

The AROC Annual Report:

The state of rehabilitation in Australia in 2015



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of Rehabilitation
Medicine**

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WOLLONGONG**



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Introduction

This is the 11th comprehensive annual report describing discharge episodes from subacute inpatient rehabilitation programs provided by Australian facilities that are members of the Australasian Rehabilitation Outcomes Centre (AROC).

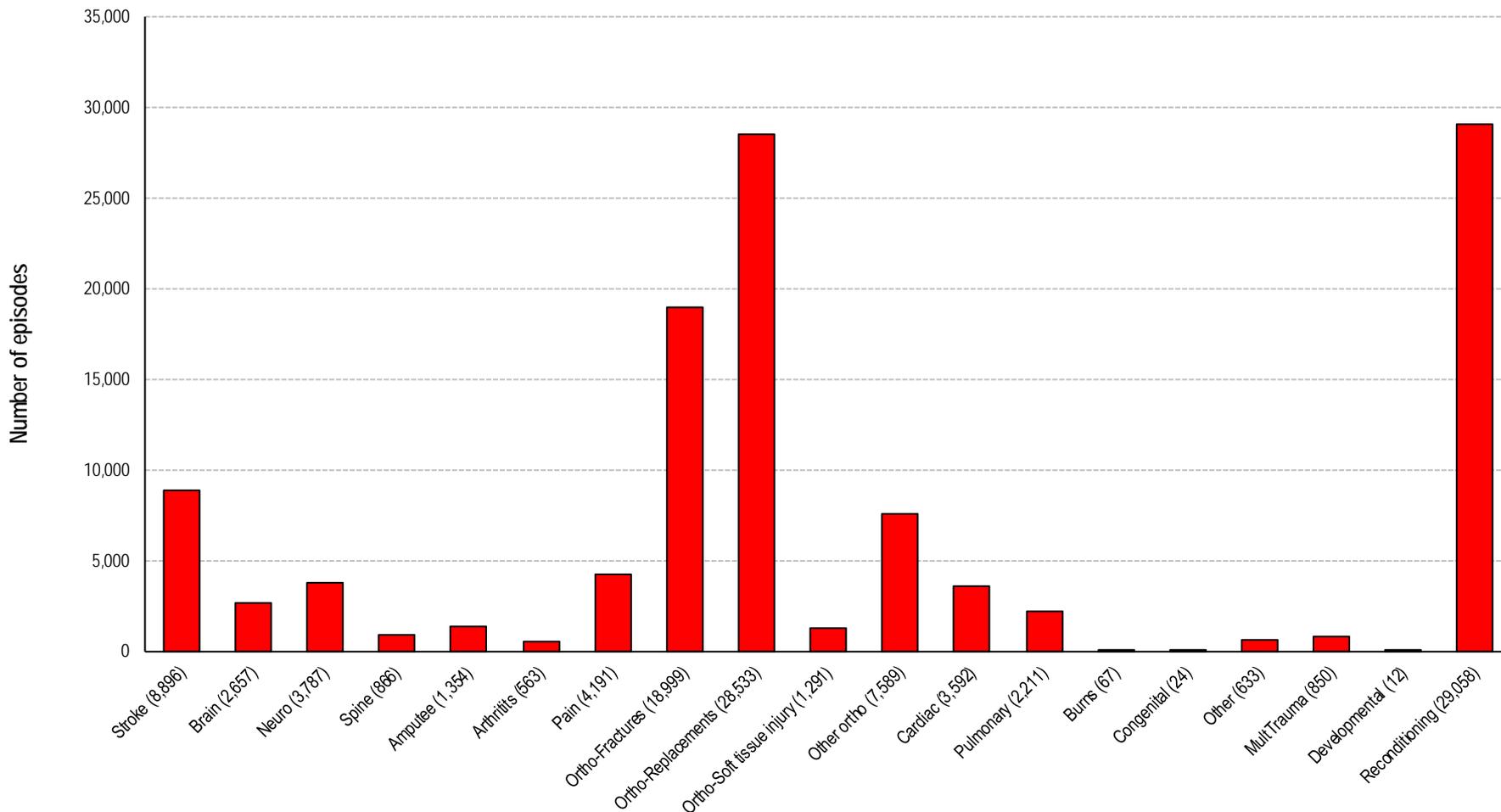
The inaugural report was published in April 2007 and described the 2005 data; this 11th instalment describes the 2015 data.

