	4AA7	4AZ3	4AZ4	All Stroke
Number of episodes	269	271	104	257	75	350	102	300	68	1,805
Proportion of episodes	14.9%	15.0%	5.8%	14.2%	4.2%	19.4%	5.7%	16.6%	3.8%	100.0%
Gender (%)										
Female	*48.0%*	*37.3%*	*51.0%*	*51.0%*	*36.0%*	*50.0%*	*42.2%*	*50.3%*	*45.6%*	*46.9%*
Male	*51.7%*	*62.4%*	*49.0%*	*49.0%*	*64.0%*	*50.0%*	*57.8%*	*49.7%*	*54.4%*	*53.0%*
Age group (%)										
Under 65	*27.1%*	*24.4%*	*14.4%*	*0.0%*	*77.3%*	*0.0%*	*85.3%*	*0.0%*	*100.0%*	*20.4%*
Over 65	*72.9%*	*75.6%*	*85.6%*	*100.0%*	*22.7%*	*100.0%*	*14.7%*	*100.0%*	*0.0%*	*79.3%*
Age (Mean+95%CI)	72.3 (70.6-74.0)	73.1 (71.5-74.8)	76.2 (74.1-78.3)	81.2 (80.3-82.1)	56.8 (54.6-59.0)	80.7 (79.9-81.5)	55.9 (54.2-57.6)	79.7 (78.8-80.6)	54.1 (51.7-56.5)	74.5 (73.9-75.1)
Admission FIM (Mean+95%CI)	99.2 (97.9-100.4)	88.2 (86.8-89.6)	76.7 (74.7-78.6)	65.2 (64.2-66.2)	67.9 (65.8-70.1)	47.7 (46.6-48.8)	49.0 (46.9-51.1)	29.4 (28.4-30.3)	29.2 (27.0-31.4)	63.4 (62.2-64.7)
LOS (Mean+95%CI)	12.2 (11.2-13.3)	14.7 (13.6-15.8)	19.7 (17.1-22.2)	23.8 (20.6-27.1)	23.9 (21.1-26.6)	32.1 (30.3-34.0)	40.5 (35.9-45.2)	40.6 (37.9-43.2)	65.1 (56.8-73.4)	27.1 (26.1-28.2)
Discharge destination (%)										
Discharged to community	*99.6%*	*98.9%*	*99.0%*	*98.8%*	*97.3%*	*97.7%*	*96.0%*	*97.2%*	*92.6%*	*98.0%*
Remaining in hospital system	*0.4%*	*1.1%*	*1.0%*	*1.2%*	*2.7%*	*2.3%*	*4.0%*	*2.8%*	*7.4%*	*2.0%*
FIM change (Mean+95%CI)	14.2 (13.2-15.3)	16.7 (15.4-18.1)	19.8 (17.3-22.2)	25.5 (23.6-27.4)	35.9 (32.7-39.1)	28.7 (26.4-30.9)	45.2 (41.3-49.2)	21.5 (18.9-24.0)	36.3 (29.8-42.8)	24.0 (23.1-24.9)
FIM efficiency (FIM change/LOS)	1.2	1.1	1.0	1.1	1.5	0.9	1.1	0.5	0.6	0.9

Stroke discharge destination by AN-SNAP class

Discharge destination - Stroke

Stroke LOS and FIM change by AN-SNAP class
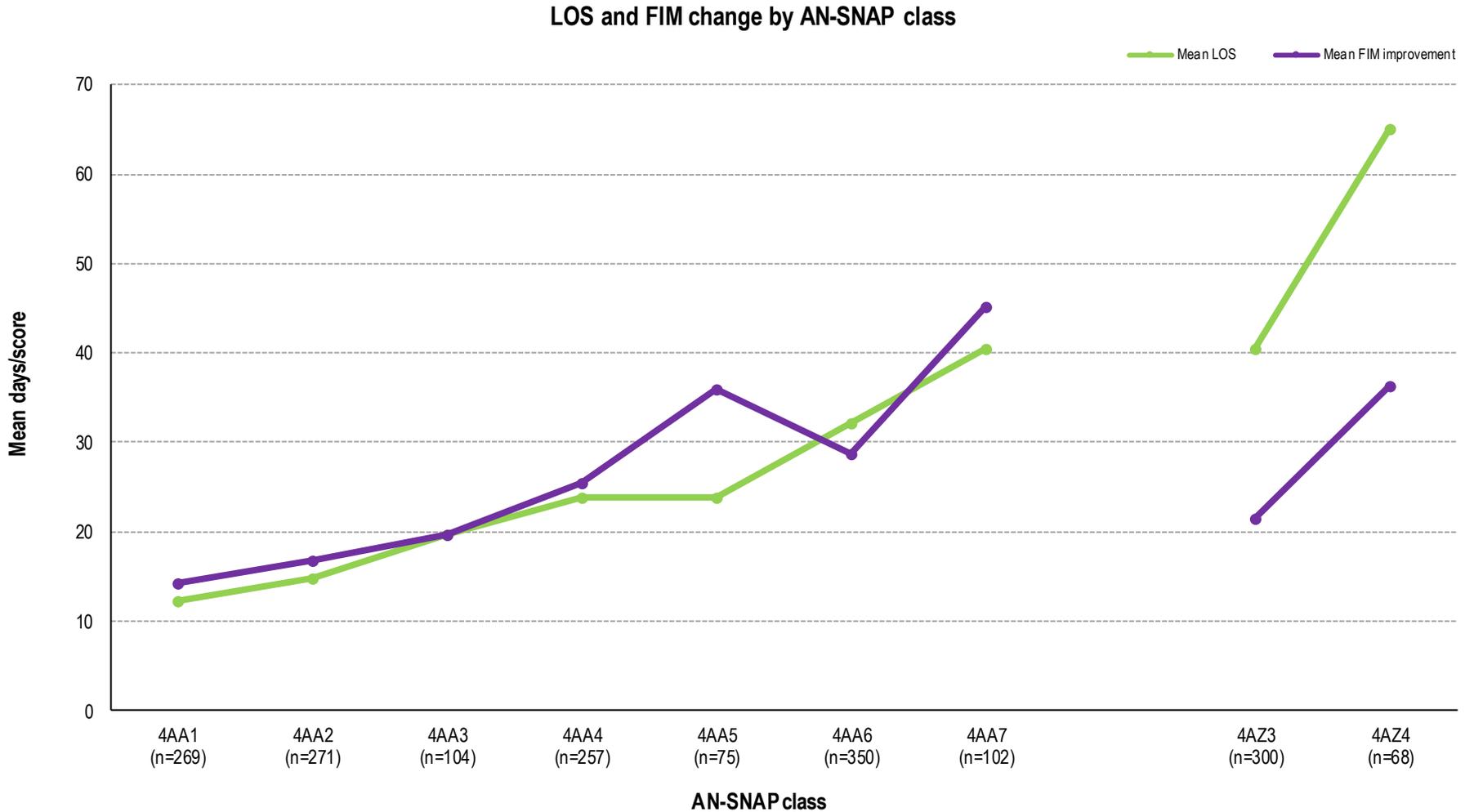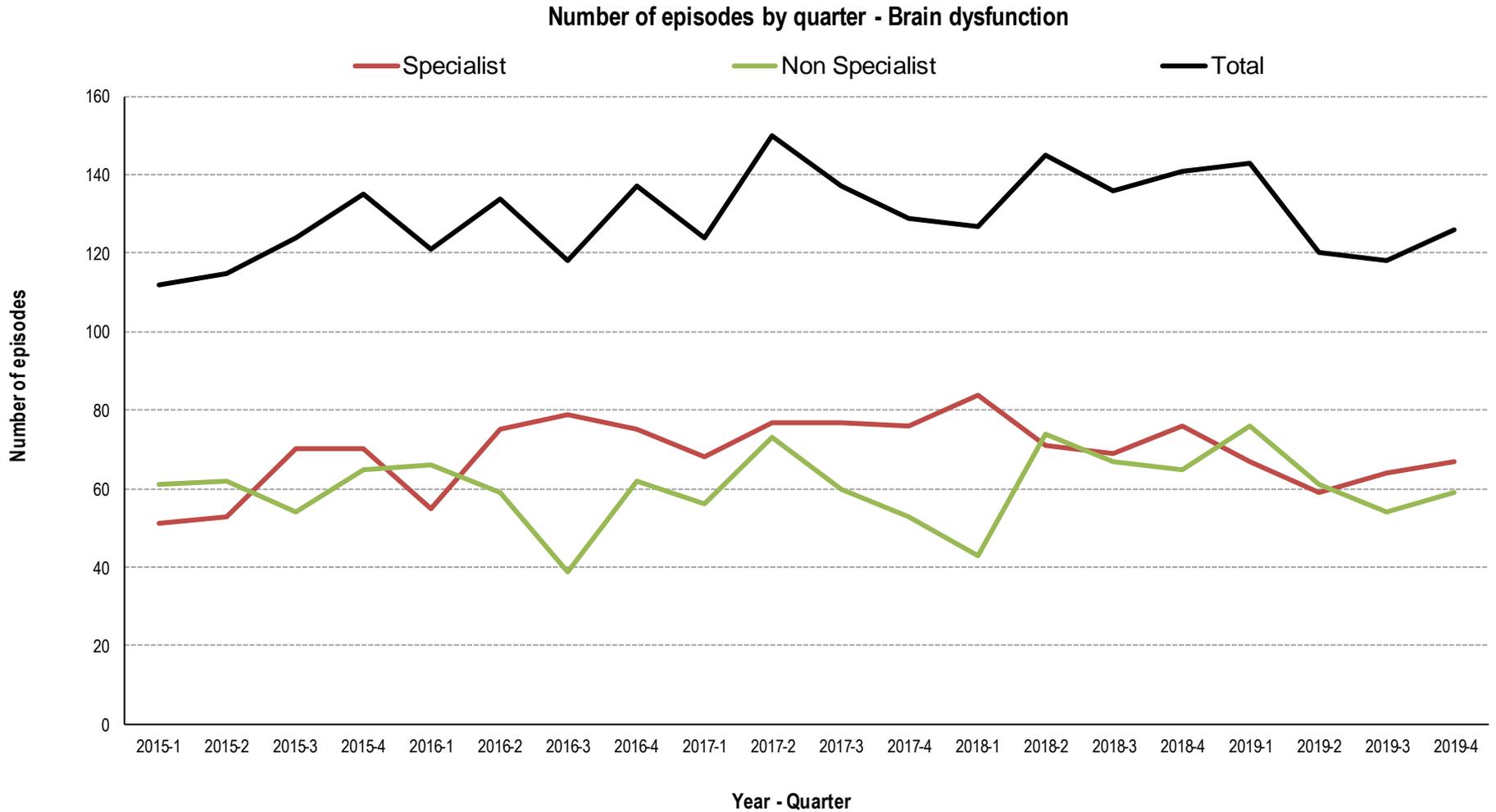
LOS and FIM change by AN-SNAP class

Change in outcome measures in stroke, 2018 to 2019

Difference from 2018 data - All Stroke

2018

Measure	2018 value
Age (years)	74.4
Length of stay (days)	26.3
FIM admission score	65.1
FIM discharge score	88.6
FIM change (adm to disch)	23.5
FIM efficiency (per week)	6.3
Disch to community (%)	97.1

2018 (n = 2,024)
2019 (n = 1,805)

Lower than 2018 data

Higher than 2018 data

Brain dysfunction episodes over time

Number of episodes by quarter - Brain dysfunction

Brain dysfunction casemix over time – Specialist facilities

Specialist Facilities
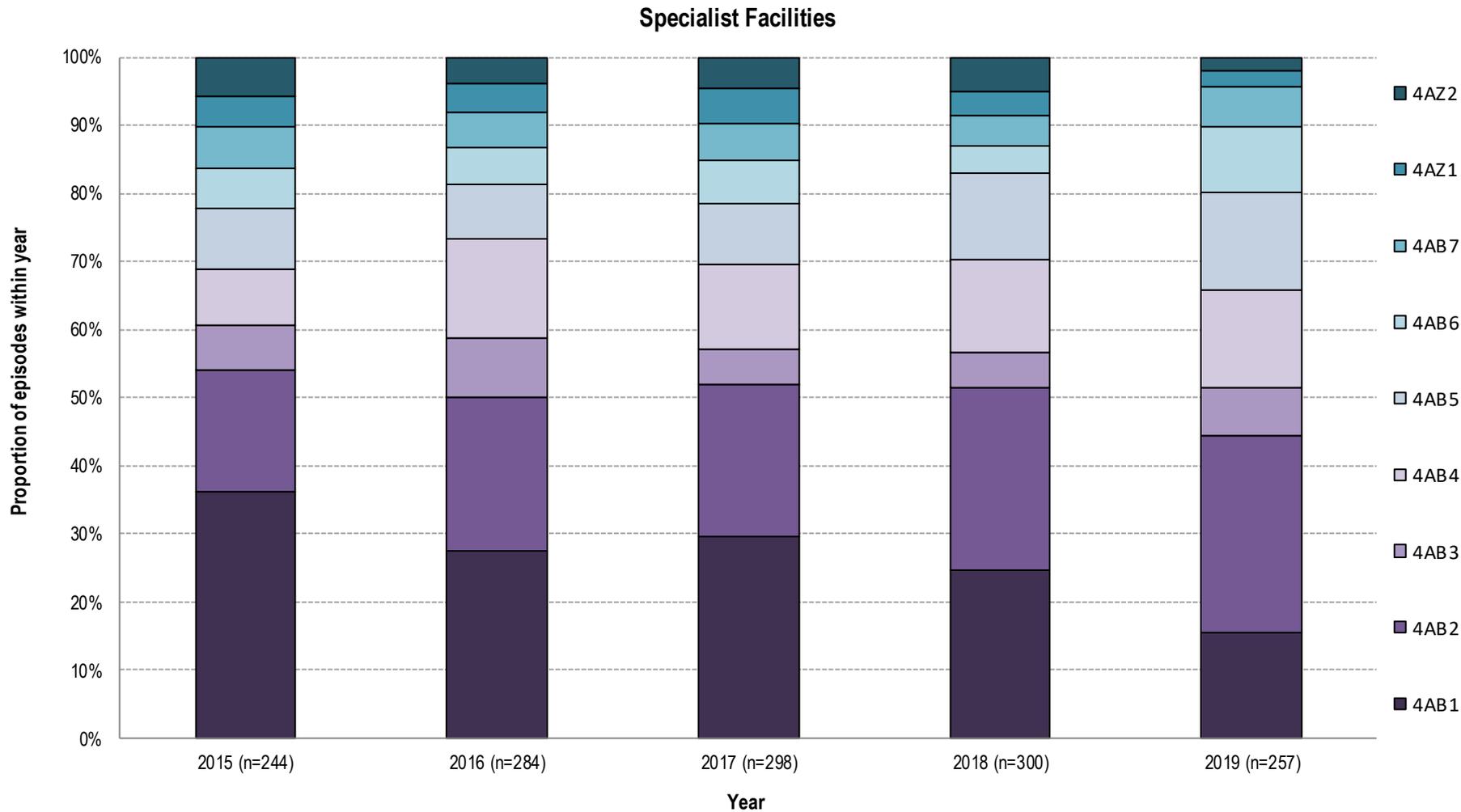
Brain dysfunction casemix over time – Non specialist facilities
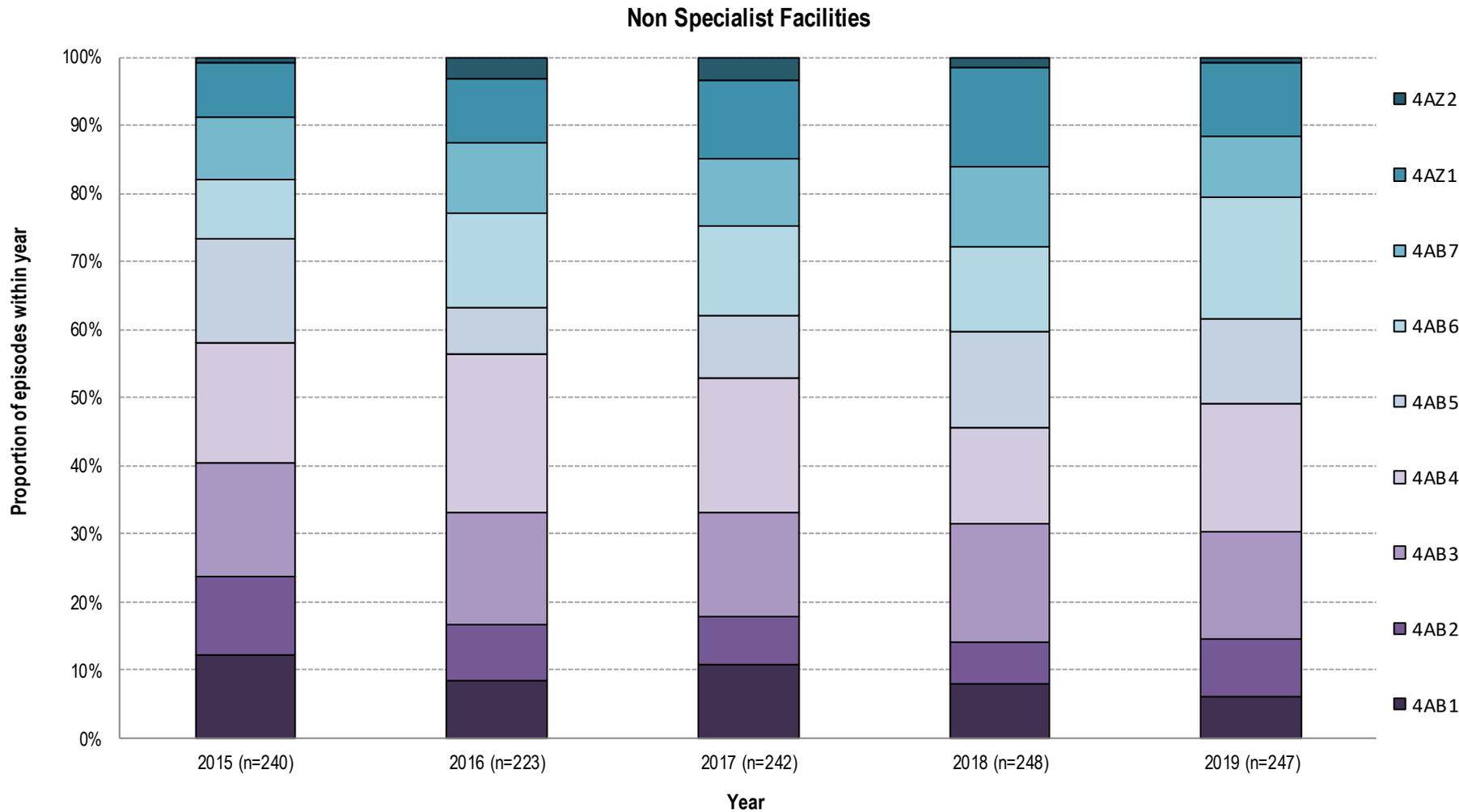
Non Specialist Facilities

Brain dysfunction episodes in 2019 - Specialist facilities

AN-SNAP class:	4AB1	4AB2	4AB3	4AB4	4AB5	4AB6	4AB7	4AZ1	4AZ2	All Brain dysfunction
Number of episodes	40	74	18	37	37	25	15	6	5	257
Proportion of episodes	15.6%	28.8%	7.0%	14.4%	14.4%	9.7%	5.8%	2.3%	1.9%	100.0%
Gender (%)										
Female	*32.5%*	*20.3%*	*44.4%*	*16.2%*	*21.6%*	*24.0%*	*46.7%*	*50.0%*	*20.0%*	*26.1%*
Male	*67.5%*	*79.7%*	*55.6%*	*83.8%*	*78.4%*	*76.0%*	*53.3%*	*50.0%*	*80.0%*	*73.9%*
Age group (%)										
Under 65	*90.0%*	*91.9%*	*72.2%*	*78.4%*	*78.4%*	*80.0%*	*46.7%*	*83.3%*	*100.0%*	*82.5%*
Over 65	*10.0%*	*8.1%*	*27.8%*	*21.6%*	*21.6%*	*20.0%*	*53.3%*	*16.7%*	*0.0%*	*17.5%*
Age (Mean+95%CI)	43.6 (37.7-49.5)	44.3 (40.3-48.2)	54.7 (45.7-63.6)	43.1 (36.3-49.9)	46.7 (41.0-52.5)	52.2 (44.0-60.4)	62.7 (53.8-71.6)	61.2 (54.4-67.9)	35.0 (24.5-45.5)	47.1 (44.8-49.5)
Admission FIM (Mean+95%CI)	110.8 (108.6-113.0)	98.5 (96.2-100.8)	89.7 (85.7-93.6)	78.9 (75.6-82.2)	66.3 (62.9-69.6)	45.8 (43.0-48.6)	35.6 (31.5-39.8)	22.8 (19.1-26.6)	24.2 (18.3-30.1)	81.2 (77.8-84.5)
LOS (Mean+95%CI)	12.6 (10.7-14.4)	25.7 (19.8-31.7)	23.9 (18.3-29.6)	28.8 (21.4-36.2)	55.1 (41.9-68.4)	53.8 (41.3-66.3)	70.0 (44.0-96.0)	88.0 (55.5-120.5)	24.4 (90.3-158.5)	36.5 (32.0-40.9)
Discharge destination (%)										
Discharged to community	*95.1%*	*96.1%*	*94.7%*	*92.1%*	*97.4%*	*73.3%*	*80.0%*	*75.0%*	*100.0%*	*91.5%*
Remaining in hospital system	*4.9%*	*3.9%*	*5.3%*	*7.9%*	*2.6%*	*26.7%*	*20.0%*	*25.0%*	*0.0%*	*8.5%*
FIM change (Mean+95%CI)	10.9 (9.0-12.8)	18.5 (16.4-20.6)	25.9 (21.5-30.4)	37.1 (33.1-41.2)	43.5 (38.7-48.3)	49.2 (39.6-58.7)	70.1 (60.9-79.3)	50.2 (23.2-77.1)	54.8 (33.7-75.9)	30.8 (28.2-33.5)
FIM efficiency (FIM change/LOS)	0.9	0.7	1.1	1.3	0.8	0.9	1.0	0.6	0.4	0.8

Brain dysfunction episodes in 2019 - Non specialist facilities

AN-SNAP class:	4AB1	4AB2	4AB3	4AB4	4AB5	4AB6	4AB7	4AZ1	4AZ2	All Brain dysfunction
Number of episodes	15	21	39	46	31	44	22	27	2	250
Proportion of episodes	6.0%	8.4%	15.6%	18.4%	12.4%	17.6%	8.8%	10.8%	n < 5	100.0%
Gender (%)										
Female	*46.7%*	*28.6%*	*51.3%*	*58.7%*	*51.6%*	*59.1%*	*45.5%*	*55.6%*	*n < 5*	*52.4%*
Male	*53.3%*	*71.4%*	*48.7%*	*41.3%*	*48.4%*	*40.9%*	*54.5%*	*44.4%*	*n < 5*	*47.6%*
Age group (%)										
Under 65	*53.3%*	*33.3%*	*28.2%*	*17.4%*	*25.8%*	*15.9%*	*9.1%*	*40.7%*	*n < 5*	*26.4%*
Over 65	*46.7%*	*66.7%*	*71.8%*	*82.6%*	*74.2%*	*84.1%*	*90.9%*	*59.3%*	*n < 5*	*73.6%*
Age (Mean+95%CI)	59.2 (48.8-69.6)	66.2 (58.2-74.3)	71.5 (66.1-76.9)	77.1 (73.9-80.2)	75.3 (70.9-79.6)	78.4 (74.9-82.0)	75.5 (70.5-80.6)	69.9 (64.4-75.3)	n < 5	72.9 (71.0-74.8)
Admission FIM (Mean+95%CI)	106.4 (101.9-111.0)	97.3 (94.0-100.7)	85.3 (82.6-87.9)	72.7 (70.1-75.3)	63.3 (60.4-66.1)	50.5 (48.2-52.7)	36.7 (32.2-41.2)	24.7 (22.0-27.5)	n < 5	65.6 (62.4-68.8)
LOS (Mean+95%CI)	9.6 (6.7-12.4)	17.3 (9.0-25.5)	14.7 (11.4-18.0)	18.6 (14.7-22.5)	21.8 (17.4-26.2)	26.9 (17.1-36.6)	31.9 (21.7-42.0)	57.9 (35.2-80.6)	n < 5	25.2 (21.2-29.1)
Discharge destination (%)										
Discharged to community	*87.5%*	*86.4%*	*97.4%*	*93.8%*	*96.7%*	*82.6%*	*87.0%*	*92.3%*	*n < 5*	*91.0%*
Remaining in hospital system	*12.5%*	*13.6%*	*2.6%*	*6.3%*	*3.3%*	*17.4%*	*13.0%*	*7.7%*	*n < 5*	*9.0%*
FIM change (Mean+95%CI)	8.0 (3.2-12.8)	10.3 (6.5-14.1)	19.3 (16.0-22.6)	16.5 (12.9-20.1)	22.4 (16.7-28.1)	24.9 (18.4-31.5)	30.7 (20.5-40.8)	28.6 (17.7-39.5)	n < 5	20.7 (18.4-23.0)
FIM efficiency (FIM change/LOS)	0.8	0.6	1.3	0.9	1.0	0.9	1.0	0.5	n < 5	0.8

Brain dysfunction discharge destination by AN-SNAP Class – Specialist facilities

Specialist - Discharge destination - Brain dysfunction
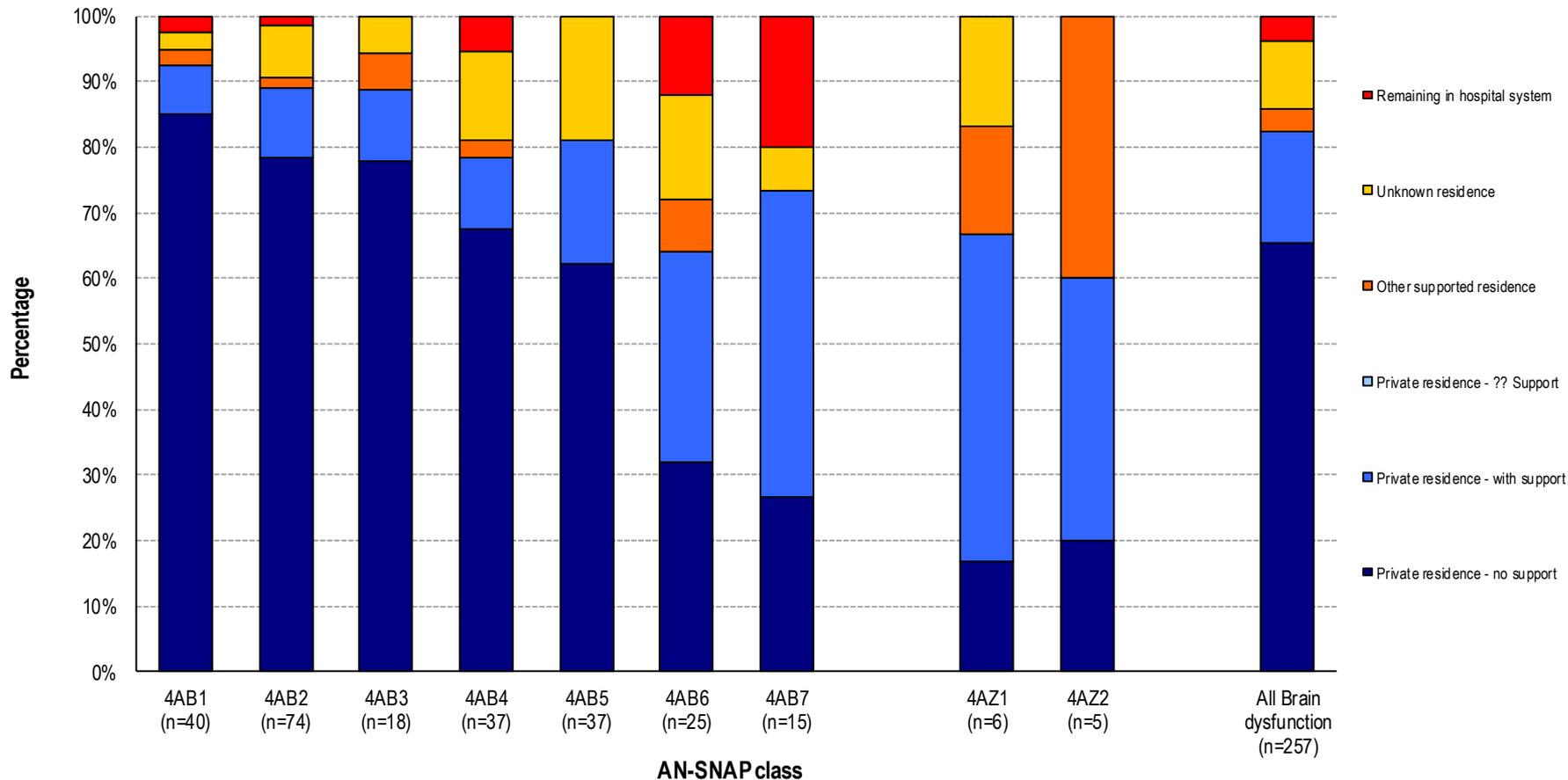
Brain dysfunction discharge destination by AN-SNAP Class – Non specialist facilities

Non specialist - Discharge destination - Brain dysfunction
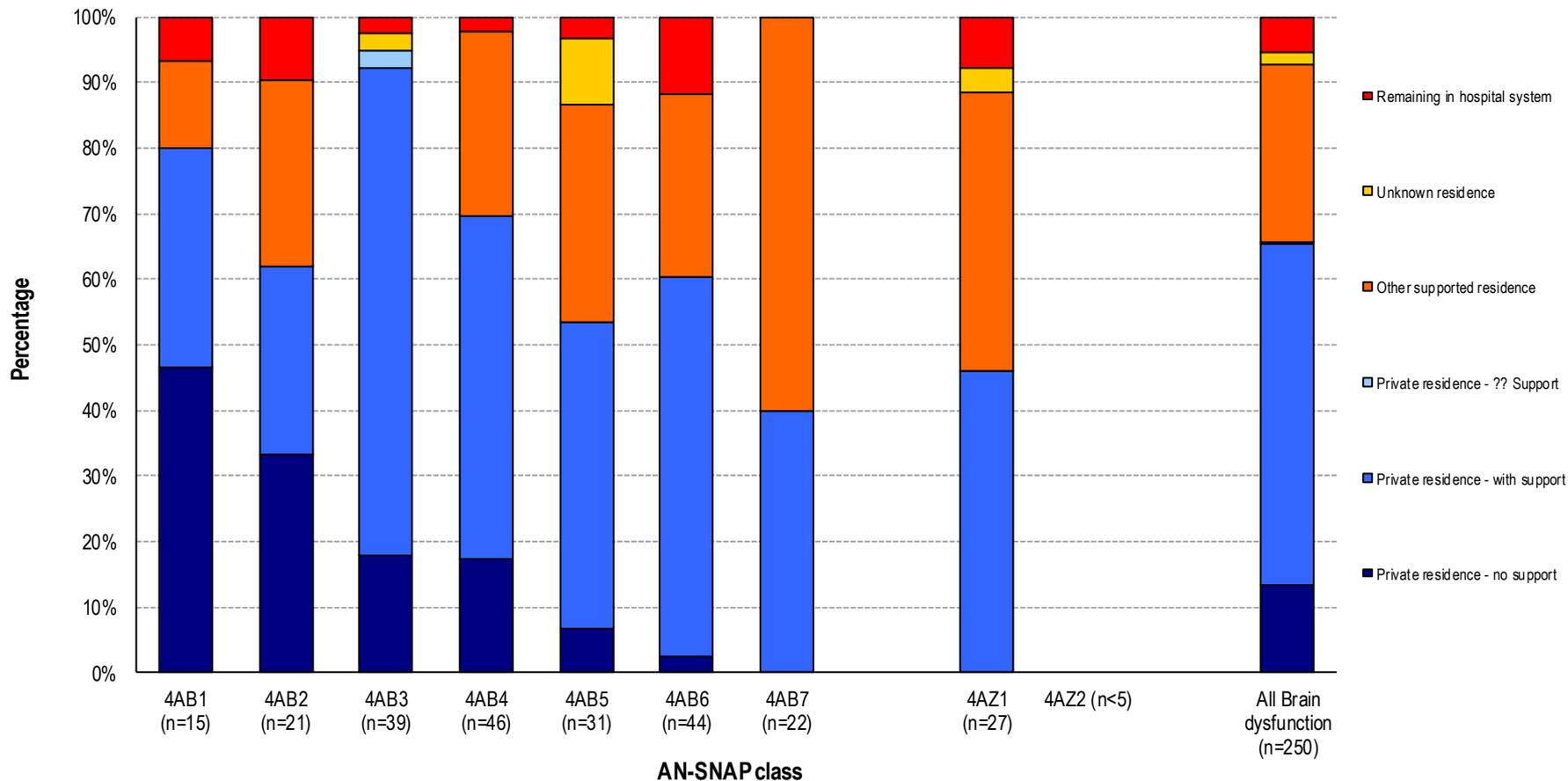
Brain dysfunction LOS and FIM change by AN-SNAP Class – Specialist facilities

Specialist - LOS and FIM change by AN-SNAP class

Brain dysfunction LOS and FIM change by AN-SNAP Class – Non specialist facilities

Non specialist - LOS and FIM change by AN-SNAP class

Change in outcome measures in brain dysfunction, 2018 to 2019 - Specialist facilities

Specialist - Difference from 2018 data - All Brain dysfunction

2018

Measure	2018
Age (years)	46.8
Length of stay (days)	33.5
FIM admission score	85.0
FIM discharge score	112.5
FIM change (adm to disch)	27.5
FIM efficiency (per week)	5.7
Disch to community (%)	97.7

2018 (n = 300)
2019 (n = 257)

Lower than 2018 data

Higher than 2018 data

Change in outcome measures in brain dysfunction, 2018 to 2019 - Non specialist facilities

Non specialist - Difference from 2018 data - All Brain dysfunction

2018 (n = 249)
2019 (n = 250)
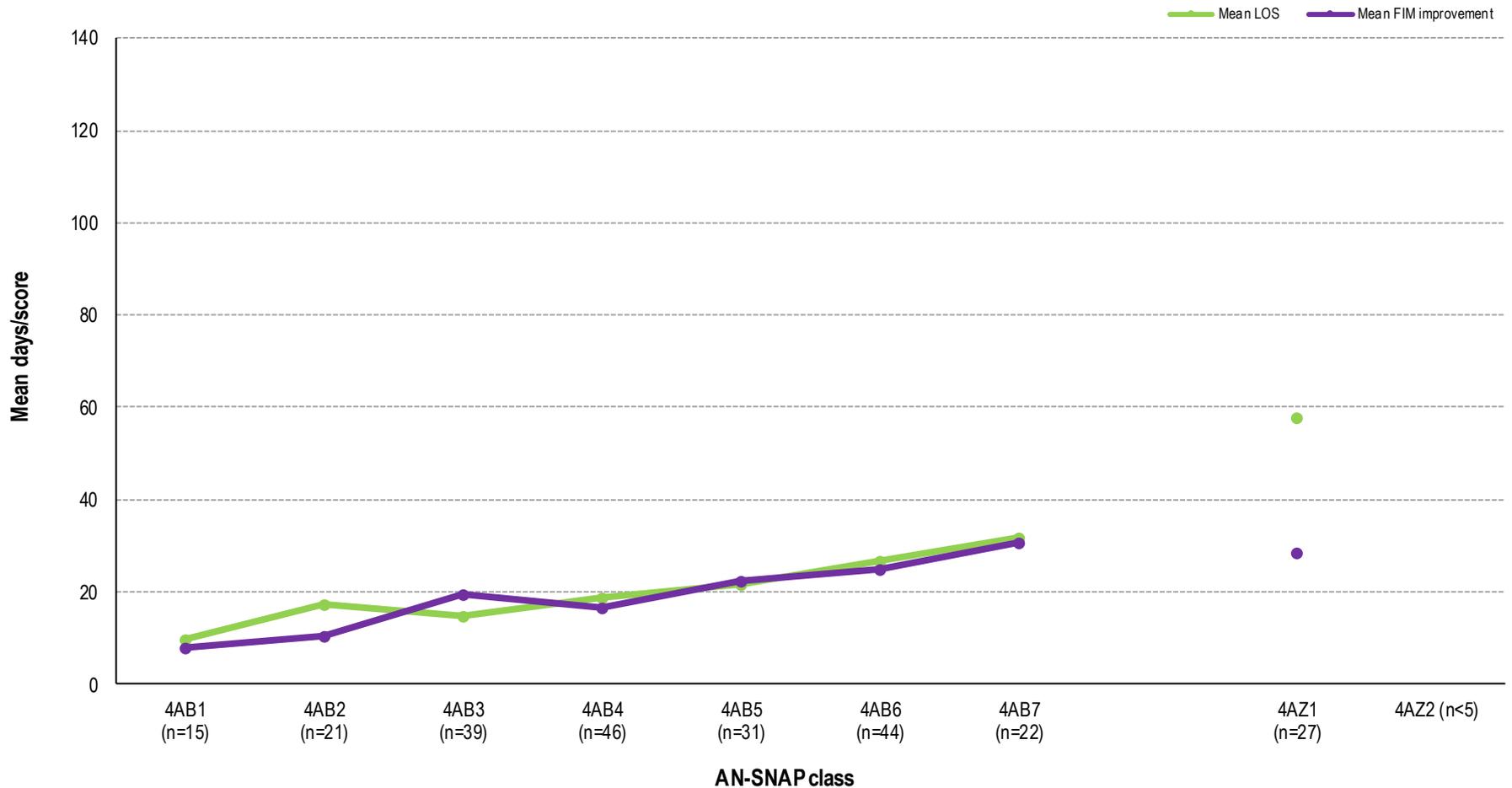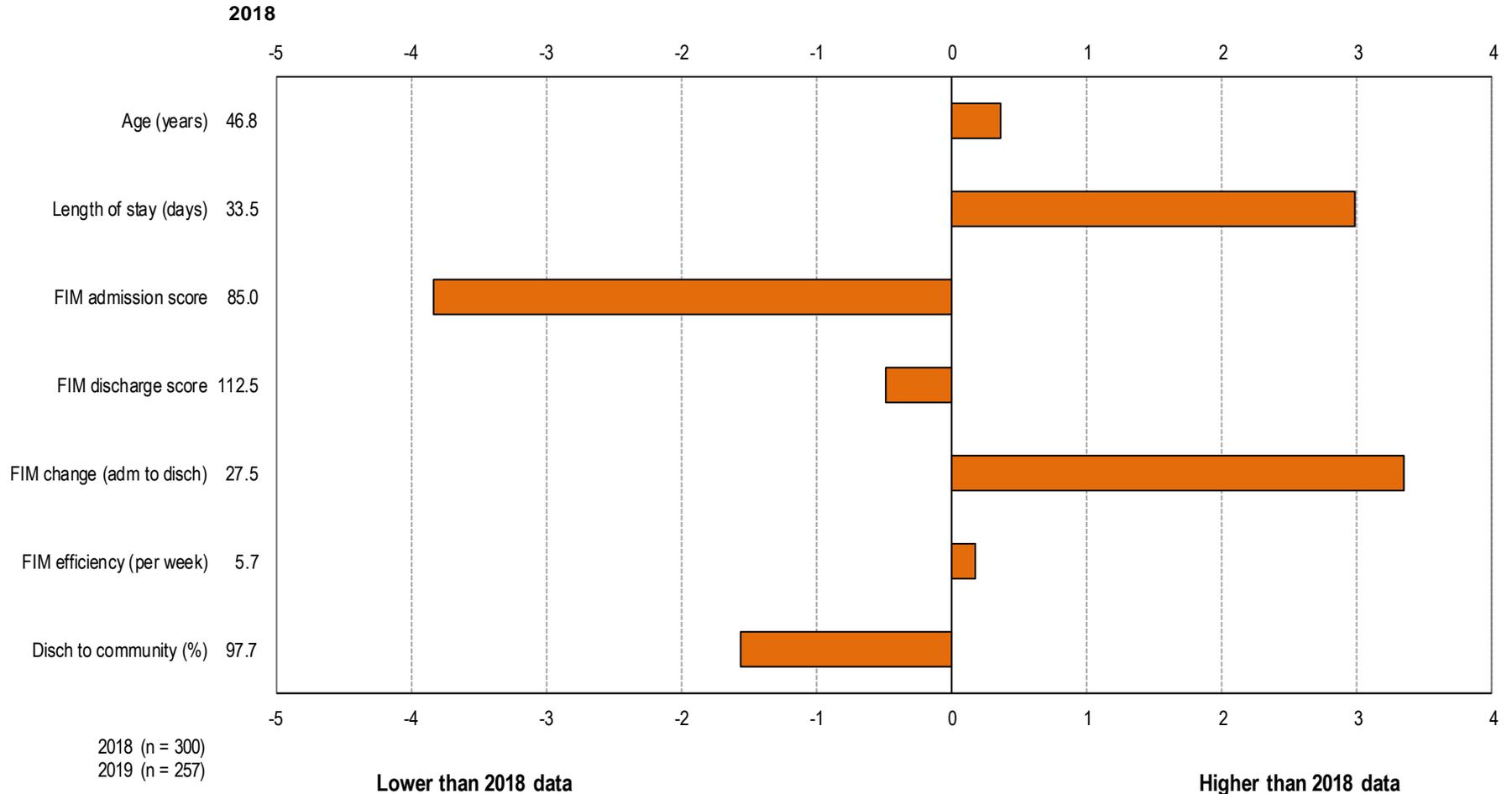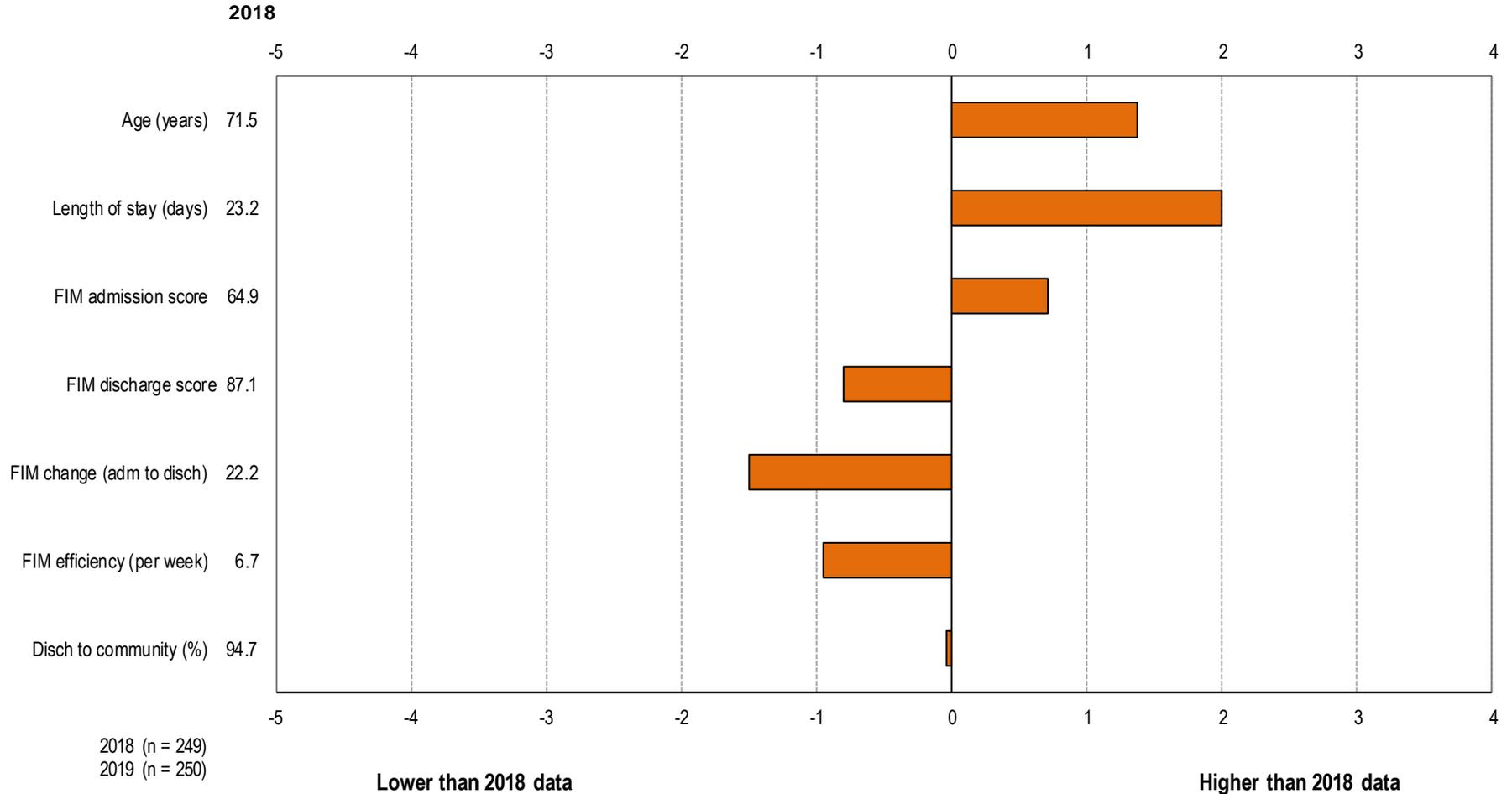
Neurological conditions episodes over time

Number of episodes by quarter - Neurological conditions
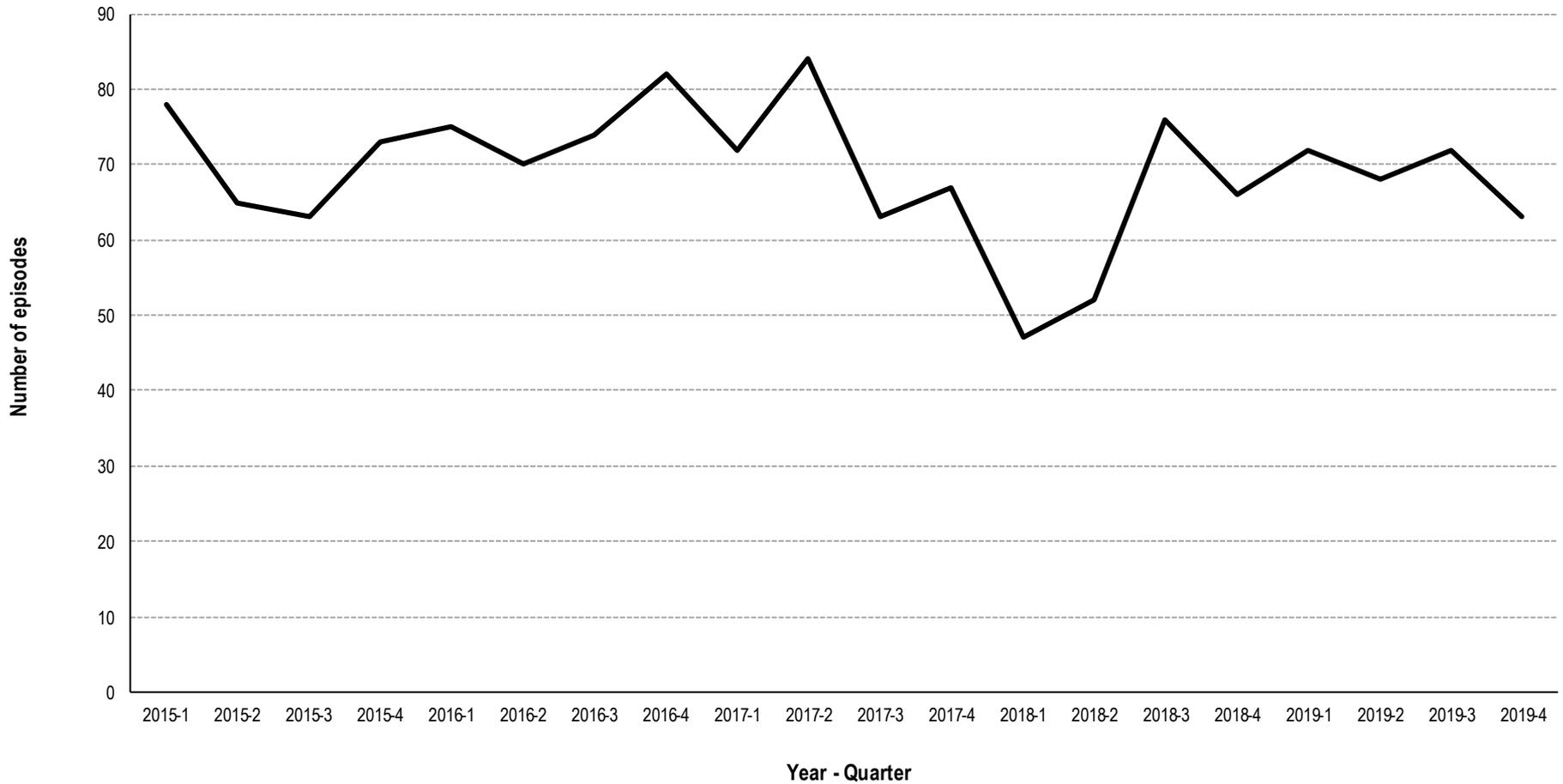
Neurological conditions casemix over time
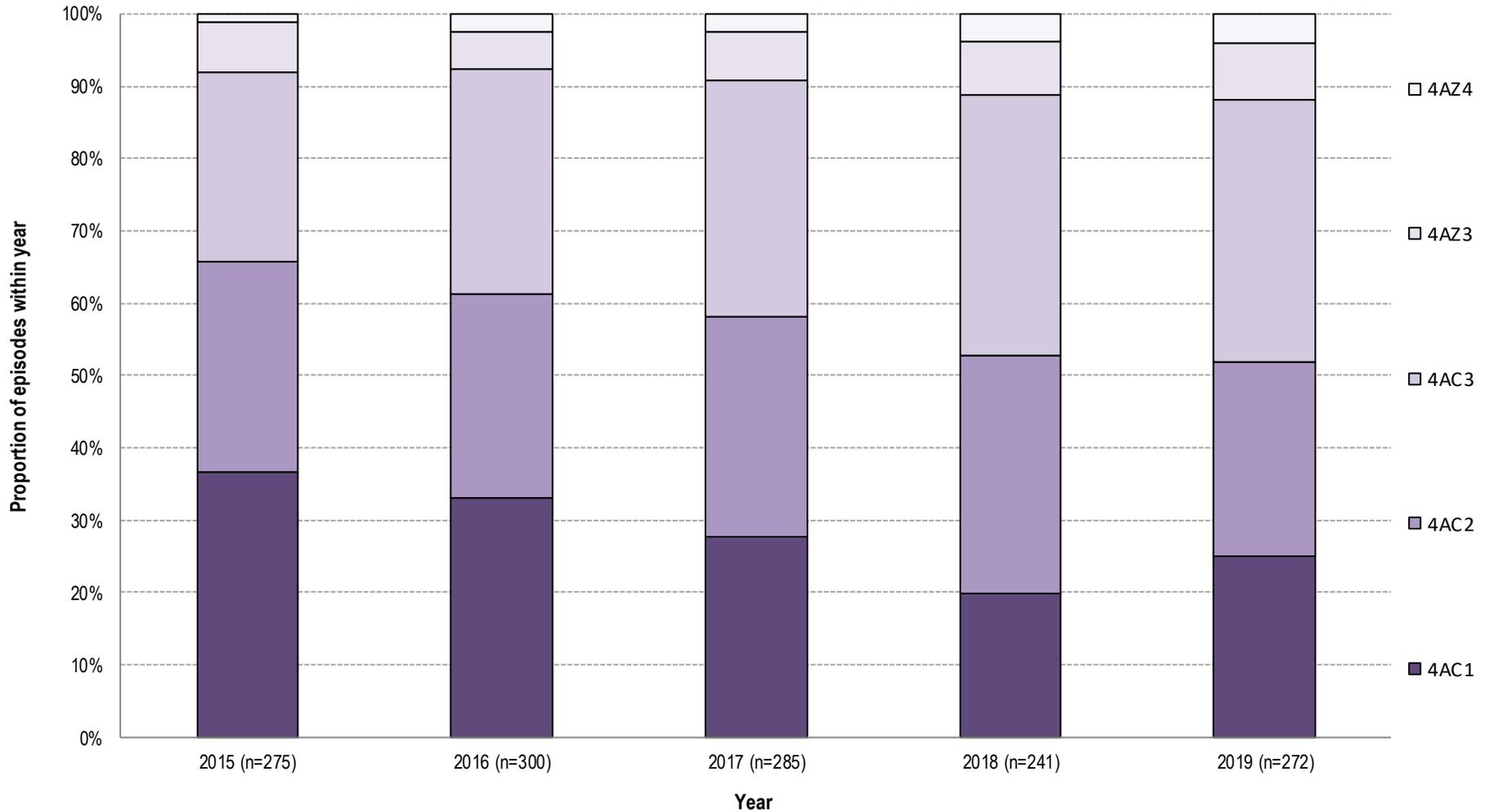
Neurological conditions episodes in 2019

AN-SNAP class:	4AC1	4AC2	4AC3	4AZ3	4AZ4	All Neurological conditions
Number of episodes	68	73	99	21	11	275
Proportion of episodes	24.7%	26.5%	36.0%	7.6%	4.0%	100.0%
Gender (%)						
Female	*54.4%*	*46.6%*	*49.5%*	*52.4%*	*54.5%*	*49.8%*
Male	*45.6%*	*53.4%*	*50.5%*	*47.6%*	*45.5%*	*50.2%*
Age group (%)						
Under 65	*36.8%*	*16.4%*	*30.3%*	*0.0%*	*100.0%*	*28.7%*
Over 65	*63.2%*	*82.2%*	*68.7%*	*100.0%*	*0.0%*	*70.2%*
Age (Mean+95%CI)	69.4 (65.9-72.9)	75.2 (72.7-77.8)	71.2 (68.4-74.0)	77.3 (74.1-80.6)	48.3 (40.2-56.4)	71.4 (69.7-73.0)
Admission FIM (Mean+95%CI)	99.4 (96.9-101.8)	75.3 (73.1-77.5)	55.6 (53.5-57.8)	34.7 (30.2-39.2)	46.3 (41.4-51.3)	70.2 (67.5-73.0)
LOS (Mean+95%CI)	13.4 (11.4-15.5)	19.9 (17.0-22.8)	26.0 (21.9-30.0)	32.2 (19.4-44.9)	85.8 (43.2-128.4)	23.6 (20.7-26.5)
Discharge destination (%)						
Discharged to community	*100.0%*	*98.6%*	*96.9%*	*100.0%*	*81.8%*	*97.8%*
Remaining in hospital system	*0.0%*	*1.4%*	*3.1%*	*0.0%*	*18.2%*	*2.2%*
FIM change (Mean+95%CI)	11.5 (8.9-14.0)	13.7 (11.0-16.4)	20.1 (16.3-23.8)	26.4 (14.0-38.7)	43.1 (22.2-64.1)	17.4 (15.2-19.6)
FIM efficiency (FIM change/LOS)	0.9	0.7	0.8	0.8	0.5	0.7