This report is the first to use the version 4 AN-SNAP classification (to be 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>

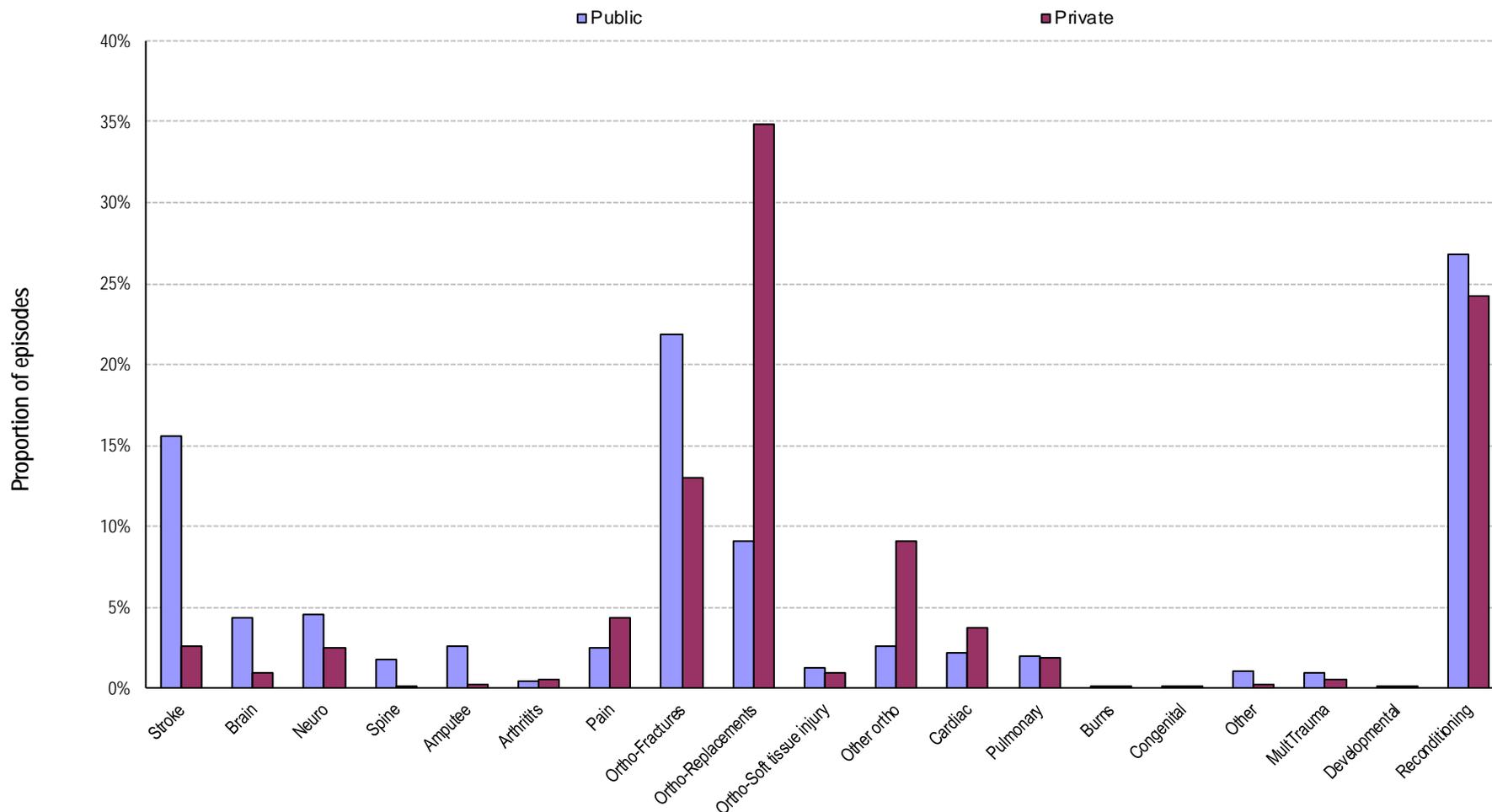
This report also introduces an extended times series analysis, looking at change in various rehabilitation measures over the most recent five years.