Neurological conditions discharge destination by AN-SNAP class

Discharge destination - Neurological conditions

Neurological conditions LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Mean LOS ——— Mean FIM improvement ———
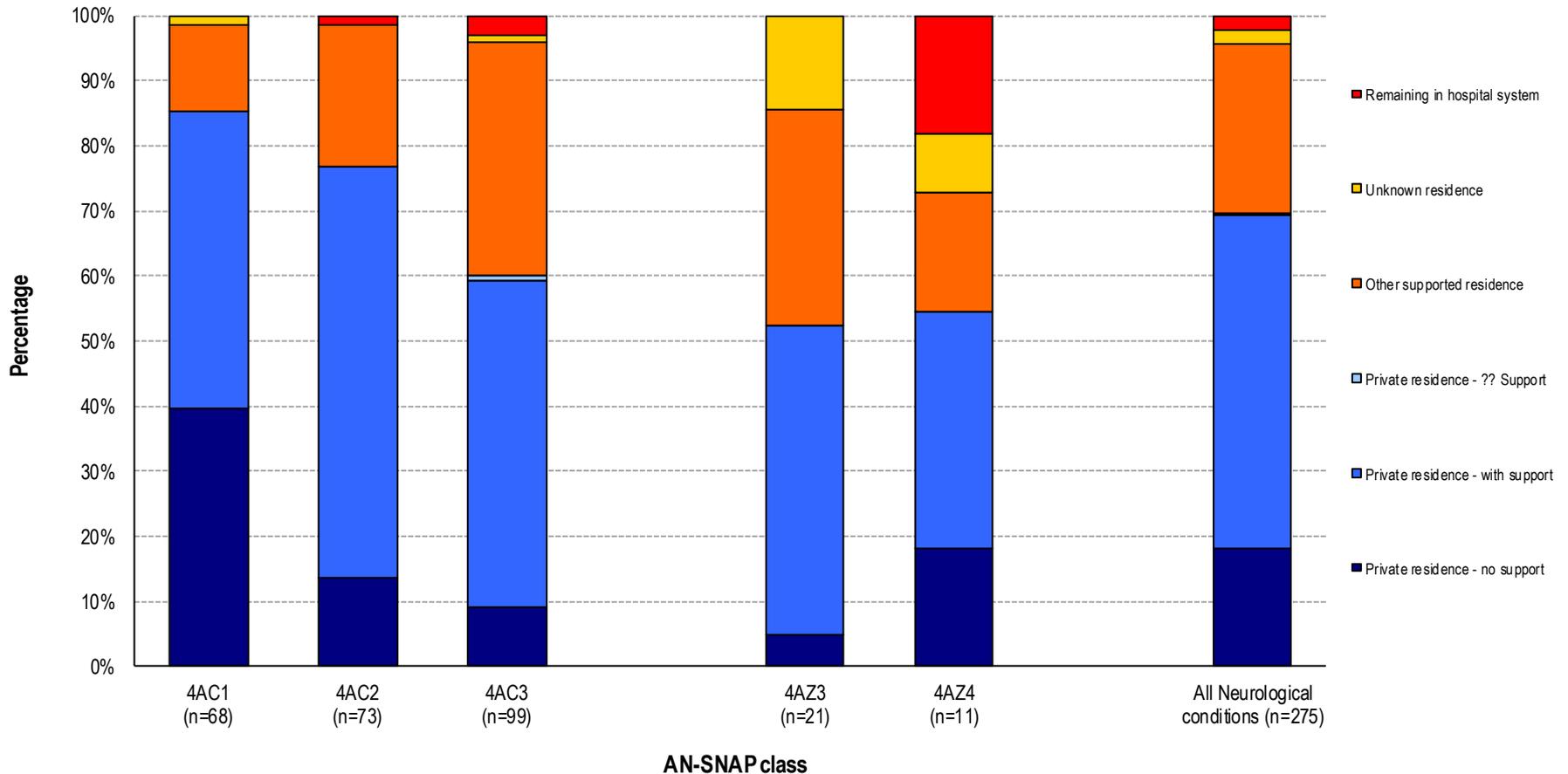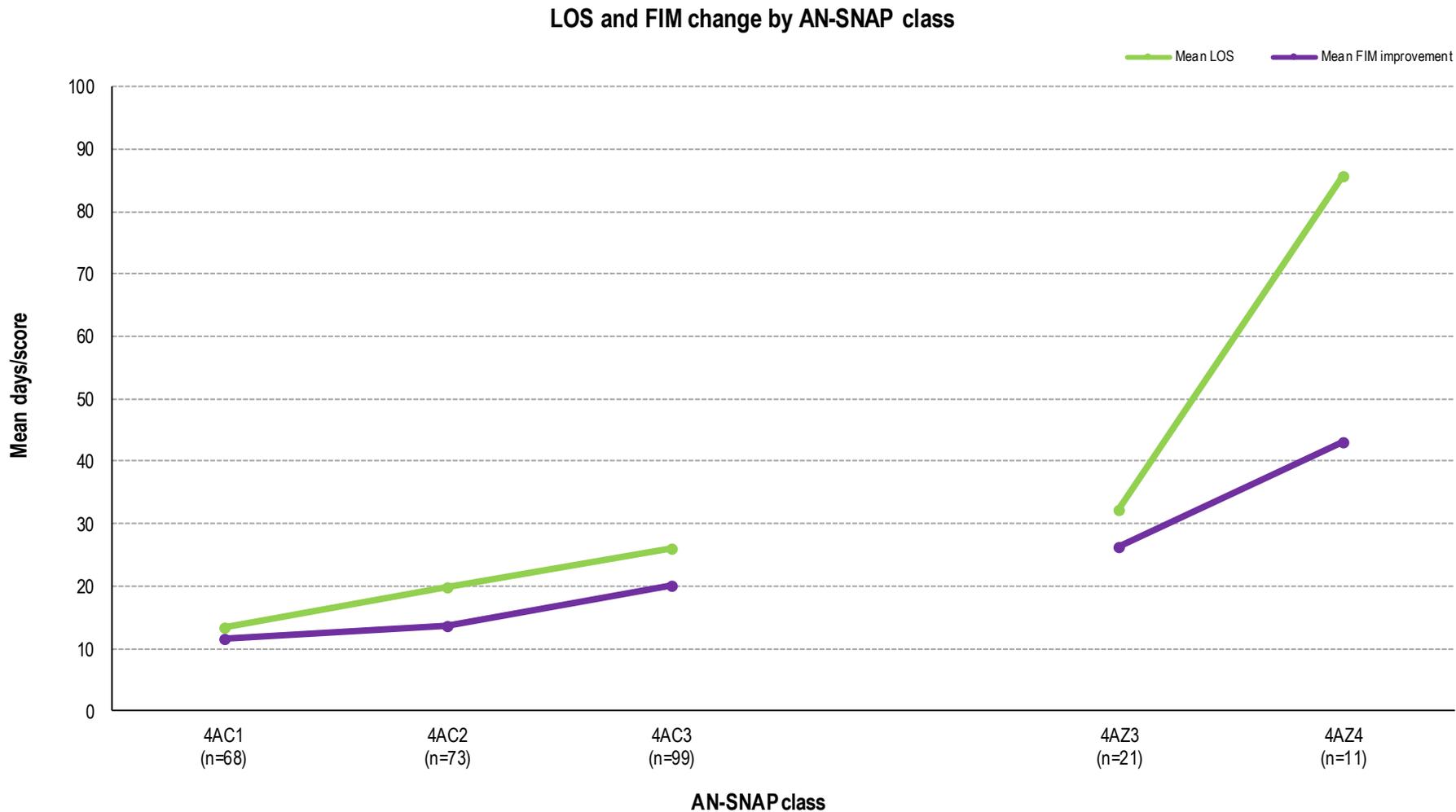
Change in outcome measures in neurological conditions, 2018 to 2019

Difference from 2018 data - All Neurological conditions

2018	
Age (years)	69.7
Length of stay (days)	21.9
FIM admission score	67.8
FIM discharge score	86.5
FIM change (adm to disch)	18.7
FIM efficiency (per week)	6.0
Disch to community (%)	97.1

2018 (n = 241)
2019 (n = 275)

Lower than 2018 data   Higher than 2018 data

Spinal cord dysfunction episodes over time

Number of episodes by quarter - Spinal cord dysfunction
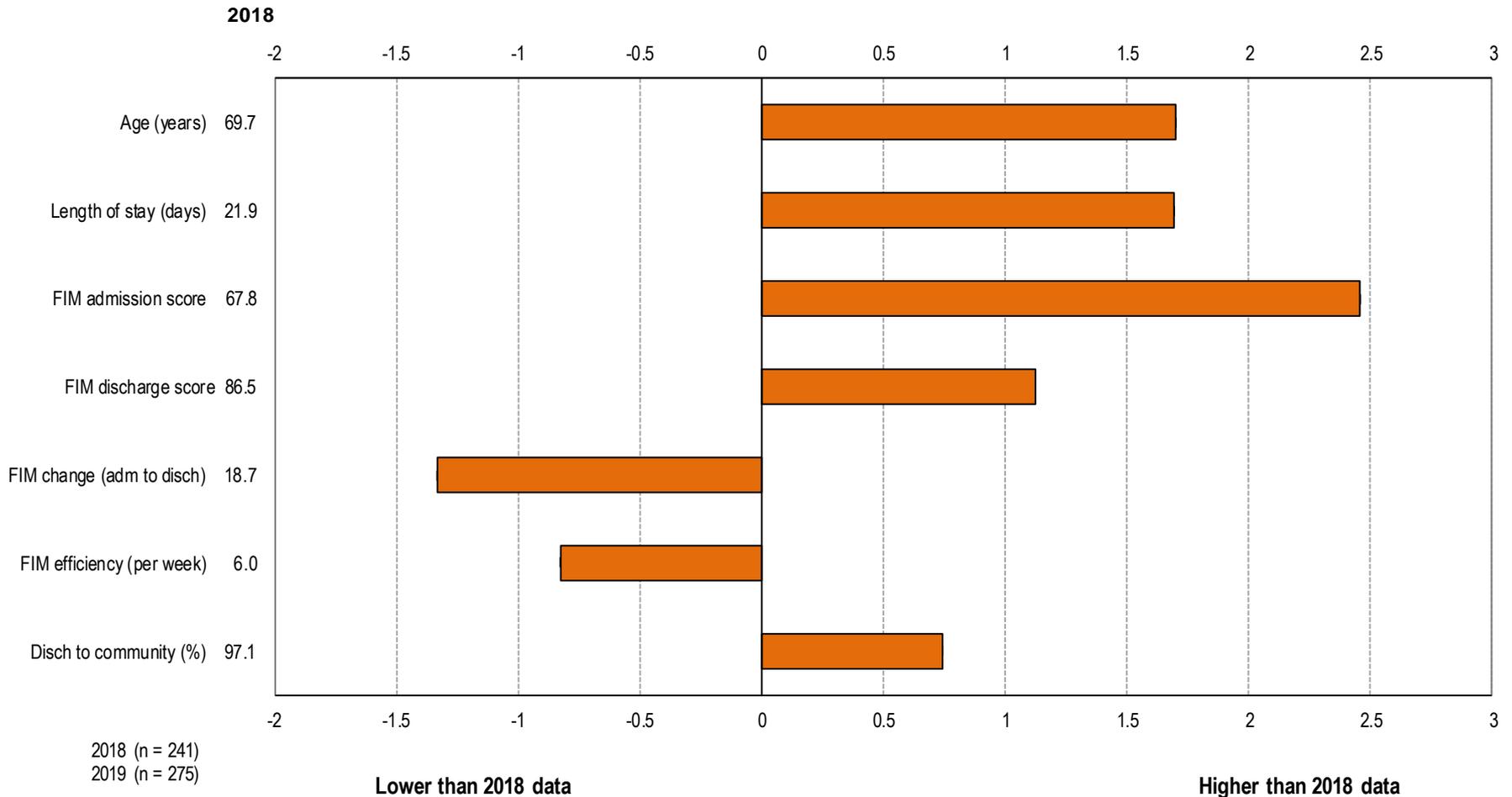
— Specialist   — Non Specialist   — Total
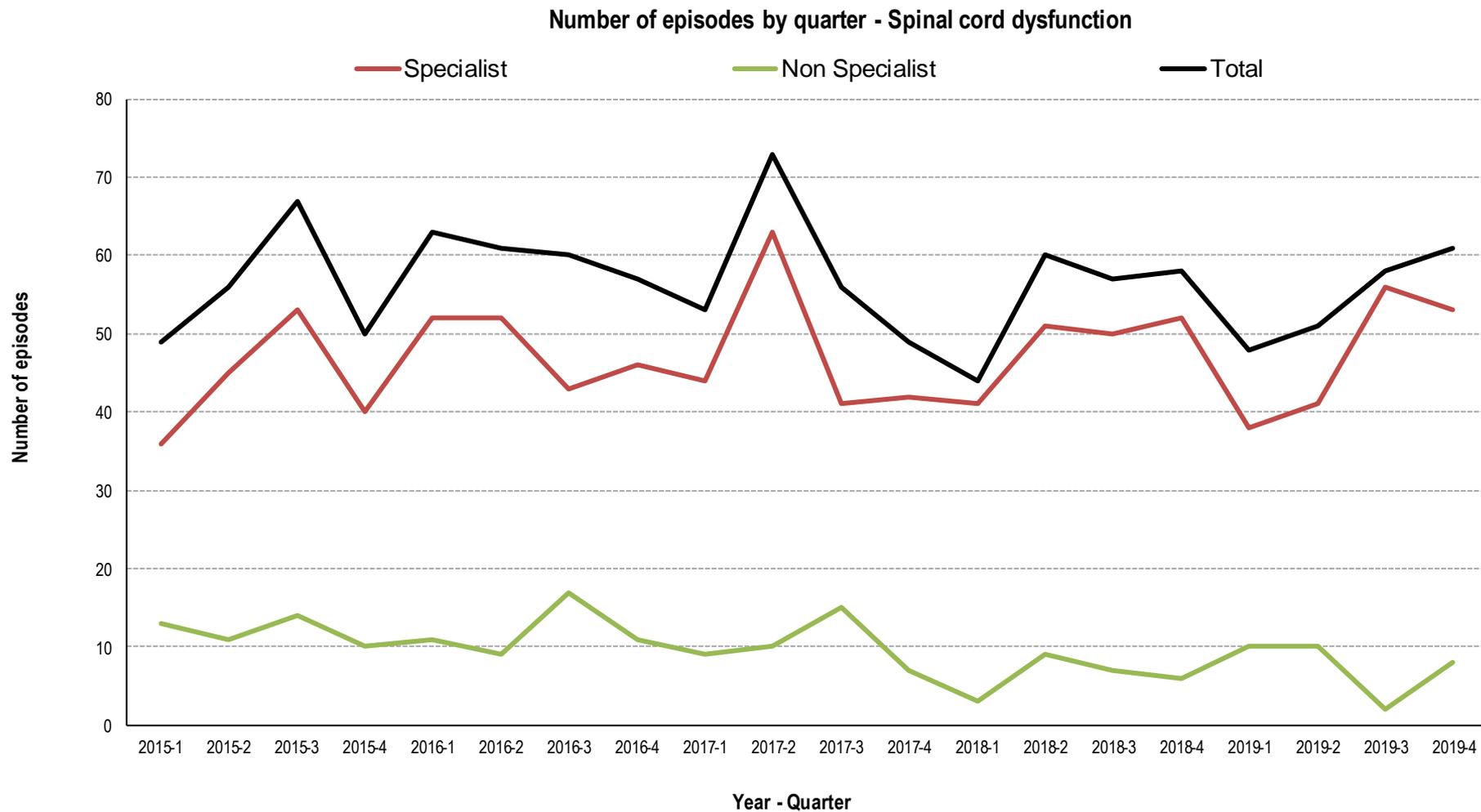
Spinal cord dysfunction casemix over time – Specialist facilities

Specialist Facilities
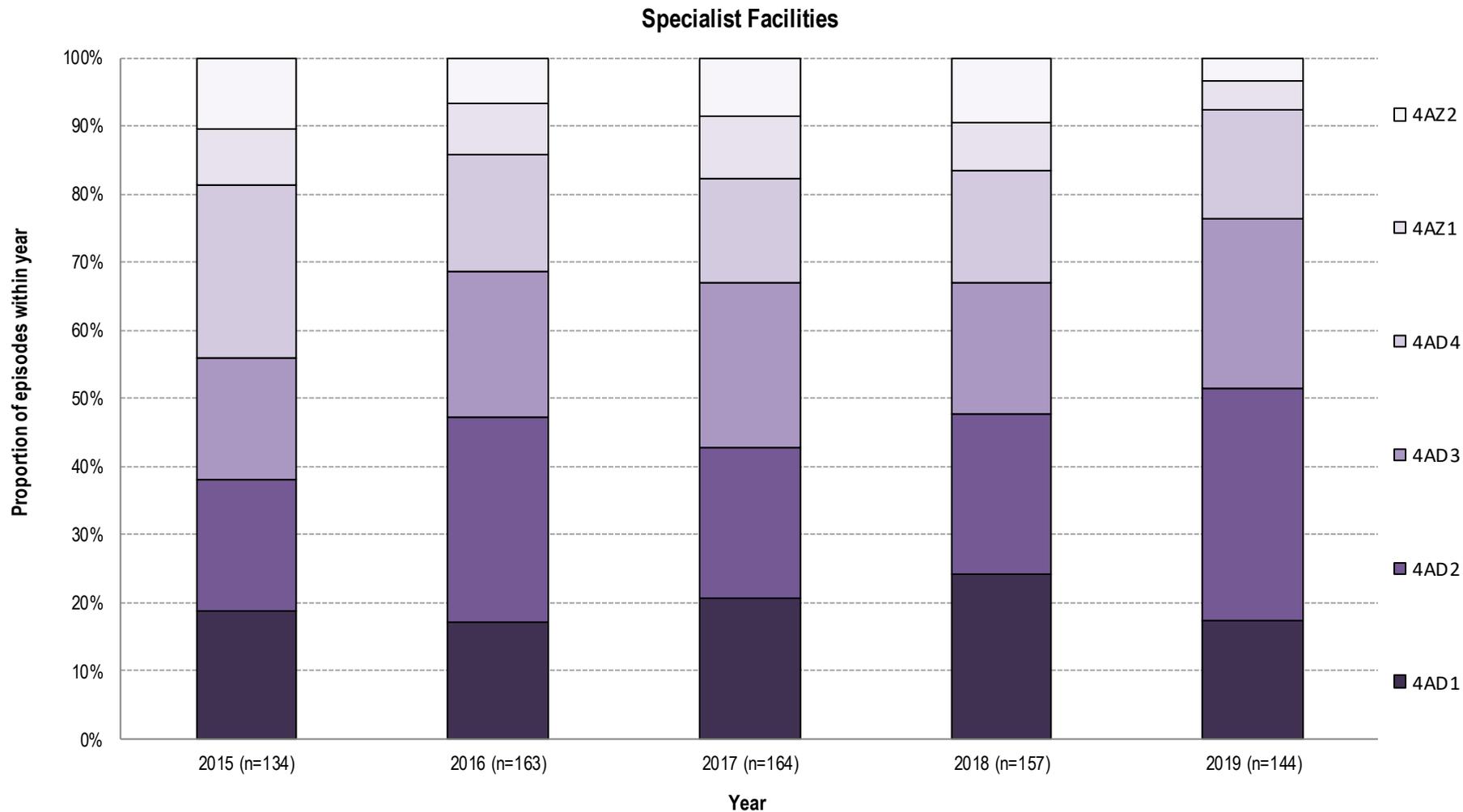
Spinal cord dysfunction episodes over time – Non specialist facilities
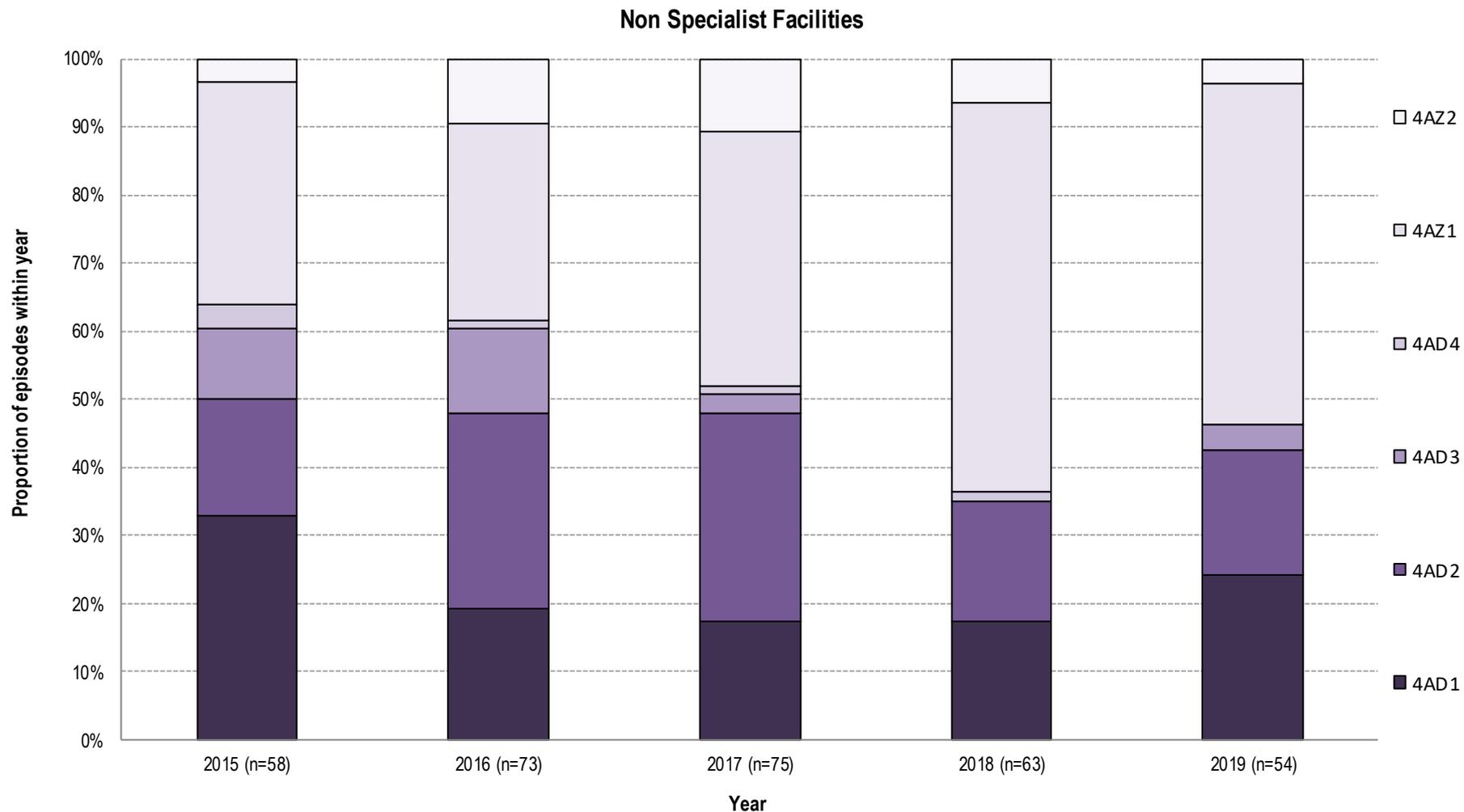
Non Specialist Facilities

Spinal cord dysfunction episodes in 2019 - Specialist facilities

AN-SNAP class:	4AD1	4AD2	4AD3	4AD4	4AZ1	4AZ2	All Spinal cord dysfunction
Number of episodes	25	49	36	23	32	23	188
Proportion of episodes	13.3%	26.1%	19.1%	12.2%	17.0%	12.2%	100.0%
Gender (%)							
Female	*32.0%*	*38.8%*	*36.1%*	*39.1%*	*34.4%*	*4.3%*	*32.4%*
Male	*68.0%*	*61.2%*	*63.9%*	*56.5%*	*65.6%*	*95.7%*	*67.0%*
Age group (%)							
Under 65	*48.0%*	*51.0%*	*100.0%*	*100.0%*	*53.1%*	*100.0%*	*72.3%*
Over 65	*52.0%*	*49.0%*	*0.0%*	*0.0%*	*46.9%*	*0.0%*	*27.7%*
Age (Mean+95%CI)	62.7 (59.7-65.8)	65.7 (63.1-68.3)	32.1 (28.8-35.4)	31.7 (26.9-36.4)	63.9 (60.7-67.1)	29.2 (24.8-33.6)	49.9 (47.2-52.7)
Admission FIM (Mean+95%CI)	99.7 (95.4-103.9)	61.0 (58.8-63.2)	90.3 (85.0-95.6)	58.9 (56.2-61.7)	43.9 (41.0-46.8)	45.2 (42.6-47.8)	66.5 (63.2-69.8)
LOS (Mean+95%CI)	25.7 (17.0-34.4)	56.5 (46.8-66.2)	39.7 (23.6-55.8)	62.2 (53.2-71.2)	79.7 (66.4-93.0)	91.1 (72.7-109.5)	58.3 (52.2-64.4)
Discharge destination (%)							
Discharged to community	*96.0%*	*93.9%*	*97.2%*	*95.7%*	*90.9%*	*100.0%*	*95.2%*
Remaining in hospital system	*4.0%*	*6.1%*	*2.8%*	*4.3%*	*9.1%*	*0.0%*	*4.8%*
FIM change (Mean+95%CI)	19.2 (15.7-22.8)	31.7 (25.8-37.6)	25.2 (19.9-30.4)	41.0 (33.9-48.2)	26.7 (17.8-35.6)	21.0 (10.1-32.0)	27.7 (24.7-30.8)
FIM efficiency (FIM change/LOS)	0.7	0.6	0.6	0.7	0.3	0.2	0.5

Spinal cord dysfunction episodes in 2019 - Non specialist facilities

AN-SNAP class:	4AD1	4AD2	4AD3	4AD4	4AZ1	4AZ2	All Spinal cord dysfunction
Number of episodes	13	10	2	0	5	0	30
Proportion of episodes	43.3%	33.3%	n < 5	n < 5	16.7%	n < 5	100.0%
Gender (%)							
Female	*46.2%*	*30.0%*	*n < 5*	*n < 5*	*20.0%*	*n < 5*	*33.3%*
Male	*53.8%*	*70.0%*	*n < 5*	*n < 5*	*80.0%*	*n < 5*	*66.7%*
Age group (%)							
Under 65	*23.1%*	*50.0%*	*n < 5*	*n < 5*	*0.0%*	*n < 5*	*33.3%*
Over 65	*76.9%*	*50.0%*	*n < 5*	*n < 5*	*100.0%*	*n < 5*	*66.7%*
Age (Mean+95%CI)	70.5 (66.2-74.8)	67.8 (62.6-73.0)	n < 5	n < 5	71.8 (65.4-78.2)	n < 5	67.5 (63.2-71.8)
Admission FIM (Mean+95%CI)	92.1 (86.8-97.3)	64.4 (58.8-70.0)	n < 5	n < 5	38.8 (26.2-51.3)	n < 5	74.4 (66.6-82.2)
LOS (Mean+95%CI)	16.2 (11.3-21.0)	35.9 (29.0-42.8)	n < 5	n < 5	47.0 (27.8-66.2)	n < 5	28.1 (22.3-34.0)
Discharge destination (%)							
Discharged to community	*92.9%*	*76.9%*	*n < 5*	*n < 5*	*57.1%*	*n < 5*	*76.3%*
Remaining in hospital system	*7.1%*	*23.1%*	*n < 5*	*n < 5*	*42.9%*	*n < 5*	*23.7%*
FIM change (Mean+95%CI)	14.9 (10.0-19.8)	23.6 (11.4-35.8)	n < 5	n < 5	11.8 (-8.1-31.6)	n < 5	17.5 (12.0-23.0)
FIM efficiency (FIM change/LOS)	0.9	0.7	n < 5	n < 5	0.3	n < 5	0.6

Spinal cord dysfunction discharge destination by AN-SNAP class – Specialist facilities

Specialist - Discharge destination - Spinal cord dysfunction

Spinal cord dysfunction discharge destination by AN-SNAP class – Non specialist facilities

Non specialist - Discharge destination - Spinal cord dysfunction

Spinal cord dysfunction LOS and FIM change by AN-SNAP class – Specialist facilities

Specialist - LOS and FIM change by AN-SNAP class

Mean LOS — *Mean FIM improvement*

x-axis: AN-SNAP class — 4AD1 (n=25), 4AD2 (n=49), 4AD3 (n=36), 4AD4 (n=23), 4AZ1 (n=32), 4AZ2 (n=23)

y-axis: Mean days/score

Spinal cord dysfunction LOS and FIM change by AN-SNAP class – Non specialist facilities

Non specialist - LOS and FIM change by AN-SNAP class

Change in outcome measures in spinal cord dysfunction, 2018 to 2019 - Specialist facilities

Specialist - Difference from 2018 data - All Spinal cord dysfunction

Change in outcome measures in spinal cord dysfunction, 2018 to 2019 - Non specialist facilities

Non specialist - Difference from 2018 data - All Spinal cord dysfunction

Amputation episodes over time

Number of episodes by quarter - Amputation of limb
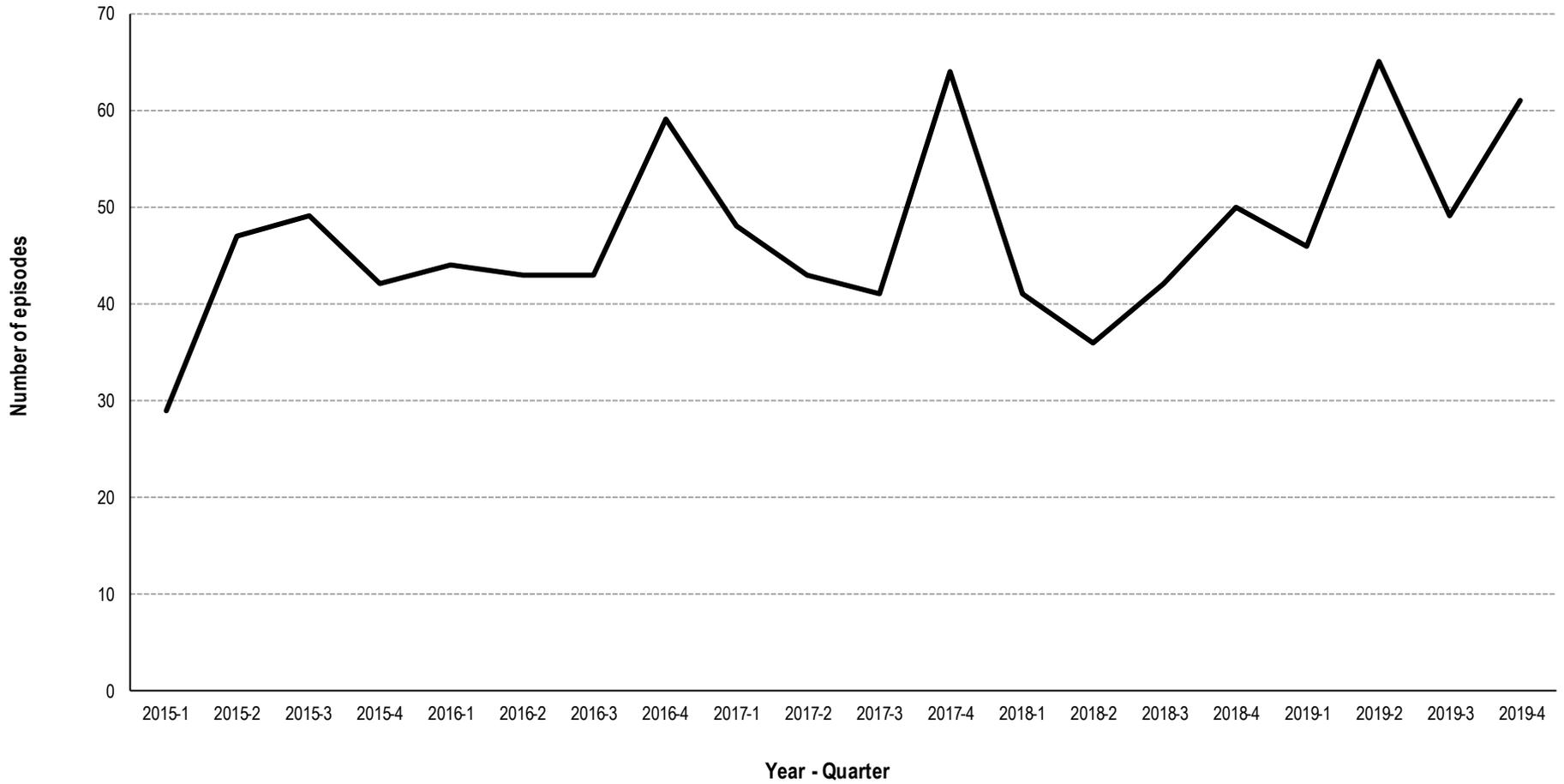
Amputation casemix over time
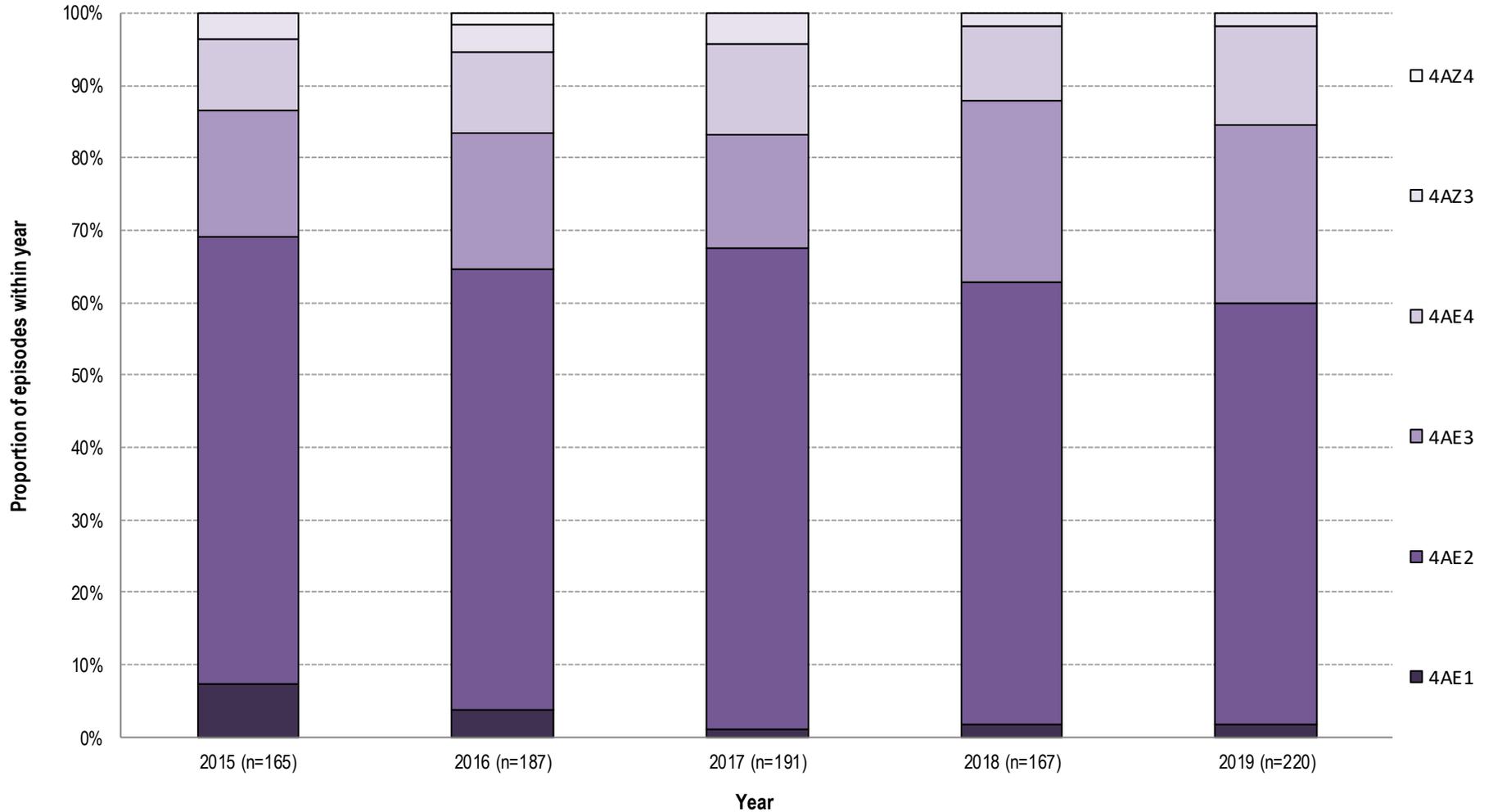
Amputation episodes in 2019

AN-SNAP class:	4AE1	4AE2	4AE3	4AE4	4AZ3	4AZ4	All Amputation of limb
Number of episodes	4	128	54	30	4	0	221
Proportion of episodes	n < 5	57.9%	24.4%	13.6%	n < 5	n < 5	100.0%
Gender (%)							
Female	*n < 5*	*39.8%*	*42.6%*	*43.3%*	*n < 5*	*n < 5*	*39.8%*
Male	*n < 5*	*60.2%*	*57.4%*	*56.7%*	*n < 5*	*n < 5*	*60.2%*
Age group (%)							
Under 65	*n < 5*	*31.3%*	*18.5%*	*100.0%*	*n < 5*	*n < 5*	*37.6%*
Over 65	*n < 5*	*68.8%*	*81.5%*	*0.0%*	*n < 5*	*n < 5*	*62.4%*
Age (Mean+95%CI)	n < 5	69.9 (68.4-71.5)	74.6 (72.1-77.1)	46.3 (44.0-48.6)	n < 5	n < 5	67.9 (66.3-69.5)
Admission FIM (Mean+95%CI)	n < 5	83.5 (81.0-86.1)	47.8 (44.7-50.9)	97.9 (91.7-104.1)	n < 5	n < 5	76.8 (73.7-80.0)
LOS (Mean+95%CI)	n < 5	22.3 (19.7-24.8)	34.5 (29.3-39.7)	29.8 (9.7-49.9)	n < 5	n < 5	26.0 (22.7-29.3)
Discharge destination (%)							
Discharged to community	*n < 5*	*94.5%*	*88.7%*	*90.0%*	*n < 5*	*n < 5*	*92.7%*
Remaining in hospital system	*n < 5*	*5.5%*	*11.3%*	*10.0%*	*n < 5*	*n < 5*	*7.3%*
FIM change (Mean+95%CI)	n < 5	16.2 (14.3-18.2)	25.8 (21.2-30.5)	11.0 (7.6-14.3)	n < 5	n < 5	17.6 (15.9-19.4)
FIM efficiency (FIM change/LOS)	n < 5	0.7	0.7	0.4	n < 5	n < 5	0.7

Amputation discharge destination by AN-SNAP class

Discharge destination - Amputation of limb
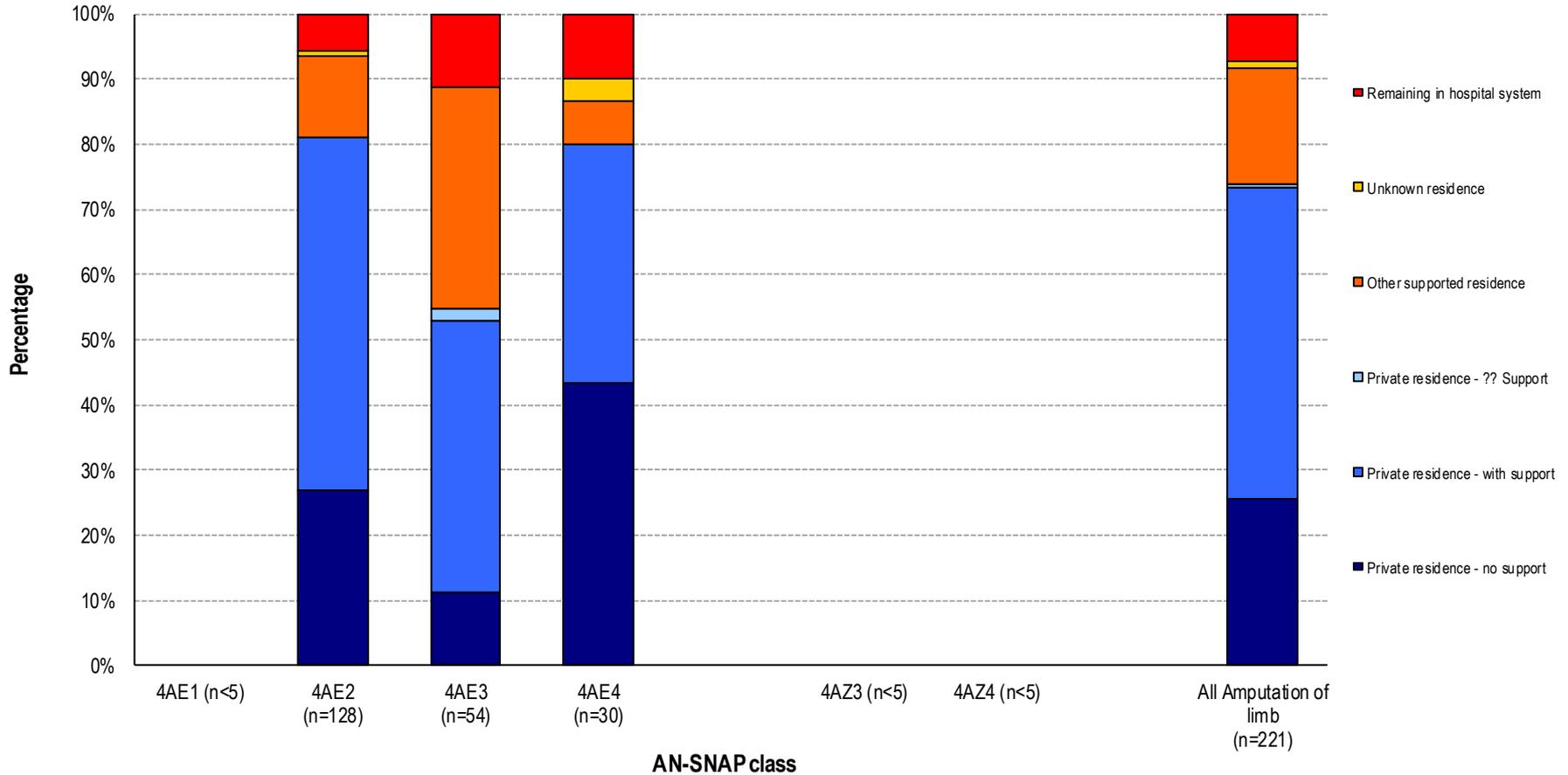
Amputation LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Change in outcome measures in amputation, 2018 to 2019

Difference from 2018 data - All Amputation of limb

2018		

Age (years) 69.9
Length of stay (days) 24.2
FIM admission score 75.0
FIM discharge score 92.8
FIM change (adm to disch) 17.9
FIM efficiency (per week) 5.2
Disch to community (%) 95.2

2018 (n = 169)
2019 (n = 221)

Lower than 2018 data

Higher than 2018 data
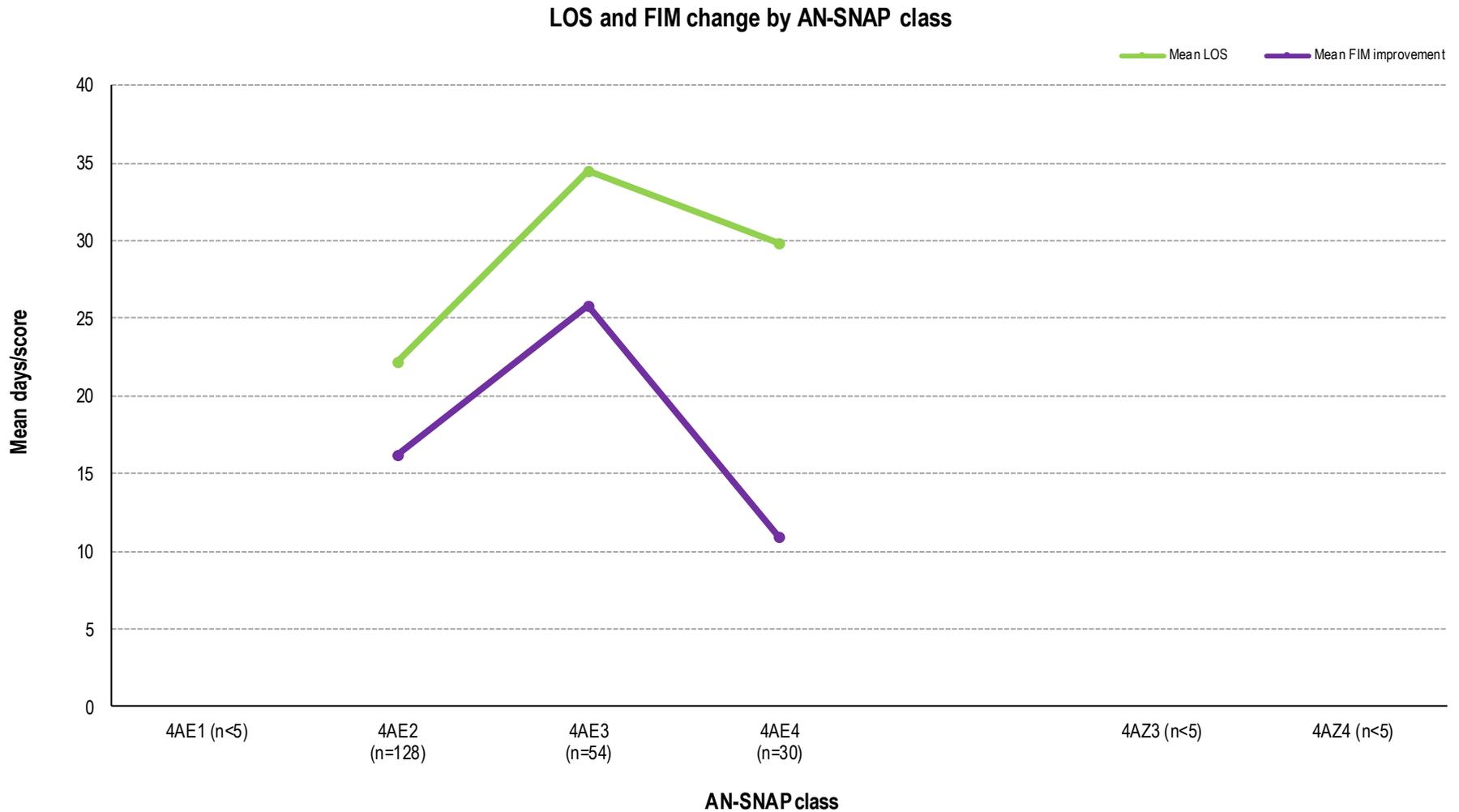
Arthritis episodes over time

Number of episodes by quarter - Arthritis
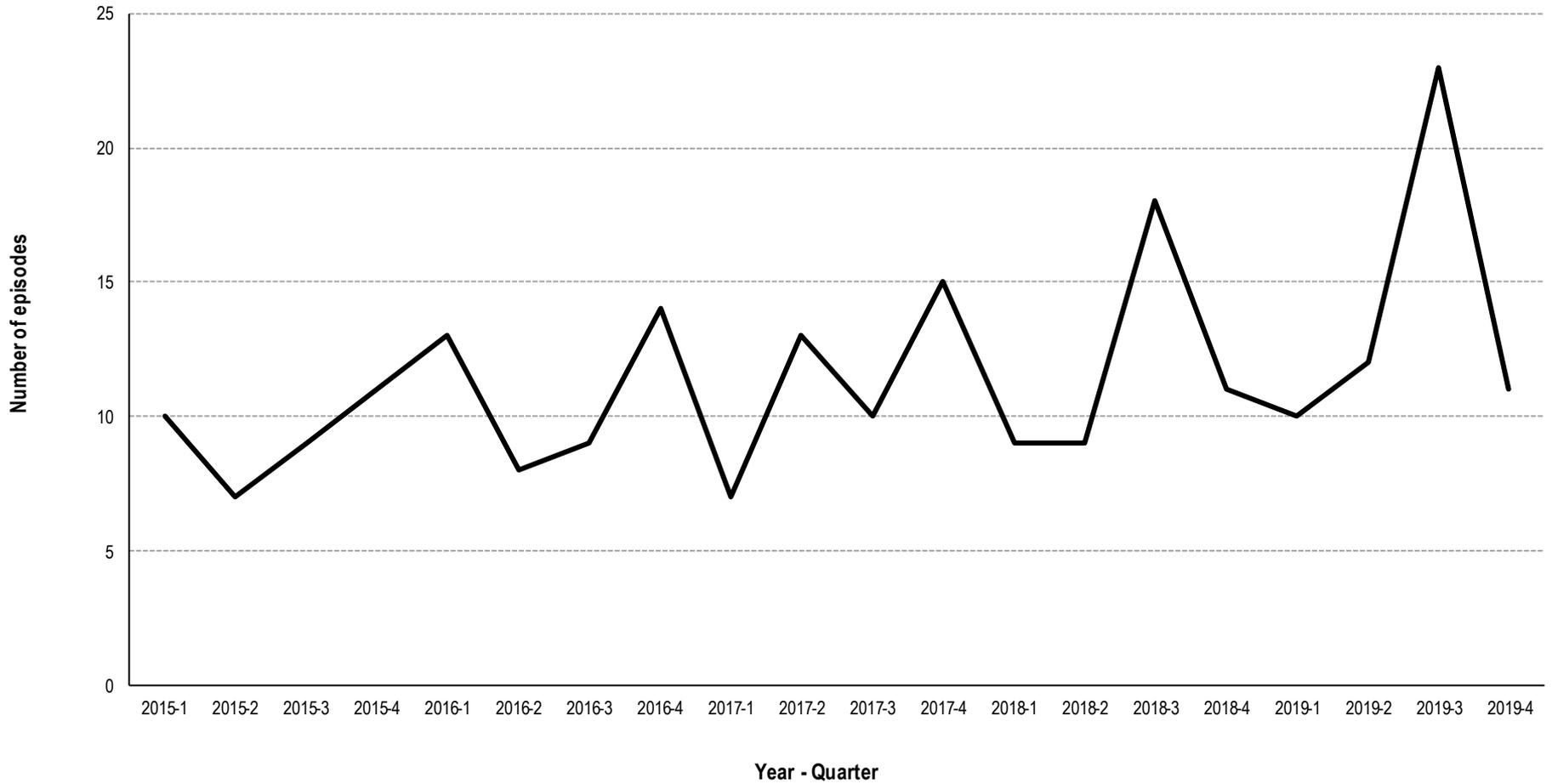
Arthritis casemix over time
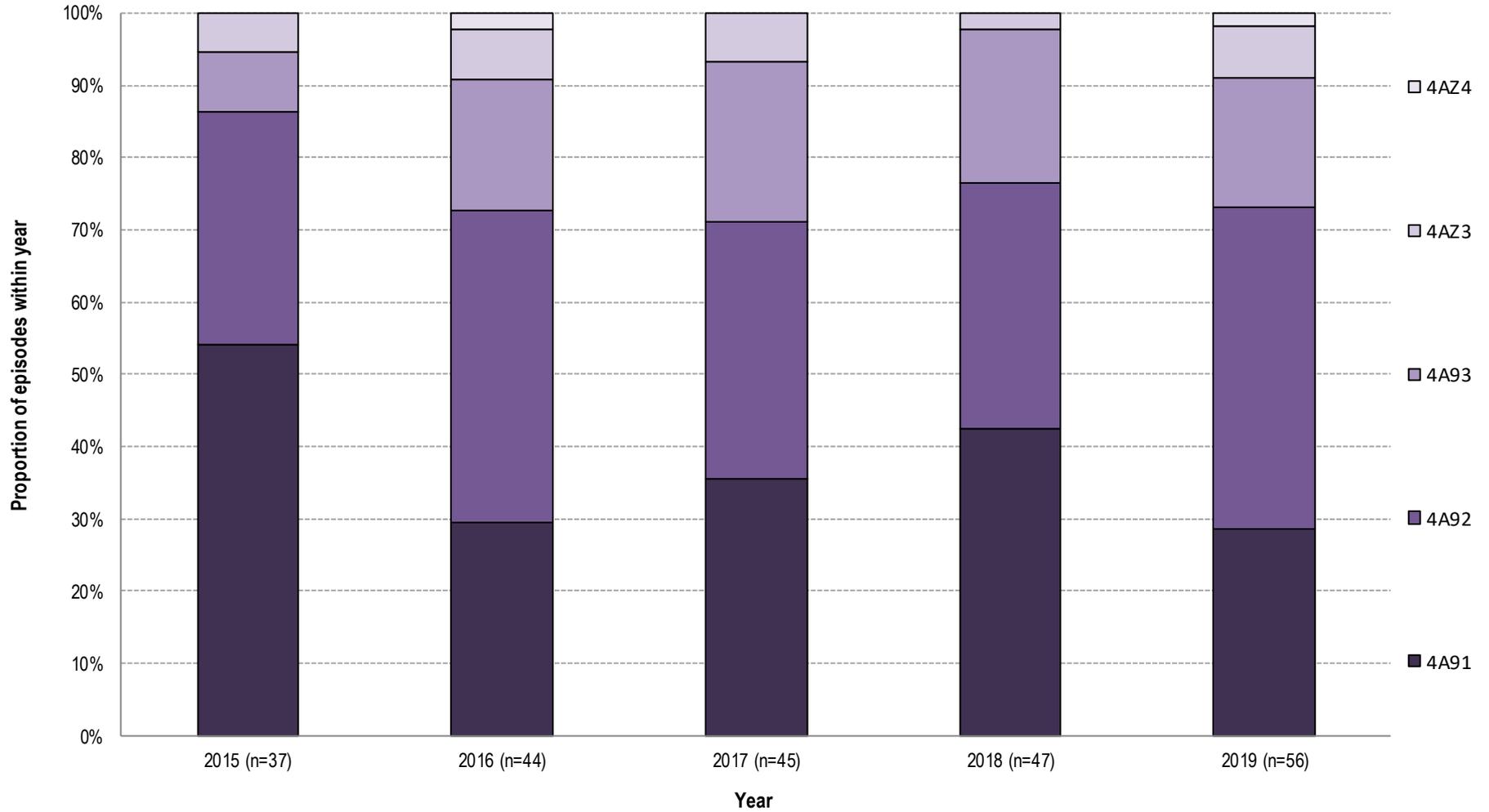
Arthritis episodes in 2019

AN-SNAP class:	4A91	4A92	4A93	4AZ3	4AZ4	All Arthritis
Number of episodes	16	25	10	4	1	56
Proportion of episodes	28.6%	44.6%	17.9%	n < 5	n < 5	100.0%
Gender (%)						
Female	*87.5%*	*40.0%*	*50.0%*	*n < 5*	*n < 5*	*58.9%*
Male	*12.5%*	*60.0%*	*50.0%*	*n < 5*	*n < 5*	*41.1%*
Age group (%)						
Under 65	*12.5%*	*20.0%*	*30.0%*	*n < 5*	*n < 5*	*19.6%*
Over 65	*87.5%*	*80.0%*	*70.0%*	*n < 5*	*n < 5*	*80.4%*
Age (Mean+95%CI)	76.8 (68.9-84.8)	75.3 (69.8-80.8)	76.2 (68.2-84.2)	n < 5	n < 5	76.3 (72.6-79.9)
Admission FIM (Mean+95%CI)	90.3 (85.8-94.9)	69.2 (66.0-72.4)	55.3 (49.4-61.2)	n < 5	n < 5	69.4 (64.5-74.2)
LOS (Mean+95%CI)	13.9 (10.8-17.1)	19.4 (13.8-24.9)	33.9 (15.5-52.3)	n < 5	n < 5	21.8 (17.1-26.6)
Discharge destination (%)						
Discharged to community	*100.0%*	*100.0%*	*100.0%*	*n < 5*	*n < 5*	*100.0%*
Remaining in hospital system	*0.0%*	*0.0%*	*0.0%*	*n < 5*	*n < 5*	*0.0%*
FIM change (Mean+95%CI)	12.9 (8.8-16.9)	23.2 (17.3-29.1)	30.7 (21.5-39.9)	n < 5	n < 5	21.9 (18.0-25.8)
FIM efficiency (FIM change/LOS)	0.9	1.2	0.9	n < 5	n < 5	1.0

Arthritis discharge destination by AN-SNAP class

Discharge destination - Arthritis
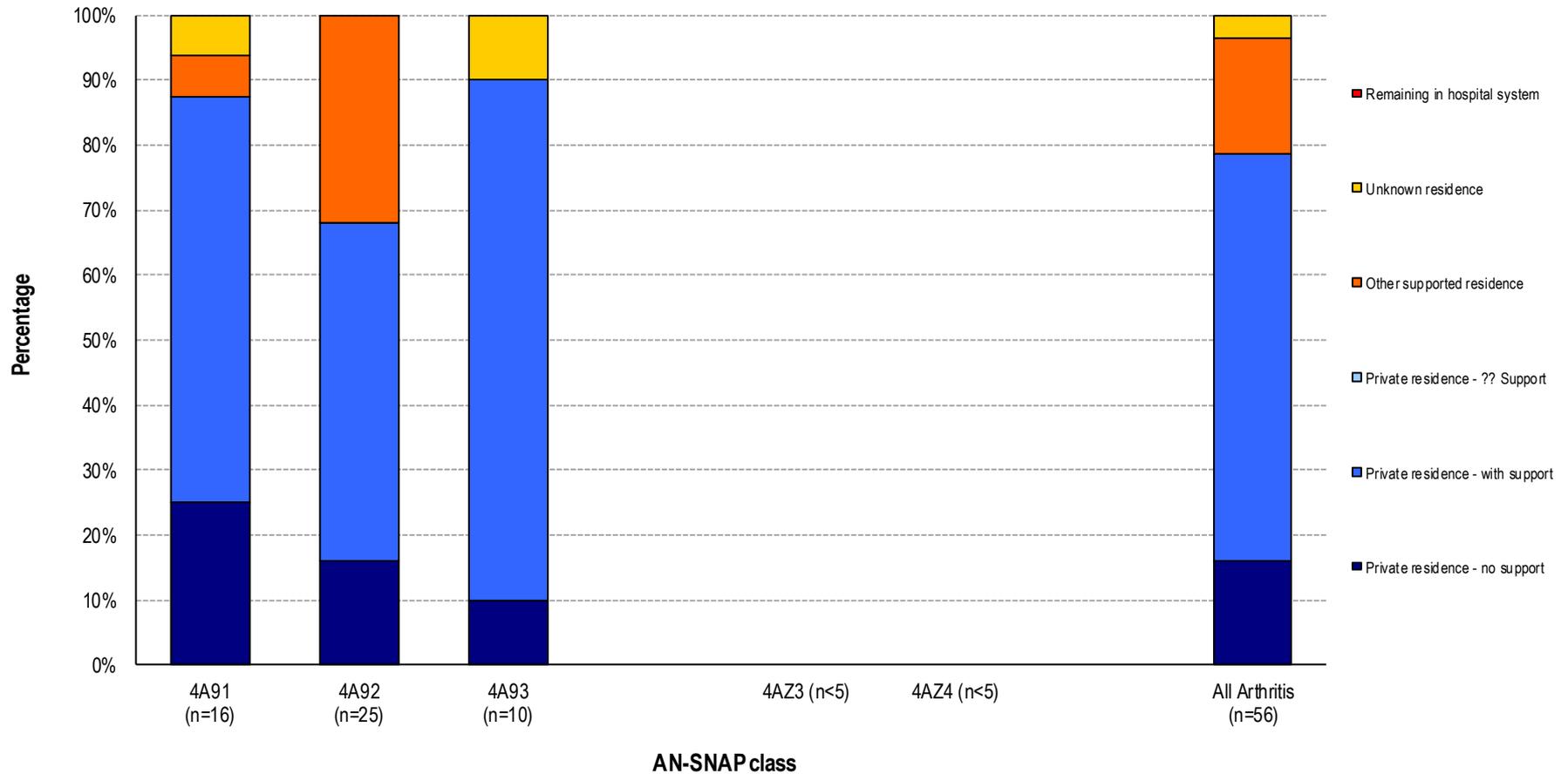
Arthritis LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Change in outcome measures in arthritis, 2018 to 2019

Difference from 2018 data - All Arthritis

2018

	2018
Age (years)	76.7
Length of stay (days)	16.6
FIM admission score	77.1
FIM discharge score	93.3
FIM change (adm to disch)	16.3
FIM efficiency (per week)	6.9
Disch to community (%)	100.0

2018 (n = 47)
2019 (n = 56)

Lower than 2018 data

Higher than 2018 data
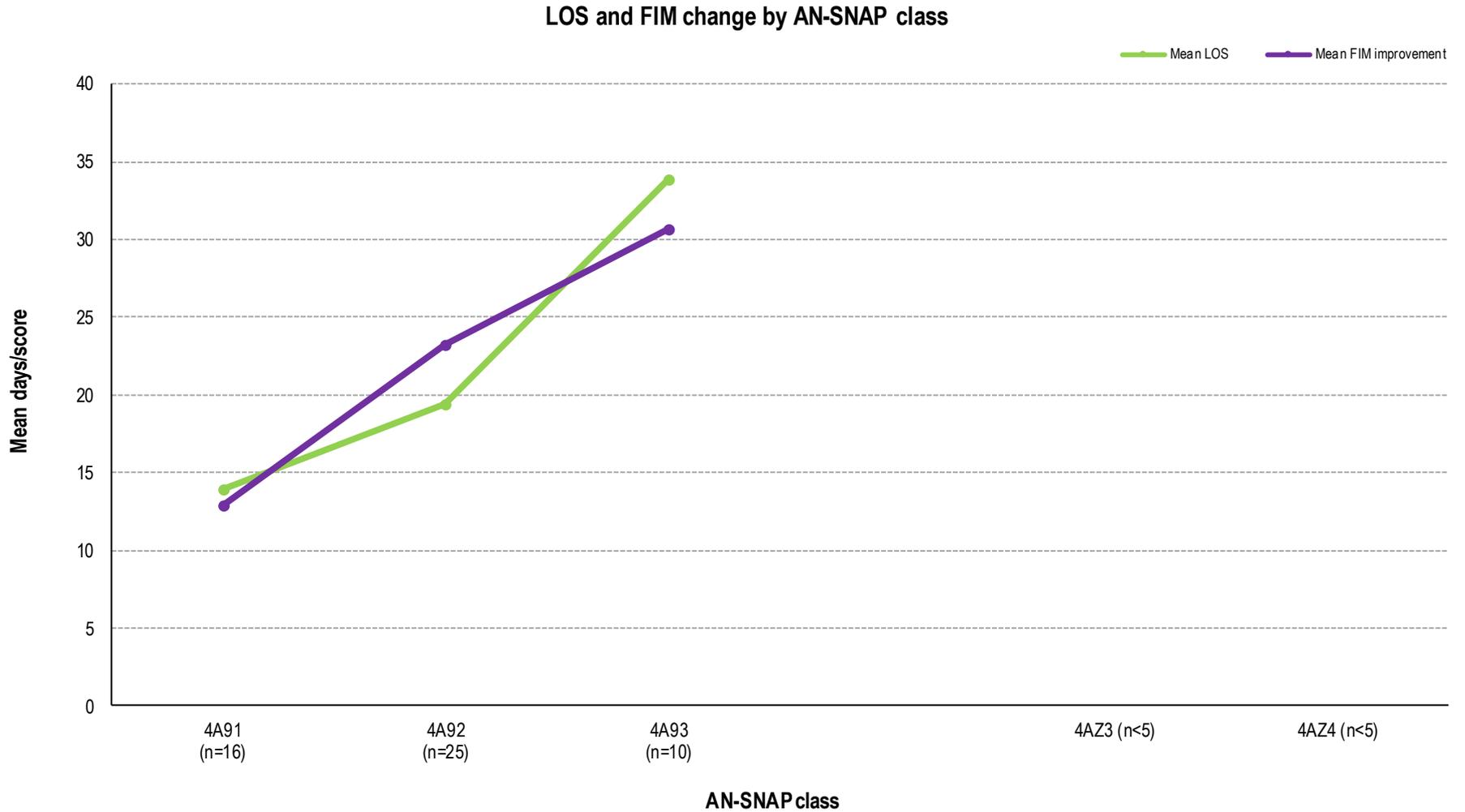
Orthopaedic fracture episodes over time

Number of episodes by quarter - Orthopaedic fractures
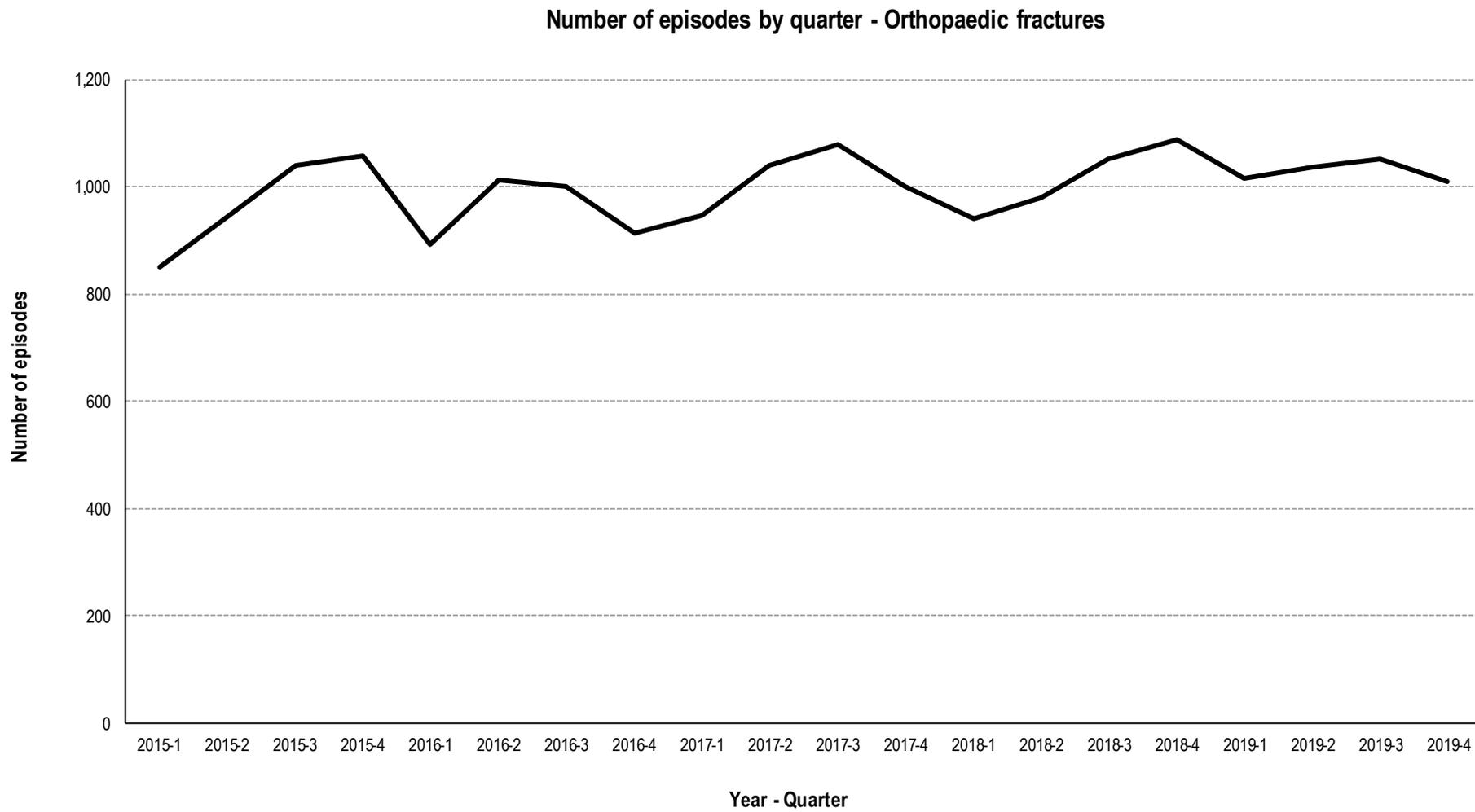
Orthopaedic fracture casemix over time
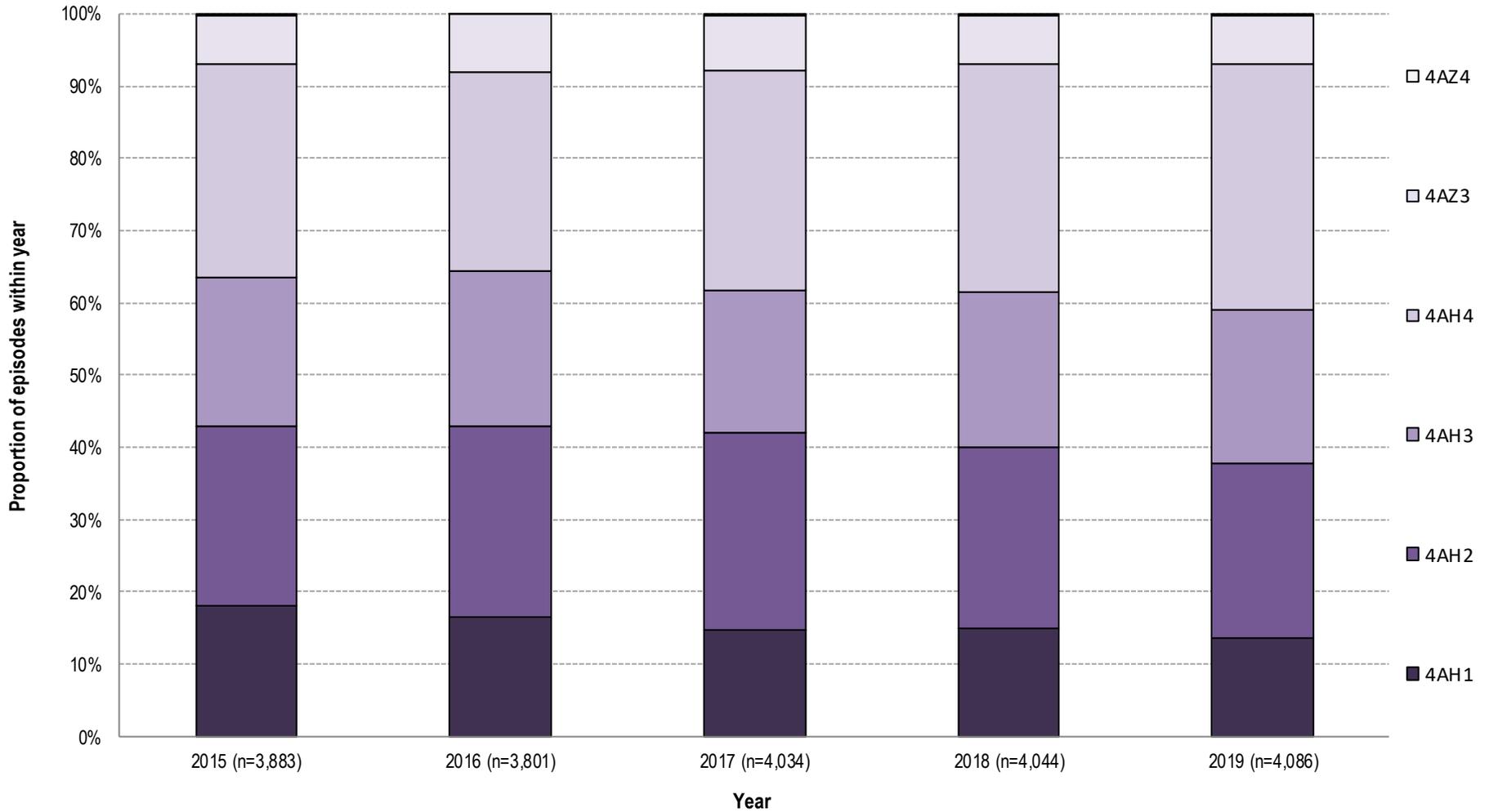
Orthopaedic fracture episodes in 2019

AN-SNAP class:	4AH1	4AH2	4AH3	4AH4	4AZ3	4AZ4	All Orthopaedic fractures
Number of episodes	557	984	868	1,393	280	4	4,113
Proportion of episodes	13.5%	23.9%	21.1%	33.9%	6.8%	n < 5	100.0%
Gender (%)							
Female	*76.3%*	*71.4%*	*72.4%*	*69.8%*	*69.6%*	*n < 5*	*71.5%*
Male	*23.7%*	*28.6%*	*27.5%*	*30.2%*	*30.4%*	*n < 5*	*28.4%*
Age group (%)							
Under 65	*11.1%*	*4.9%*	*3.2%*	*4.1%*	*0.0%*	*n < 5*	*4.9%*
Over 65	*88.3%*	*94.4%*	*95.7%*	*95.5%*	*100.0%*	*n < 5*	*94.5%*
Age (Mean+95%CI)	76.8 (75.8-77.8)	81.8 (81.2-82.4)	83.2 (82.6-83.8)	83.6 (83.1-84.1)	87.1 (86.3-88.0)	n < 5	82.4 (82.1-82.7)
Admission FIM (Mean+95%CI)	95.1 (94.4-95.8)	83.0 (82.4-83.6)	68.3 (67.8-68.9)	51.5 (50.9-52.1)	31.3 (30.2-32.3)	n < 5	67.5 (66.9-68.2)
LOS (Mean+95%CI)	12.9 (11.4-14.4)	14.5 (13.9-15.1)	17.9 (17.2-18.7)	22.9 (22.2-23.6)	23.0 (21.4-24.6)	n < 5	18.4 (18.0-18.8)
Discharge destination (%)							
Discharged to community	*98.6%*	*99.0%*	*98.2%*	*94.8%*	*94.2%*	*n < 5*	*97.0%*
Remaining in hospital system	*1.4%*	*1.0%*	*1.8%*	*5.2%*	*5.8%*	*n < 5*	*3.0%*
FIM change (Mean+95%CI)	14.6 (13.9-15.3)	16.0 (15.4-16.6)	23.7 (22.9-24.6)	28.3 (27.4-29.2)	22.9 (20.3-25.5)	n < 5	22.0 (21.6-22.5)
FIM efficiency (FIM change/LOS)	1.1	1.1	1.3	1.2	1.0	n < 5	1.2

Orthopaedic fracture discharge destination by AN-SNAP class

Discharge destination - Orthopaedic fractures

Legend:
- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

X-axis (AN-SNAP class): 4AH1 (n=557), 4AH2 (n=984), 4AH3 (n=868), 4AH4 (n=1,393), 4AZ3 (n=280), 4AZ4 (n<5), All Orthopaedic fractures (n=4,113)

Y-axis: Percentage
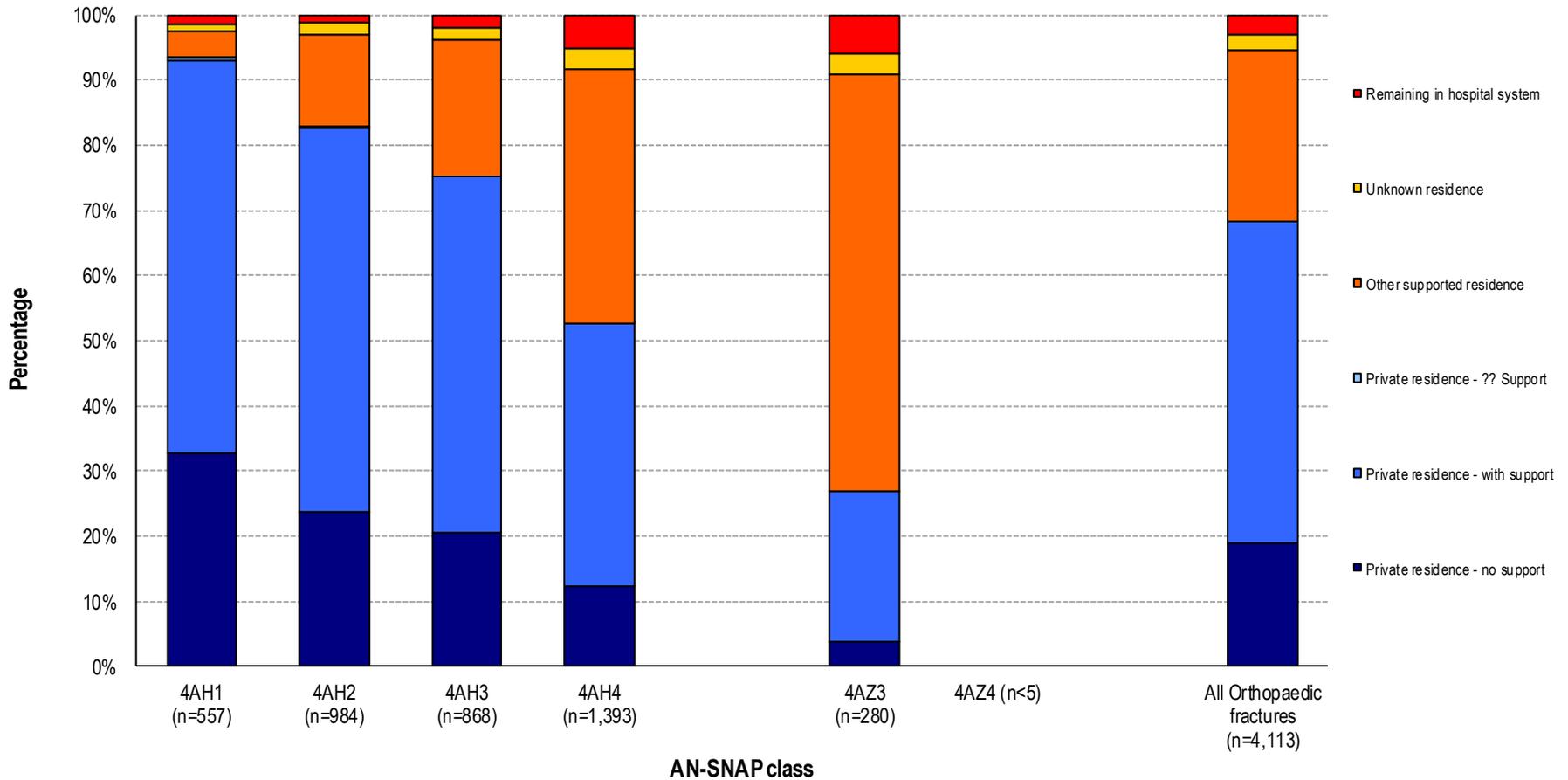
Orthopaedic fracture LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Change in outcome measures in orthopaedic fracture, 2018 to 2019

Difference from 2018 data - All Orthopaedic fractures
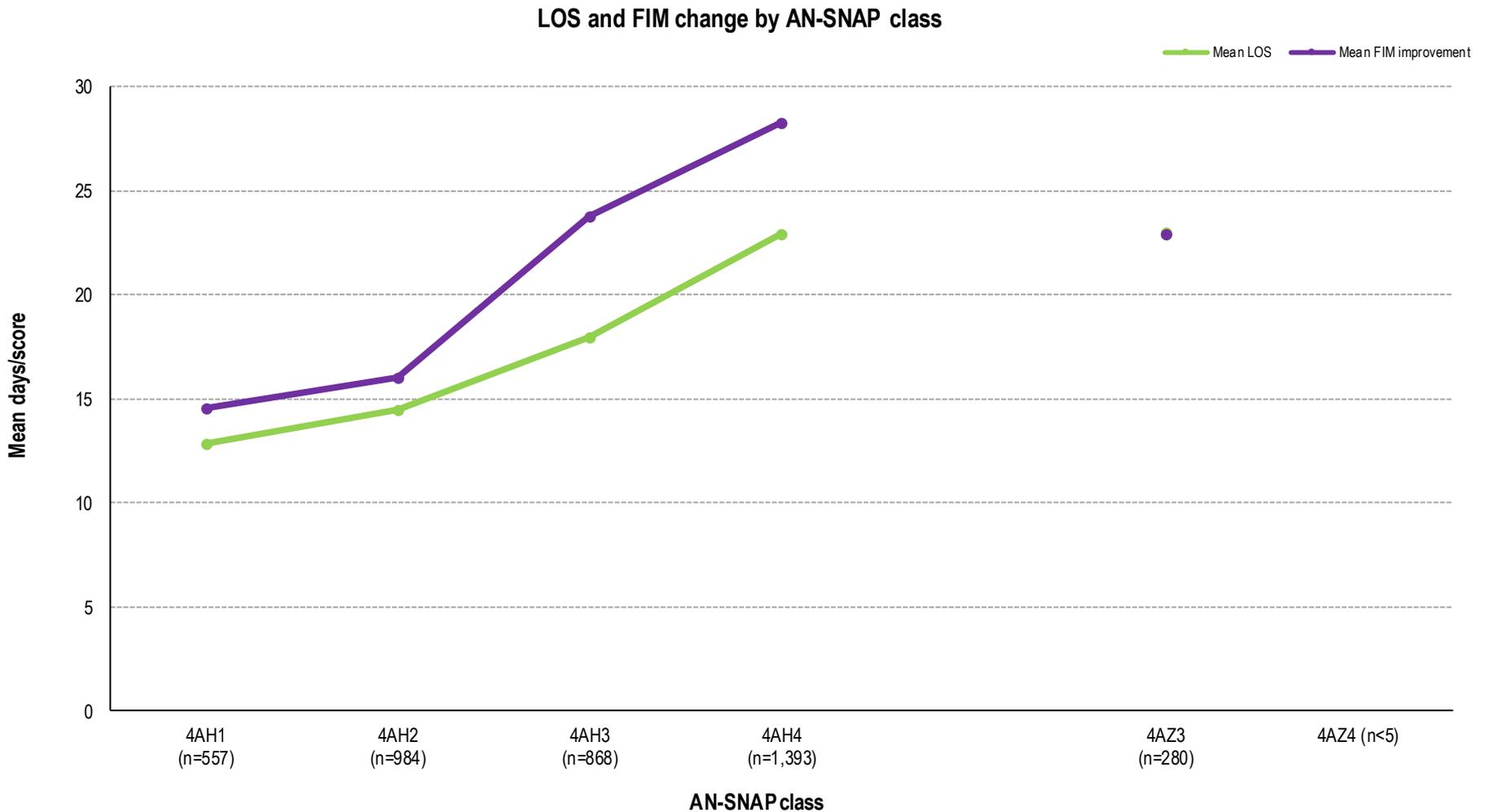
Orthopaedic replacement episodes over time

Number of episodes by quarter - Orthopaedic replacements
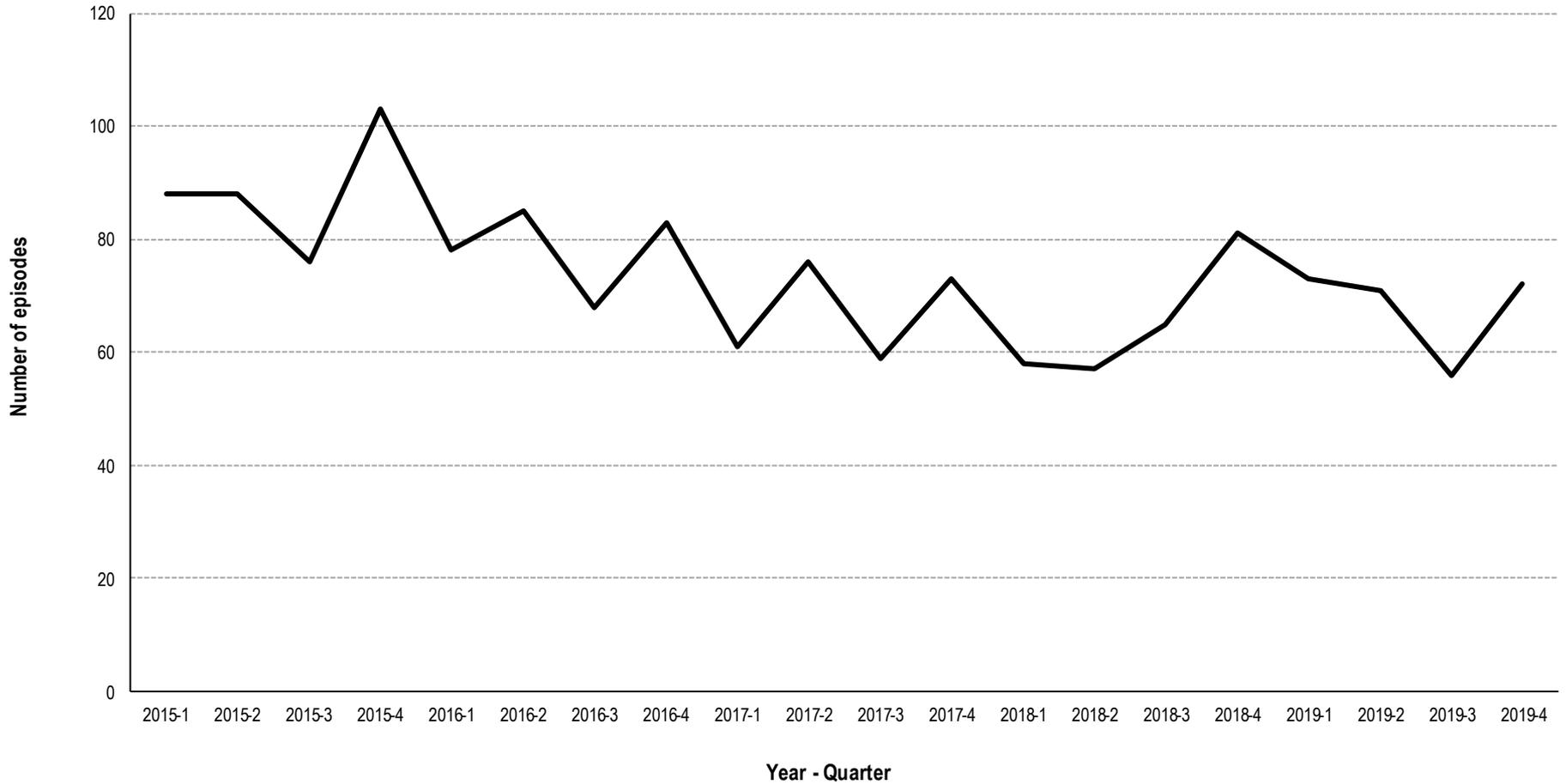
Orthopaedic replacement casemix over time
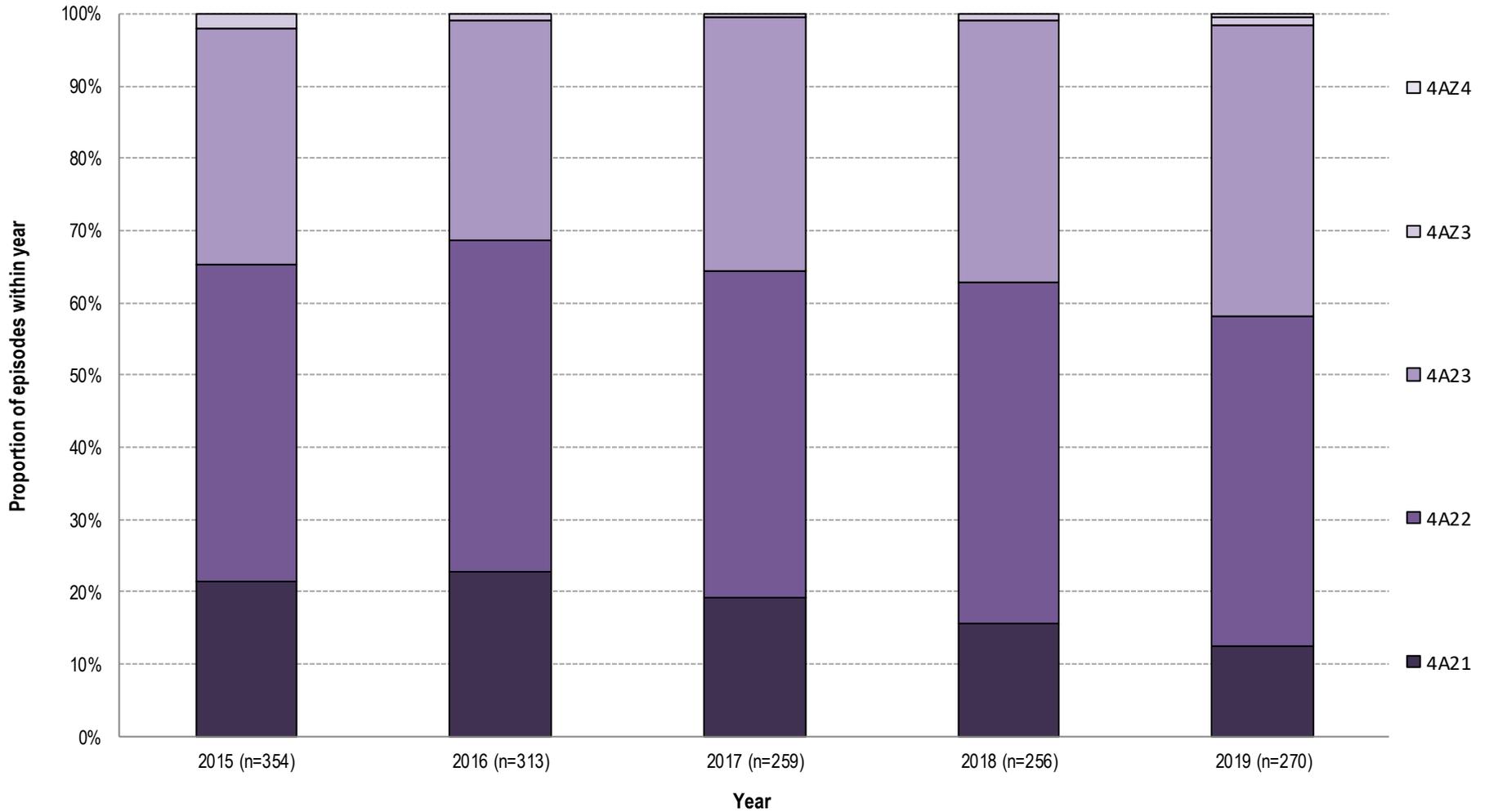
Orthopaedic replacement episodes in 2019

AN-SNAP class:	4A21	4A22	4A23	4AZ3	4AZ4	All Orthopaedic replacements
Number of episodes	34	123	109	3	1	272
Proportion of episodes	12.5%	45.2%	40.1%	n < 5	n < 5	100.0%
Gender (%)						
Female	*50.0%*	*67.5%*	*61.5%*	*n < 5*	*n < 5*	*62.9%*
Male	*50.0%*	*32.5%*	*38.5%*	*n < 5*	*n < 5*	*37.1%*
Age group (%)						
Under 65	*14.7%*	*5.7%*	*4.6%*	*n < 5*	*n < 5*	*6.6%*
Over 65	*85.3%*	*94.3%*	*93.6%*	*n < 5*	*n < 5*	*92.3%*
Age (Mean+95%CI)	73.7 (70.6-76.9)	78.4 (76.8-80.0)	79.9 (78.2-81.7)	n < 5	n < 5	78.5 (77.4-79.6)
Admission FIM (Mean+95%CI)	103.3 (101.0-105.6)	86.7 (84.9-88.4)	62.6 (60.3-64.9)	n < 5	n < 5	78.2 (75.9-80.4)
LOS (Mean+95%CI)	8.6 (7.1-10.1)	14.3 (8.2-20.4)	19.5 (17.2-21.9)	n < 5	n < 5	16.1 (13.1-19.1)
Discharge destination (%)						
Discharged to community	*97.1%*	*98.4%*	*99.1%*	*n < 5*	*n < 5*	*98.5%*
Remaining in hospital system	*2.9%*	*1.6%*	*0.9%*	*n < 5*	*n < 5*	*1.5%*
FIM change (Mean+95%CI)	9.1 (7.2-11.0)	16.5 (15.0-18.0)	28.8 (26.0-31.7)	n < 5	n < 5	20.6 (19.0-22.2)
FIM efficiency (FIM change/LOS)	1.1	1.2	1.5	n < 5	n < 5	1.3

Orthopaedic replacement discharge destination by AN-SNAP class

Discharge destination - Orthopaedic replacements
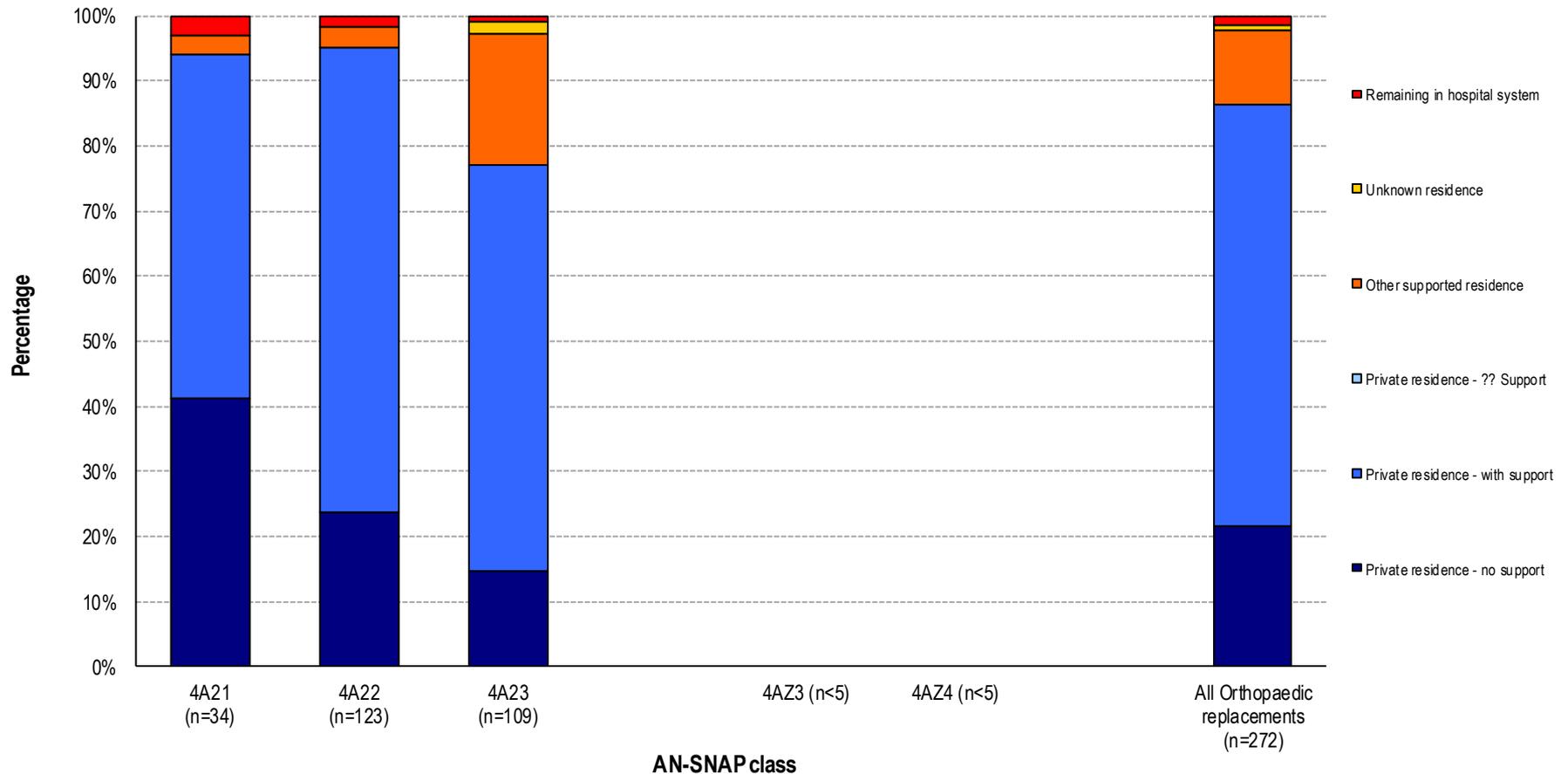
Orthopaedic replacement LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Change in outcome measures in orthopaedic replacement, 2018 to 2019

Difference from 2018 data - All Orthopaedic replacements

2018

Measure	2018 value
Age (years)	79.3
Length of stay (days)	13.9
FIM admission score	80.0
FIM discharge score	98.6
FIM change (adm to disch)	18.6
FIM efficiency (per week)	9.3
Disch to community (%)	98.9

2018 (n = 261)
2019 (n = 272)

Lower than 2018 data

Higher than 2018 data

All orthopaedic episodes over time

Number of episodes by quarter - All orthopaedic conditions
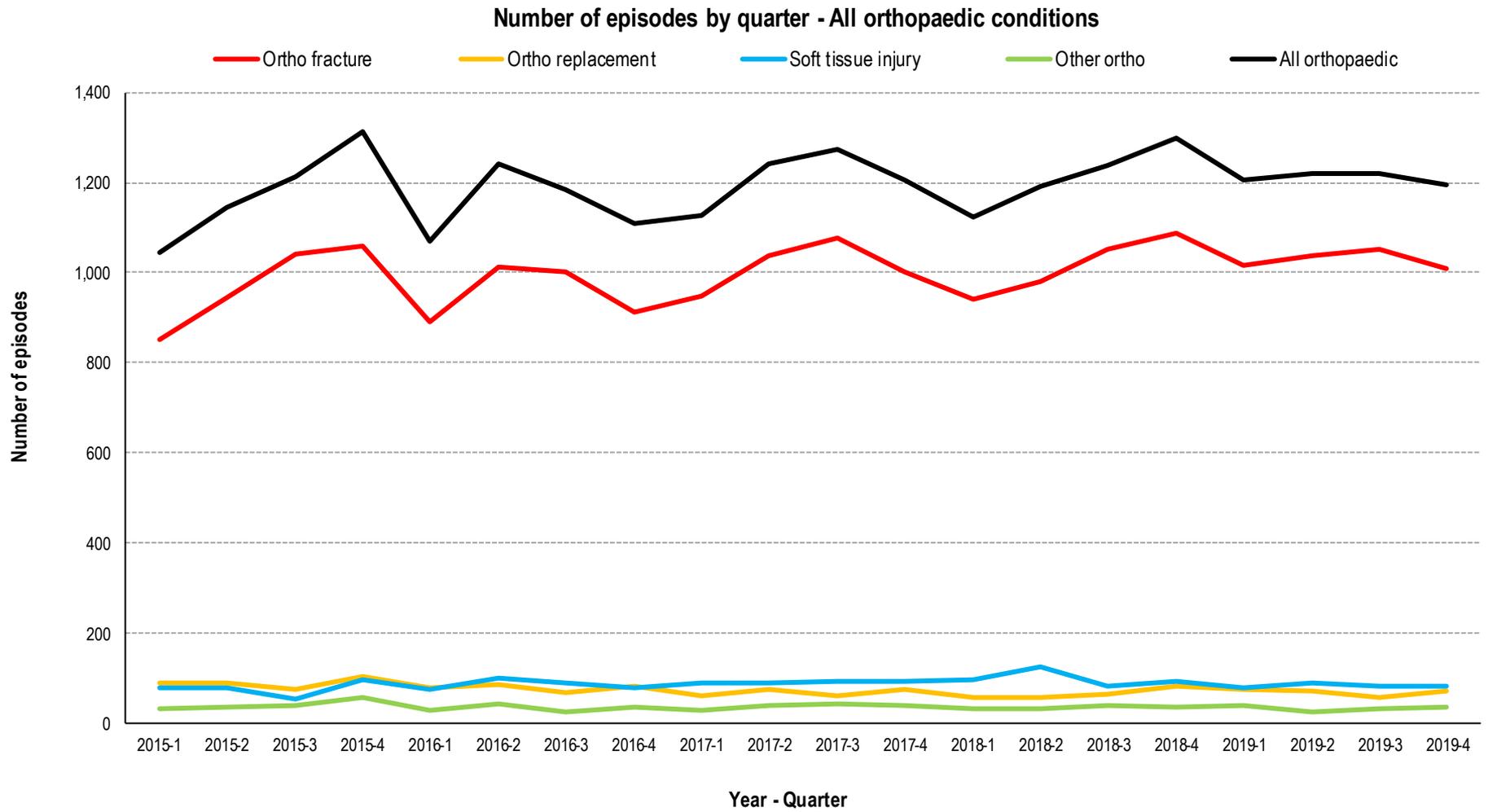
All orthopaedic episodes in 2019

AN-SNAP class:	Ortho fracture	Ortho replacement	Soft tissue injury	Other ortho	All orthopaedic conditions
Number of episodes	4,113	272	328	128	4,841
Proportion of episodes	85.0%	5.6%	6.8%	2.6%	100.0%
Gender (%)					
Female	*71.5%*	*62.9%*	*65.2%*	*58.6%*	*70.3%*
Male	*28.4%*	*37.1%*	*34.8%*	*41.4%*	*29.7%*
Age group (%)					
Under 65	*4.9%*	*6.6%*	*3.4%*	*17.2%*	*5.2%*
Over 65	*94.5%*	*92.3%*	*96.3%*	*82.8%*	*94.2%*
Age (Mean+95%CI)	82.4 (82.1-82.7)	78.5 (77.4-79.6)	83.3 (82.4-84.3)	74.2 (72.0-76.4)	82.0 (81.7-82.3)
Admission FIM (Mean+95%CI)	67.5 (66.9-68.2)	78.2 (75.9-80.4)	74.5 (72.5-76.5)	77.3 (73.7-81.0)	68.9 (68.3-69.5)
LOS (Mean+95%CI)	18.4 (18.0-18.8)	16.1 (13.1-19.1)	15.3 (14.1-16.5)	16.6 (14.5-18.7)	18.0 (17.6-18.4)
Discharge destination (%)					
Discharged to community	*97.0%*	*98.5%*	*97.5%*	*99.2%*	*97.2%*
Remaining in hospital system	*3.0%*	*1.5%*	*2.5%*	*0.8%*	*2.8%*
FIM change (Mean+95%CI)	22.0 (21.6-22.5)	20.6 (19.0-22.2)	15.9 (14.4-17.4)	19.5 (17.2-21.8)	21.5 (21.1-21.9)
FIM efficiency (FIM change/LOS)	1.2	1.3	1.0	1.2	1.2

All Orthopaedic episodes discharge destination by orthopaedic group

Discharge destination - All orthopaedic conditions
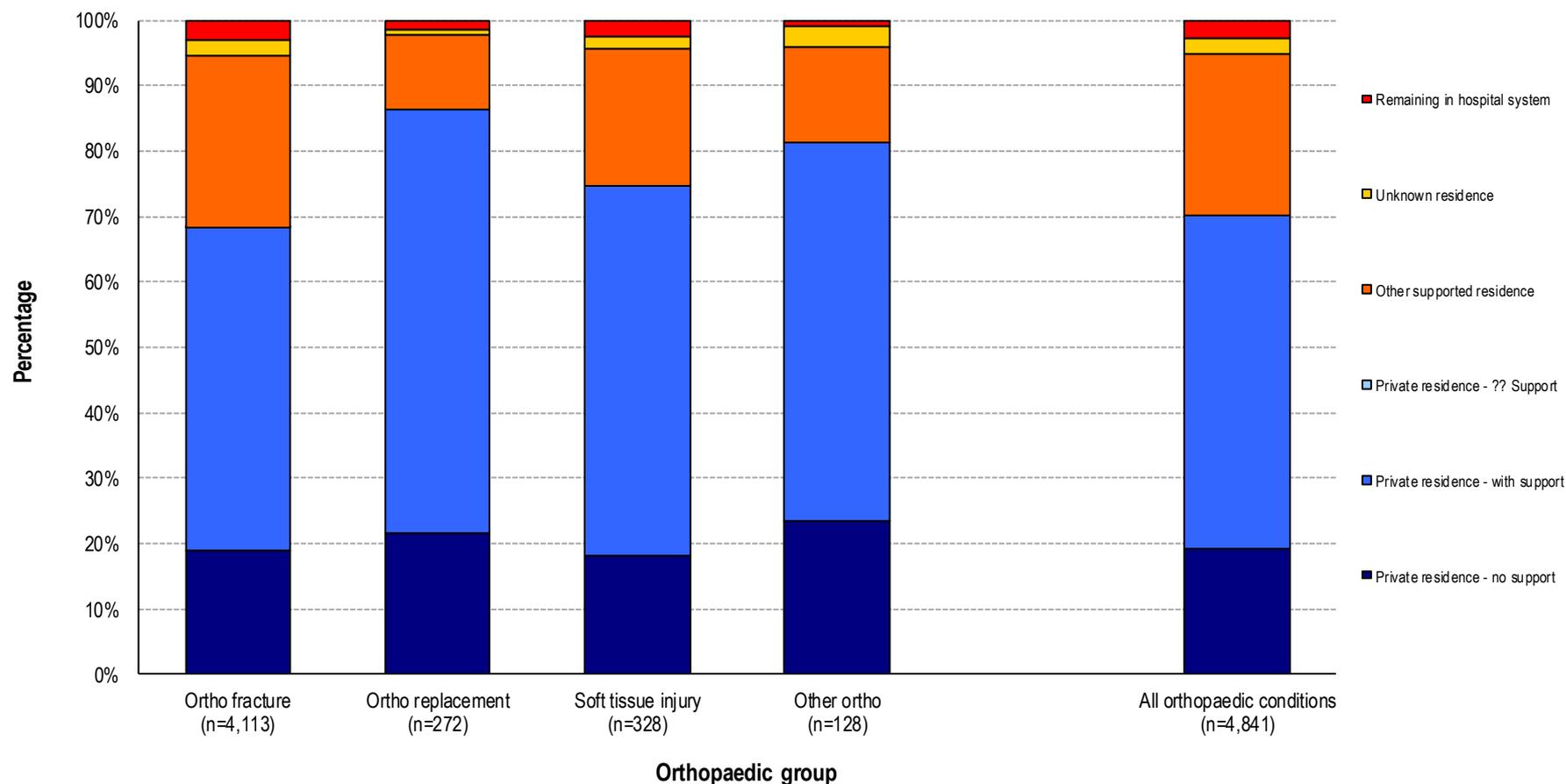
All orthopaedic conditions LOS and FIM change by orthopaedic group

LOS and FIM change by AN-SNAP class

Change in outcome measures in orthopaedic conditions, 2018 to 2019

Difference from 2018 data - All orthopaedic conditions

2018 (n = 4,853)
2019 (n = 4,841)

Lower than 2018 data

Higher than 2018 data
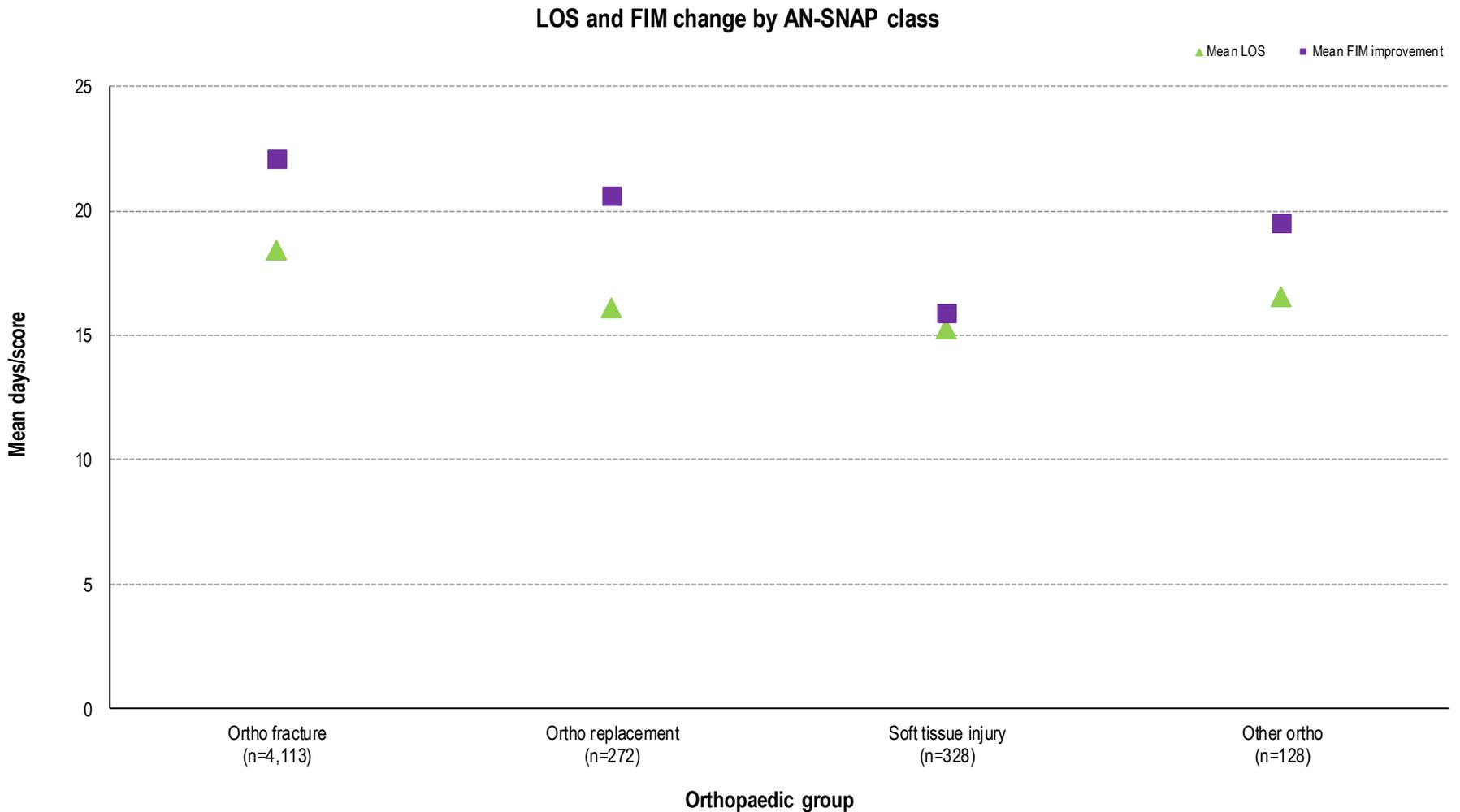
Pulmonary episodes over time

Number of episodes by quarter - Pulmonary
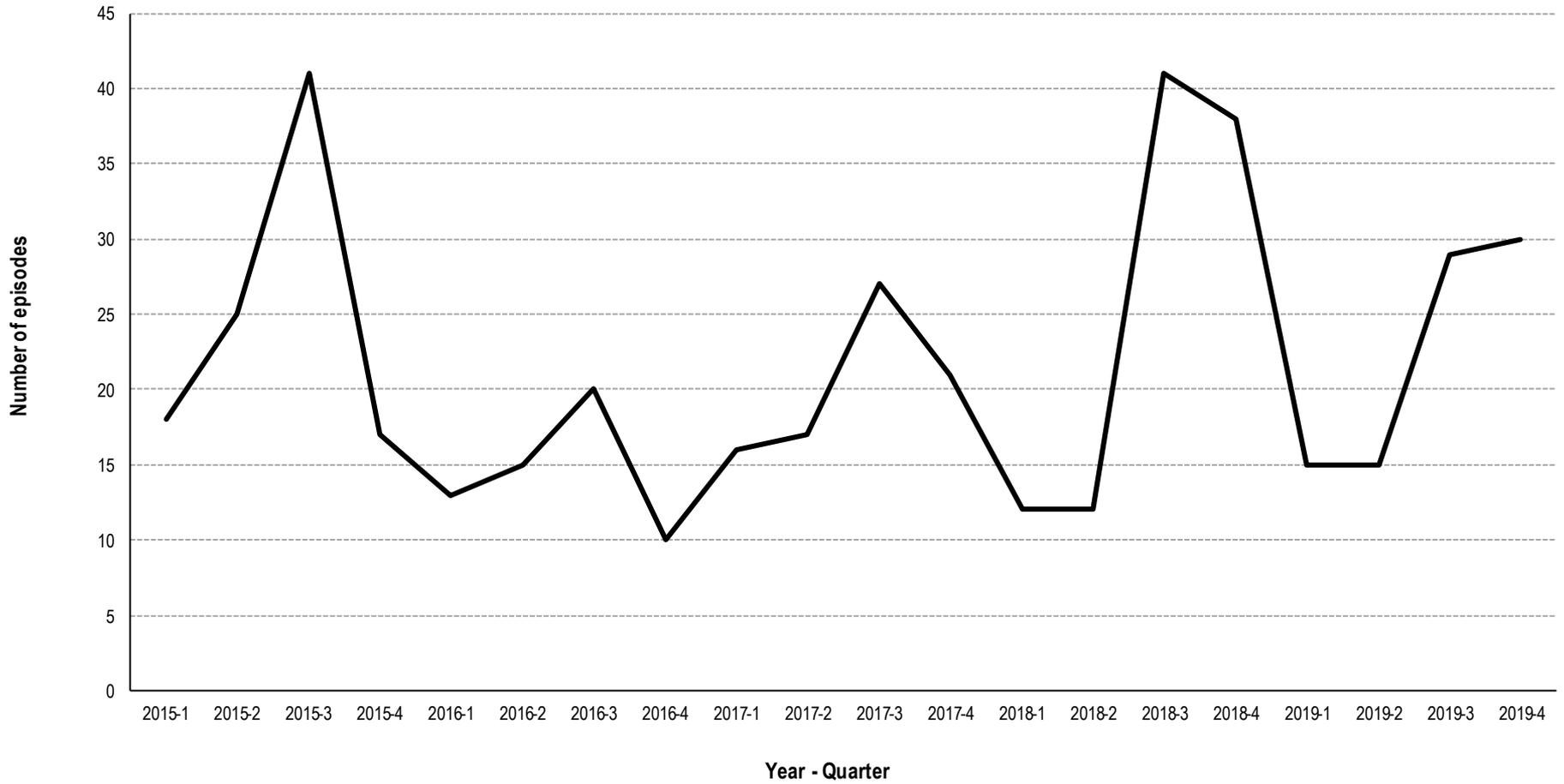
Pulmonary casemix over time
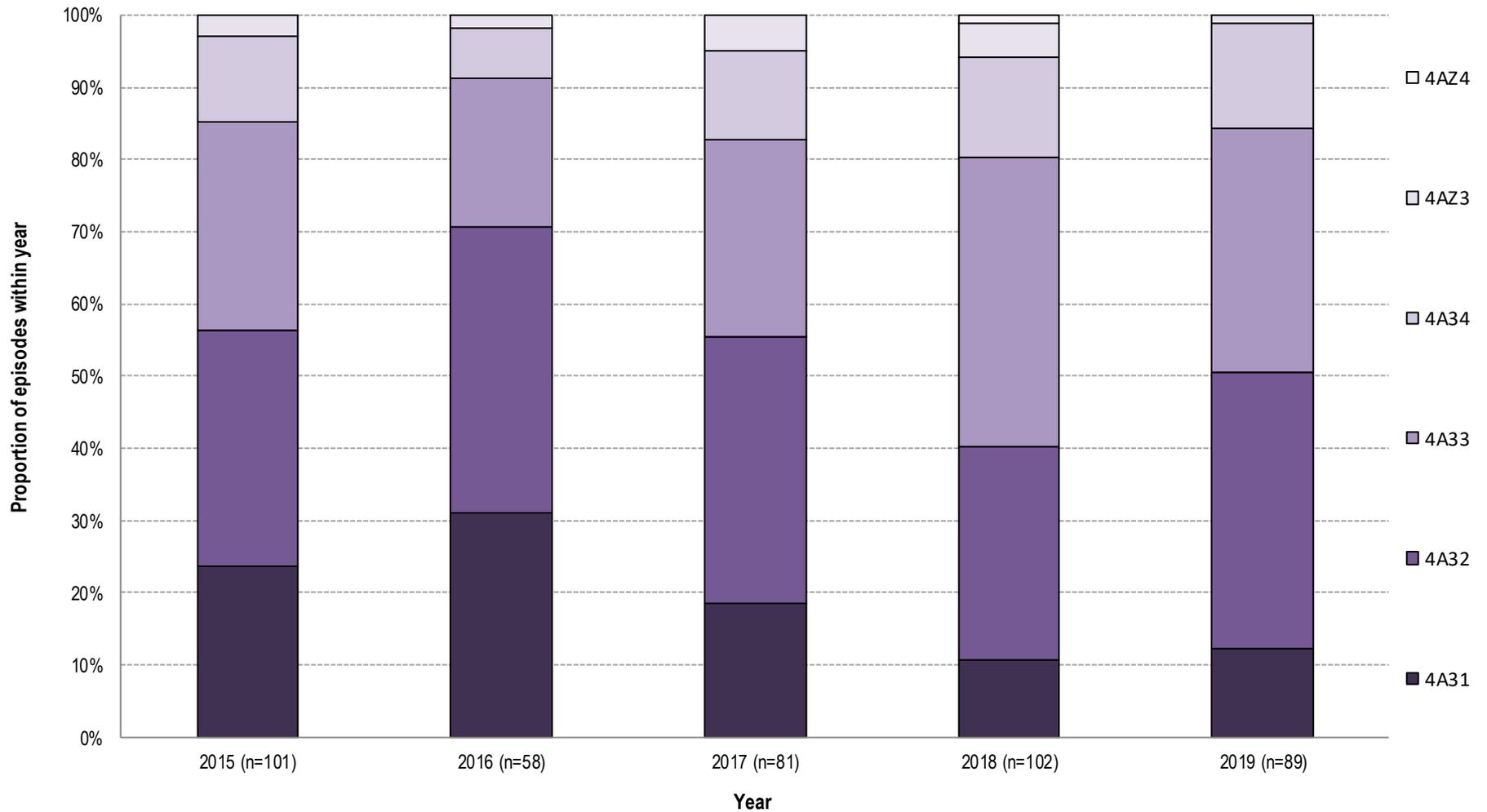
Pulmonary episodes in 2019

AN-SNAP class:	4A31	4A32	4A33	4A34	4AZ3	4AZ4	All Pulmonary
Number of episodes	11	34	30	13	1	0	89
Proportion of episodes	12.4%	38.2%	33.7%	14.6%	n < 5	n < 5	100.0%
Gender (%)							
Female	*72.7%*	*55.9%*	*33.3%*	*46.2%*	*n < 5*	*n < 5*	*48.3%*
Male	*27.3%*	*44.1%*	*66.7%*	*53.8%*	*n < 5*	*n < 5*	*51.7%*
Age group (%)							
Under 65	*0.0%*	*5.9%*	*3.3%*	*0.0%*	*n < 5*	*n < 5*	*3.4%*
Over 65	*100.0%*	*94.1%*	*96.7%*	*100.0%*	*n < 5*	*n < 5*	*96.6%*
Age (Mean+95%CI)	80.8 (75.7-85.9)	79.0 (75.7-82.4)	83.1 (80.1-86.1)	82.8 (78.8-86.8)	n < 5	n < 5	81.1 (79.3-83.0)
Admission FIM (Mean+95%CI)	102.0 (97.2-106.8)	88.8 (85.7-91.9)	63.7 (60.2-67.3)	48.1 (42.9-53.3)	n < 5	n < 5	76.2 (71.8-80.5)
LOS (Mean+95%CI)	11.5 (7.5-15.4)	13.7 (12.0-15.4)	16.3 (13.9-18.7)	20.7 (13.7-27.7)	n < 5	n < 5	15.2 (13.7-16.7)
Discharge destination (%)							
Discharged to community	*100.0%*	*97.0%*	*100.0%*	*100.0%*	*n < 5*	*n < 5*	*98.8%*
Remaining in hospital system	*0.0%*	*3.0%*	*0.0%*	*0.0%*	*n < 5*	*n < 5*	*1.2%*
FIM change (Mean+95%CI)	9.5 (4.0-15.1)	14.3 (11.4-17.1)	25.1 (20.0-30.3)	24.4 (11.7-37.1)	n < 5	n < 5	18.5 (15.5-21.5)
FIM efficiency (FIM change/LOS)	0.8	1.0	1.5	1.2	n < 5	n < 5	1.2

Pulmonary discharge destination by AN-SNAP class

Discharge destination - Pulmonary

Legend:
- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

Y-axis: Percentage (0% to 100%)

X-axis: AN-SNAP class
- 4A31 (n=11)
- 4A32 (n=34)
- 4A33 (n=30)
- 4A34 (n=13)
- 4AZ3 (n<5)
- 4AZ4 (n<5)
- All Pulmonary (n=89)
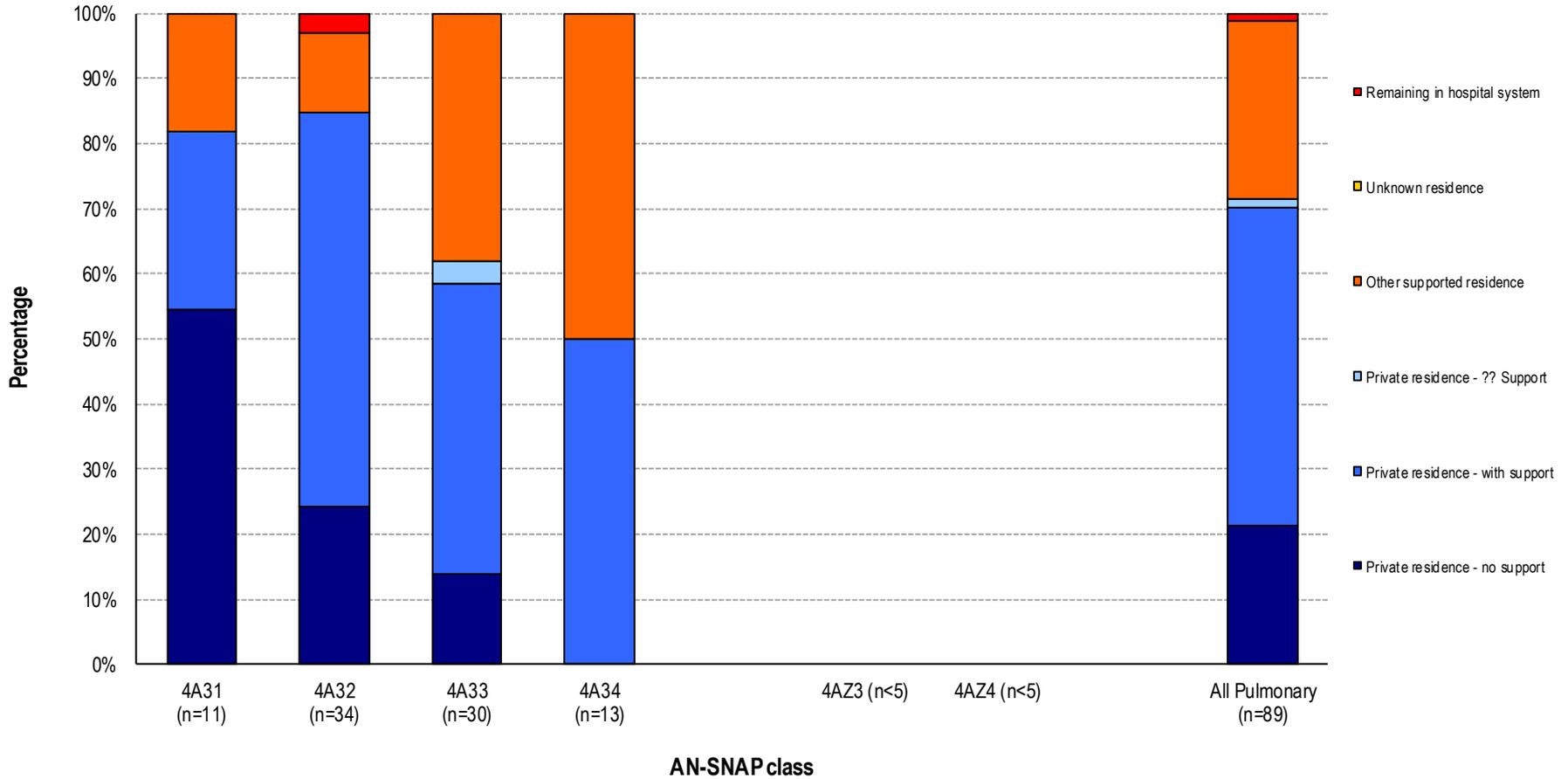
Pulmonary LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Mean LOS — Mean FIM improvement

Change in outcome measures in pulmonary, 2018 to 2019

Difference from 2018 data - All Pulmonary

2018

	2018
Age (years)	80.8
Length of stay (days)	16.5
FIM admission score	73.7
FIM discharge score	93.7
FIM change (adm to disch)	20.0
FIM efficiency (per week)	8.5
Disch to community (%)	98.0

2018 (n = 103)
2019 (n = 89)

Lower than 2018 data

Higher than 2018 data

Reconditioning episodes over time

Number of episodes by quarter - Reconditioning
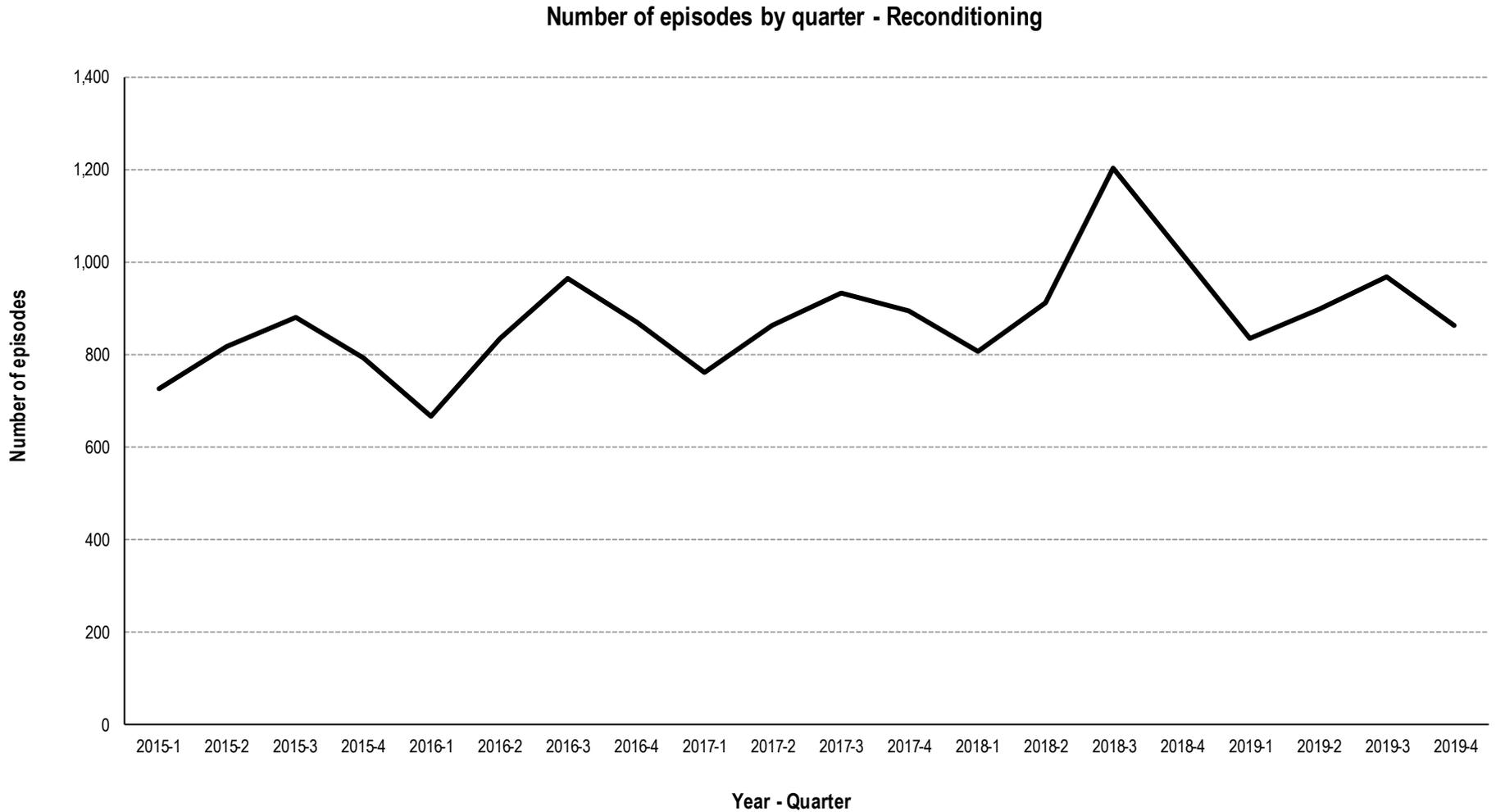
Reconditioning casemix over time
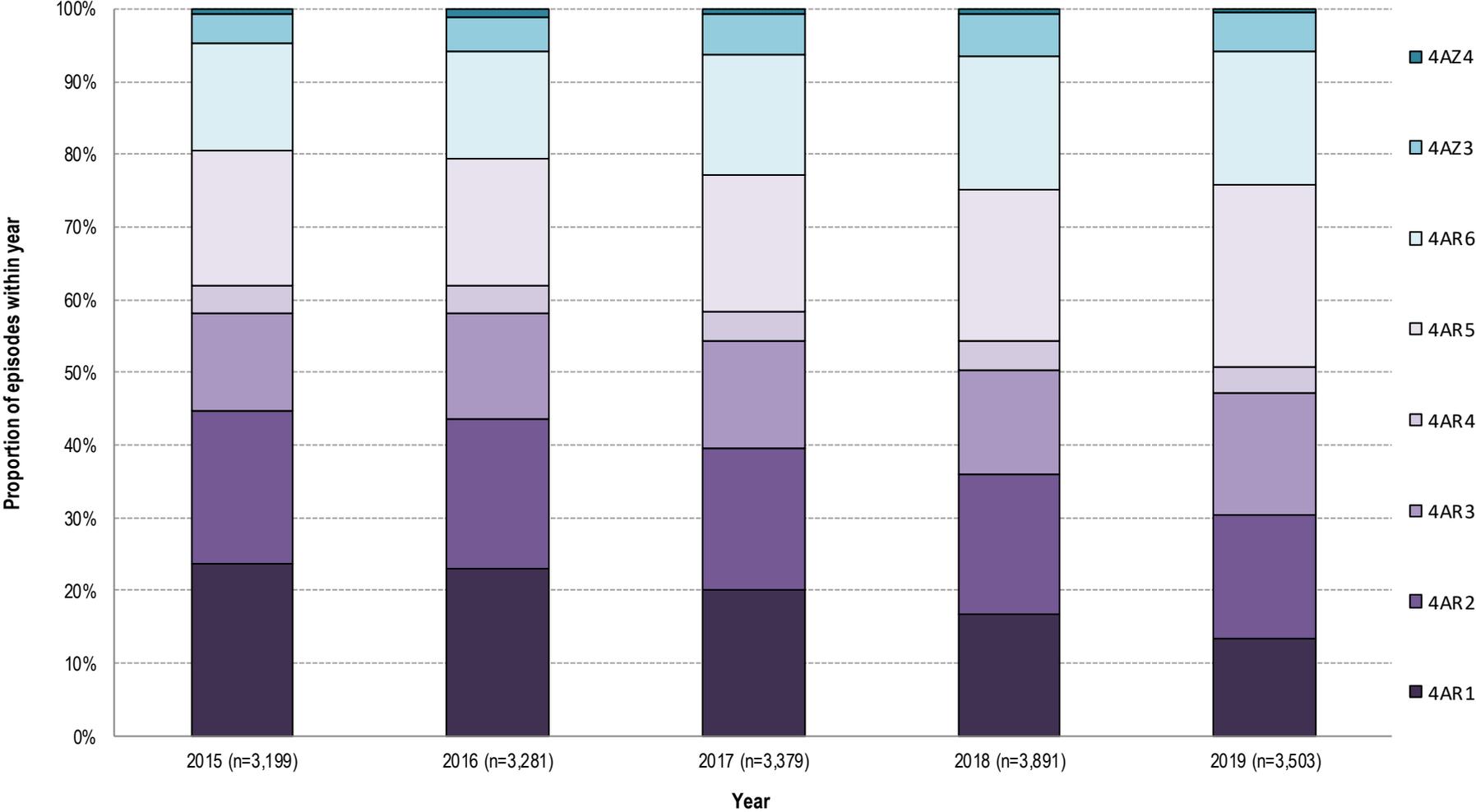
Reconditioning episodes in 2019

AN-SNAP class:	4AR1	4AR2	4AR3	4AR4	4AR5	4AR6	4AZ3	4AZ4	All Reconditioning
Number of episodes	471	592	590	123	879	649	182	17	3,562
Proportion of episodes	13.2%	16.6%	16.6%	3.5%	24.7%	18.2%	5.1%	0.5%	100.0%
Gender (%)									
Female	53.5%	55.2%	52.2%	51.2%	51.3%	50.2%	56.0%	58.8%	52.7%
Male	46.5%	44.4%	47.8%	48.0%	48.6%	49.8%	44.0%	41.2%	47.2%
Age group (%)									
Under 65	10.4%	8.6%	3.2%	13.0%	3.2%	8.5%	0.0%	100.0%	6.6%
Over 65	89.0%	90.7%	95.9%	87.0%	96.6%	91.4%	100.0%	0.0%	92.9%
Age (Mean+95%CI)	77.3 (76.2-78.3)	79.8 (78.9-80.7)	82.0 (81.2-82.7)	77.6 (75.2-79.9)	82.8 (82.2-83.4)	80.1 (79.2-80.9)	83.0 (81.9-84.1)	50.0 (43.9-56.1)	80.6 (80.2-80.9)
Admission FIM (Mean+95%CI)	101.6 (100.8-102.4)	87.3 (86.8-87.8)	75.8 (75.2-76.3)	75.3 (74.4-76.1)	62.1 (61.6-62.7)	47.6 (46.8-48.3)	29.6 (28.3-31.0)	37.2 (32.4-42.0)	70.4 (69.7-71.1)
LOS (Mean+95%CI)	12.1 (11.3-12.9)	14.7 (13.9-15.5)	16.3 (15.4-17.1)	19.0 (16.4-21.7)	19.0 (18.1-19.8)	23.7 (22.4-25.1)	25.1 (22.6-27.6)	41.6 (26.0-57.1)	18.1 (17.6-18.6)
Discharge destination (%)									
Discharged to community	98.7%	97.6%	97.8%	98.3%	97.7%	97.0%	98.8%	100.0%	97.8%
Remaining in hospital system	1.3%	2.4%	2.2%	1.7%	2.3%	3.0%	1.2%	0.0%	2.2%
FIM change (Mean+95%CI)	7.9 (7.1-8.6)	14.8 (14.0-15.6)	14.6 (13.8-15.5)	22.5 (20.2-24.7)	19.0 (18.1-20.0)	21.5 (20.0-22.9)	17.9 (14.5-21.3)	18.4 (9.1-27.6)	16.5 (16.0-17.0)
FIM efficiency (FIM change/LOS)	0.6	1.0	0.9	1.2	1.0	0.9	0.7	0.4	0.9

Reconditioning discharge destination by AN-SNAP class

Discharge destination - Reconditioning

Legend:
- Remaining in hospital system
- Unknown residence
- Other supported residence
- Private residence - ?? Support
- Private residence - with support
- Private residence - no support

X-axis (AN-SNAP class): 4AR1 (n=471), 4AR2 (n=592), 4AR3 (n=590), 4AR4 (n=123), 4AR5 (n=879), 4AR6 (n=649), 4AZ3 (n=182), 4AZ4 (n=17), All Reconditioning (n=3,562)

Y-axis: Percentage
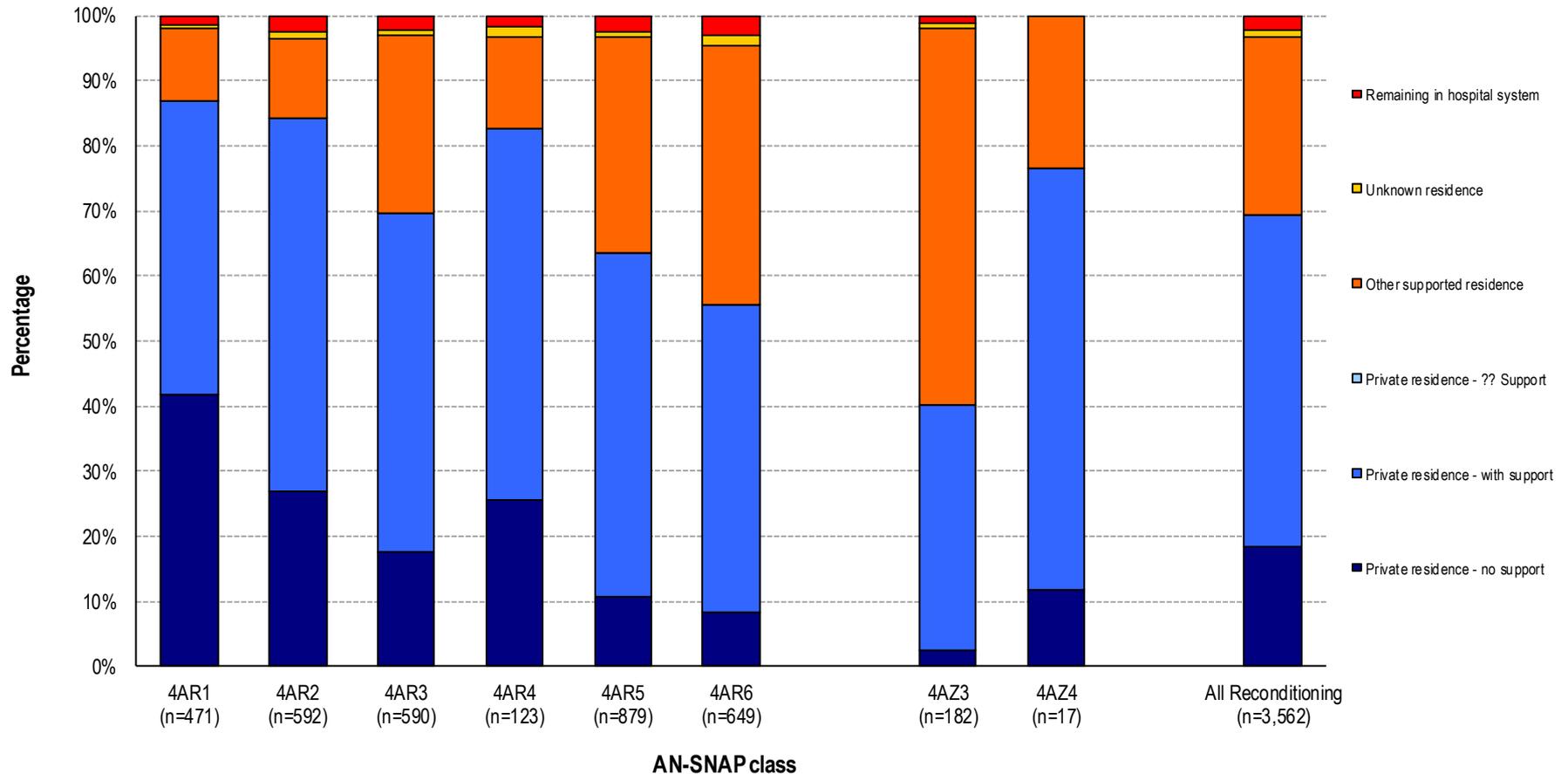
Reconditioning LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Change in outcome measures in reconditioning, 2018 to 2019

Difference from 2018 data - All Reconditioning

2018

Measure	2018 value
Age (years)	80.0
Length of stay (days)	17.5
FIM admission score	72.1
FIM discharge score	88.9
FIM change (adm to disch)	16.9
FIM efficiency (per week)	6.7
Disch to community (%)	98.2

2018 (n = 3,938)
2019 (n = 3,562)

Lower than 2018 data

Higher than 2018 data

Other impairment episodes over time

Number of episodes by quarter - Other impairments

Other impairments casemix over time
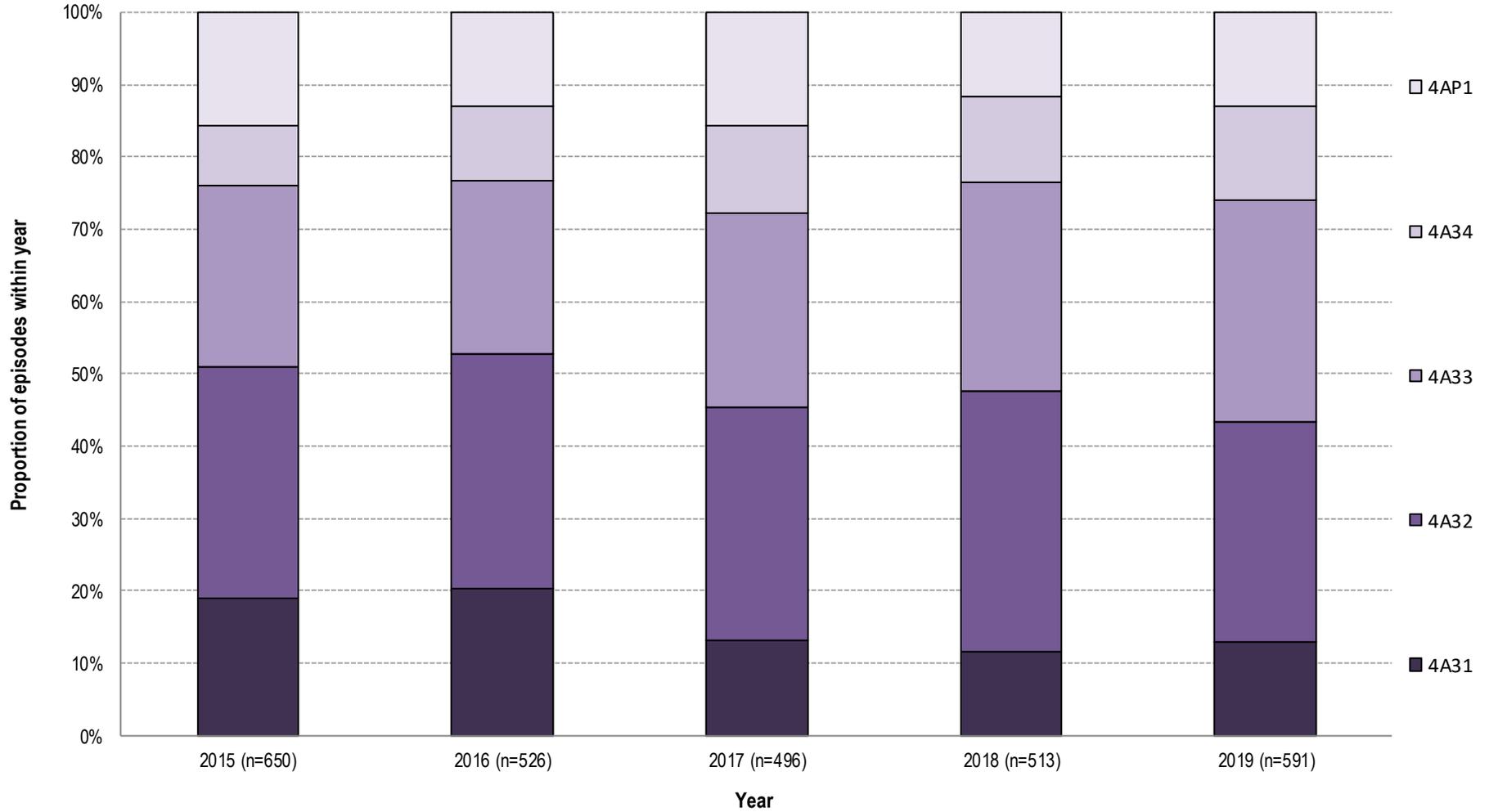
Other impairment episodes in 2019

AN-SNAP class:	Pain	Cardiac	MMT	Burns	Congenital deformity	Developmental disability
Number of episodes	305	130	95	3	6	4
Proportion of total episodes in 2019	2.5%	1.1%	0.8%	n < 5	0.0%	n < 5
Gender (%)						
Female	*66.6%*	*45.4%*	*25.3%*	*n < 5*	*100.0%*	*n < 5*
Male	*33.4%*	*54.6%*	*74.7%*	*n < 5*	*0.0%*	*n < 5*
Age group (%)						
Under 65	*1.6%*	*5.4%*	*84.2%*	*n < 5*	*50.0%*	*n < 5*
Over 65	*98.0%*	*94.6%*	*15.8%*	*n < 5*	*50.0%*	*n < 5*
Age (Mean+95%CI)	82.7 (81.7-83.8)	80.2 (78.6-81.8)	42.4 (38.4-46.5)	n < 5	61.5 (42.4-80.6)	n < 5
Admission FIM (Mean+95%CI)	77.4 (75.1-79.6)	77.2 (73.6-80.8)	70.6 (64.2-76.9)	n < 5	69.8 (42.5-97.1)	n < 5
LOS (Mean+95%CI)	15.3 (14.1-16.4)	16.1 (14.6-17.6)	41.1 (33.4-48.9)	n < 5	16.6 (1.5-31.7)	n < 5
Discharge destination (%)						
Discharged to community	*98.4%*	*97.6%*	*96.8%*	*n < 5*	*83.3%*	*n < 5*
Remaining in hospital system	*1.6%*	*2.4%*	*3.2%*	*n < 5*	*16.7%*	*n < 5*
FIM change (Mean+95%CI)	17.2 (15.7-18.8)	16.9 (14.4-19.4)	33.5 (28.6-38.4)	n < 5	16.2 (4.2-28.2)	n < 5
FIM efficiency (FIM change/LOS)	1.1	1.0	0.8	n < 5	1.0	n < 5

Other impairment discharge destination by impairment group

Discharge destination - Other impairments
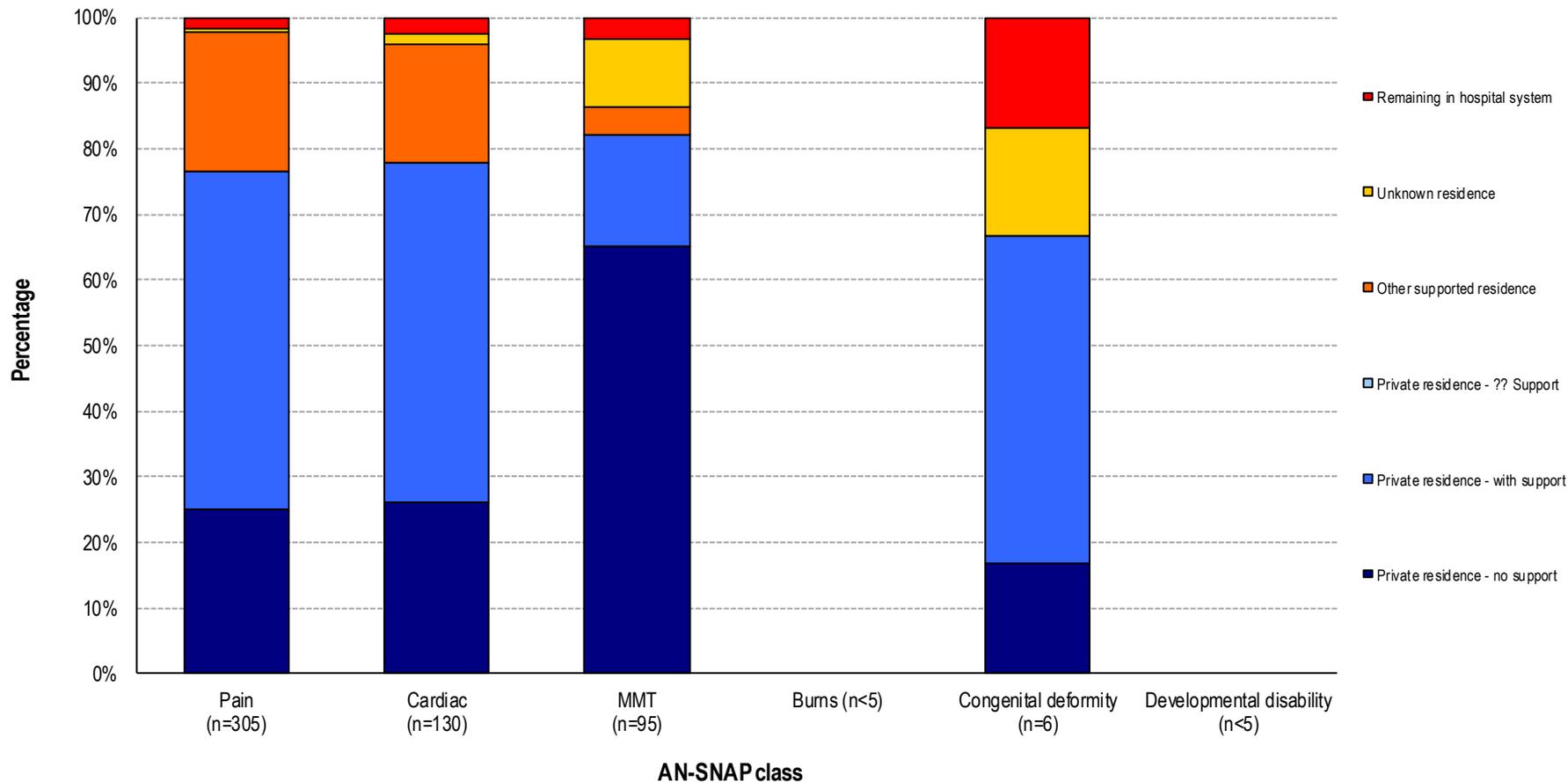
Other impairment LOS and FIM change by impairment group

LOS and FIM change by AN-SNAP class

▲ Mean LOS   ■ Mean FIM improvement

Mean days/score

Other impairment

Pain (n=305)   Cardiac (n=130)   MMT (n=95)   Burns (n<5)   Congenital deformity (n=6)   Developmental disability (n<5)

Change in outcome measures in pain, 2018 to 2019

Difference from 2018 data - Pain

2018	
Age (years)	82.5
Length of stay (days)	14.4
FIM admission score	79.4
FIM discharge score	95.9
FIM change (adm to disch)	16.4
FIM efficiency (per week)	8.0
Disch to community (%)	98.4

2018 (n = 252)
2019 (n = 305)

Lower than 2018 data

Higher than 2018 data

Change in outcome measures in cardiac, 2018 to 2019

Difference from 2018 data - Cardiac

2018

Measure	2018 value
Age (years)	80.2
Length of stay (days)	14.2
FIM admission score	80.3
FIM discharge score	99.3
FIM change (adm to disch)	19.1
FIM efficiency (per week)	9.4
Disch to community (%)	95.8

2018 (n = 127)
2019 (n = 130)

Lower than 2018 data

Higher than 2018 data

Change in outcome measures in MMT, 2018 to 2019

Difference from 2018 data - Major multiple trauma

2018

	2018
Age (years)	44.0
Length of stay (days)	44.3
FIM admission score	64.2
FIM discharge score	101.4
FIM change (adm to disch)	37.2
FIM efficiency (per week)	5.9
Disch to community (%)	97.2

2018 (n = 72)
2019 (n = 95)

Lower than 2018 data

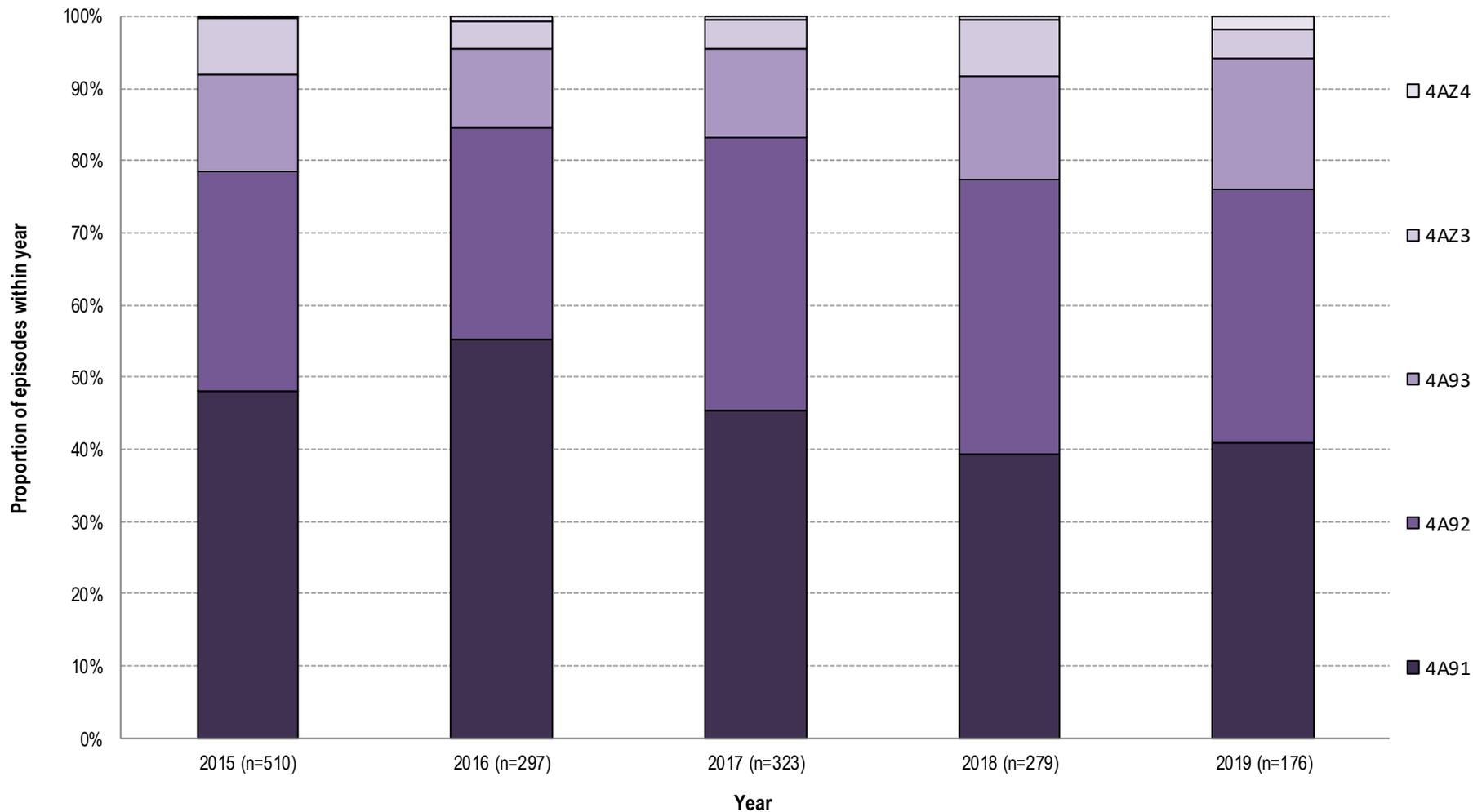Higher than 2018 data

Other disabling impairment episodes over time

Number of episodes by quarter - Other disabling impairments
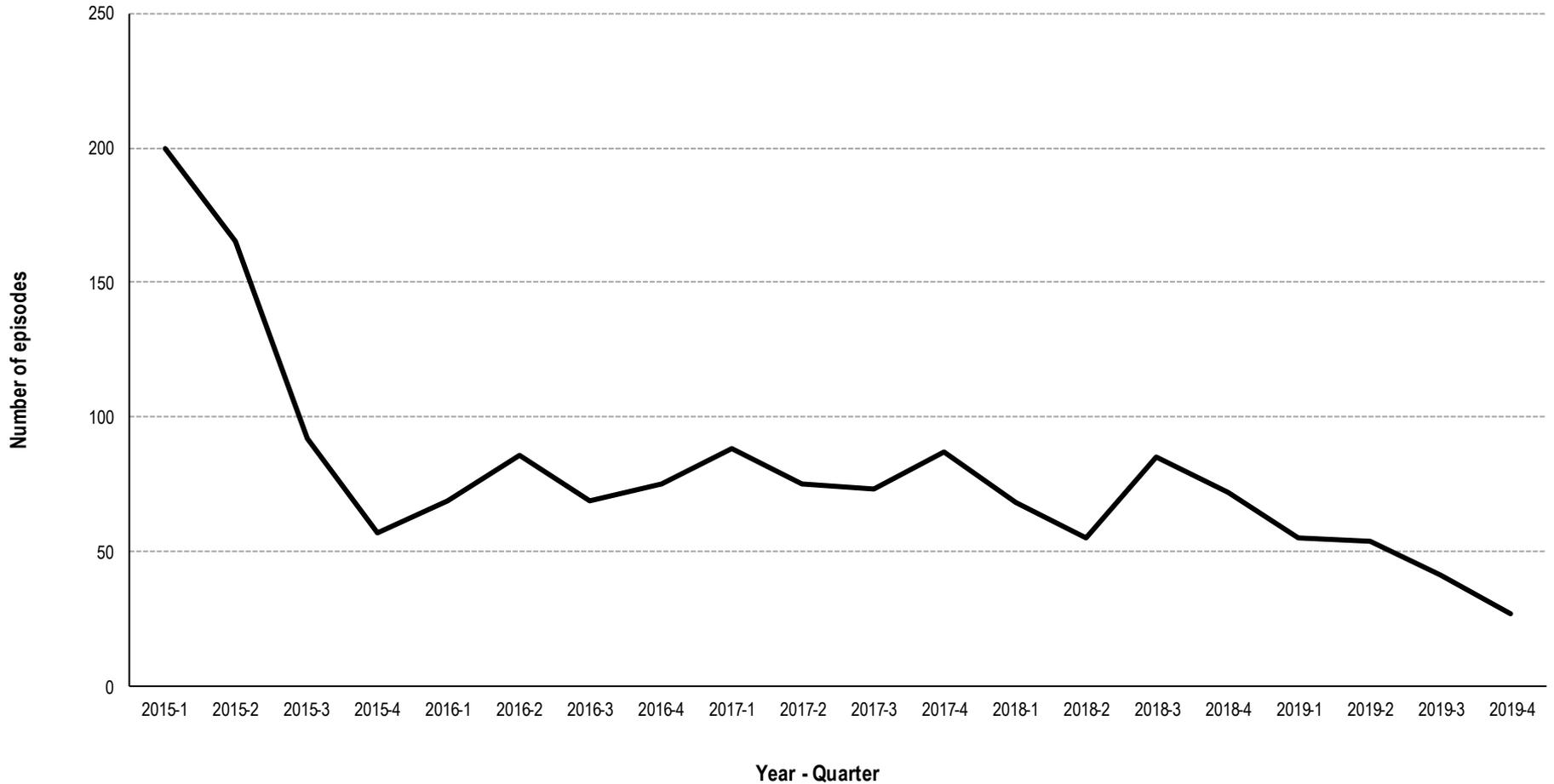
# Other disabling impairments casemix over time

Other disabling impairment episodes in 2019

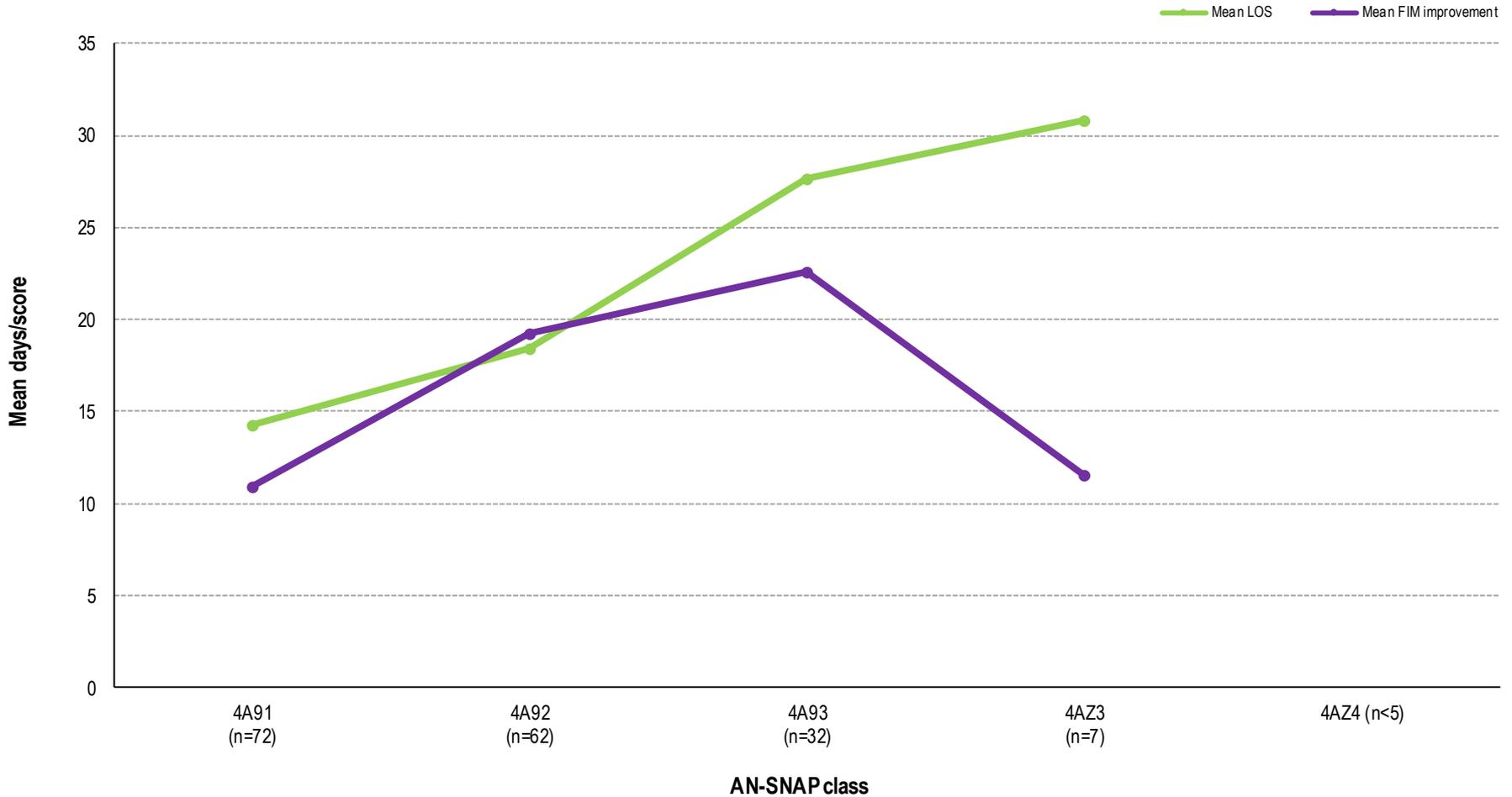| AN-SNAP class:	4A91	4A92	4A93	4AZ3	4AZ4	All Other disabling impairments
Number of episodes	72	62	32	7	3	177
Proportion of episodes	40.7%	35.0%	18.1%	4.0%	n < 5	100.0%
Gender (%)						
Female	*61.1%*	*46.8%*	*53.1%*	*57.1%*	*n < 5*	*54.8%*
Male	*38.9%*	*53.2%*	*46.9%*	*42.9%*	*n < 5*	*45.2%*
Age group (%)						
Under 65	*20.8%*	*8.1%*	*12.5%*	*0.0%*	*n < 5*	*15.3%*
Over 65	*77.8%*	*88.7%*	*87.5%*	*100.0%*	*n < 5*	*82.5%*
Age (Mean+95%CI)	74.5 (70.3-78.7)	81.0 (78.3-83.7)	77.8 (73.3-82.3)	82.6 (75.0-90.1)	n < 5	77.1 (74.8-79.4)
Admission FIM (Mean+95%CI)	96.6 (93.6-99.7)	70.5 (68.1-73.0)	47.0 (43.4-50.5)	31.7 (25.8-37.6)	n < 5	74.8 (71.2-78.3)
LOS (Mean+95%CI)	14.2 (11.7-16.8)	18.5 (15.5-21.4)	27.6 (20.3-35.0)	30.9 (18.0-43.7)	n < 5	19.5 (17.1-21.9)
Discharge destination (%)						
Discharged to community	*98.6%*	*96.7%*	*100.0%*	*100.0%*	*n < 5*	*97.7%*
Remaining in hospital system	*1.4%*	*3.3%*	*0.0%*	*0.0%*	*n < 5*	*2.3%*
FIM change (Mean+95%CI)	10.9 (8.9-12.9)	19.2 (15.5-22.9)	22.6 (15.8-29.4)	11.6 (5.0-18.1)	n < 5	16.1 (14.0-18.2)
FIM efficiency (FIM change/LOS)	0.8	1.0	0.8	0.4	n < 5	0.8

Other disabling impairment discharge destination by AN-SNAP class

Discharge destination - Other disabling impairments
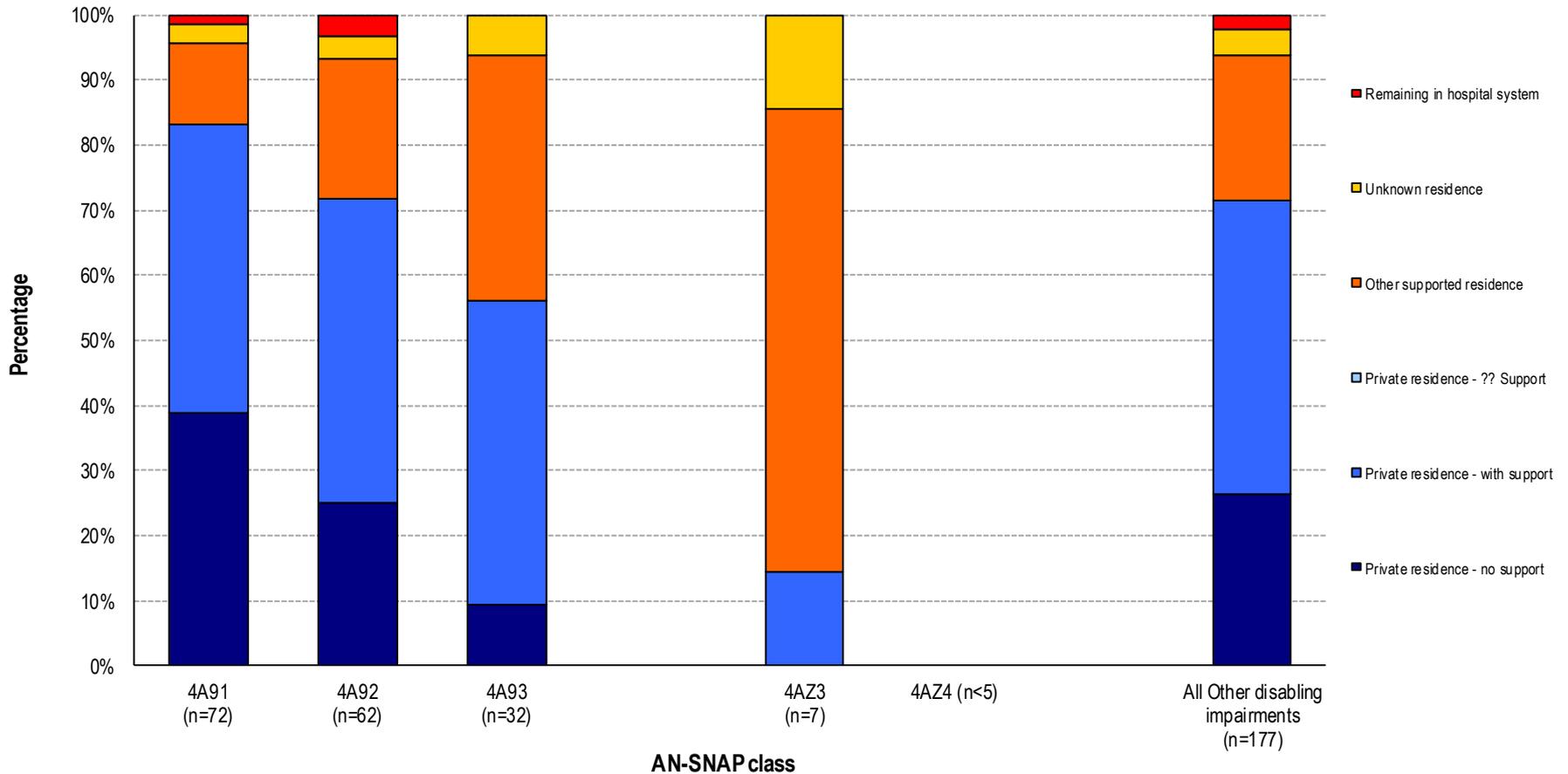
Other disabling impairment LOS and FIM change by AN-SNAP class

LOS and FIM change by AN-SNAP class

Legend: Mean LOS, Mean FIM improvement

X-axis (AN-SNAP class): 4A91 (n=72), 4A92 (n=62), 4A93 (n=32), 4AZ3 (n=7), 4AZ4 (n<5)

Y-axis: Mean days/score

Change in outcome measures in other disabling impairments, 2018 to 2019

Difference from 2018 data - All Other disabling impairments

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