The provision of rehabilitation in Australia continues to grow in volume, with 2015 seeing a 6.3% real increase in inpatient episodes of rehabilitation provided. Once again the majority of that volume growth is coming from the reconditioning impairment group.

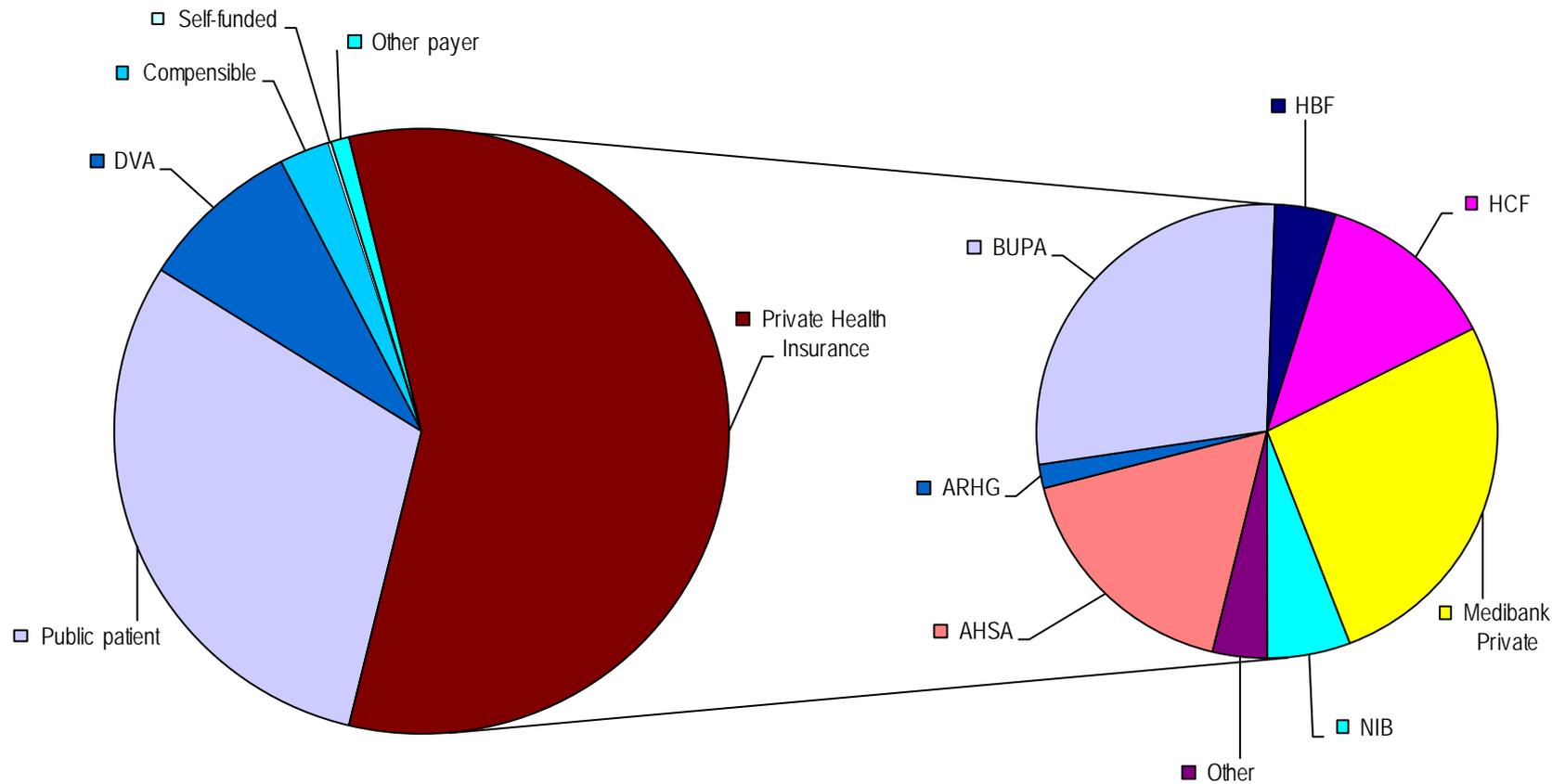
Number of episodes by impairment group, 2015



Proportion of episodes by impairment and sector, 2015



Funding source for rehabilitation in Australia, 2015

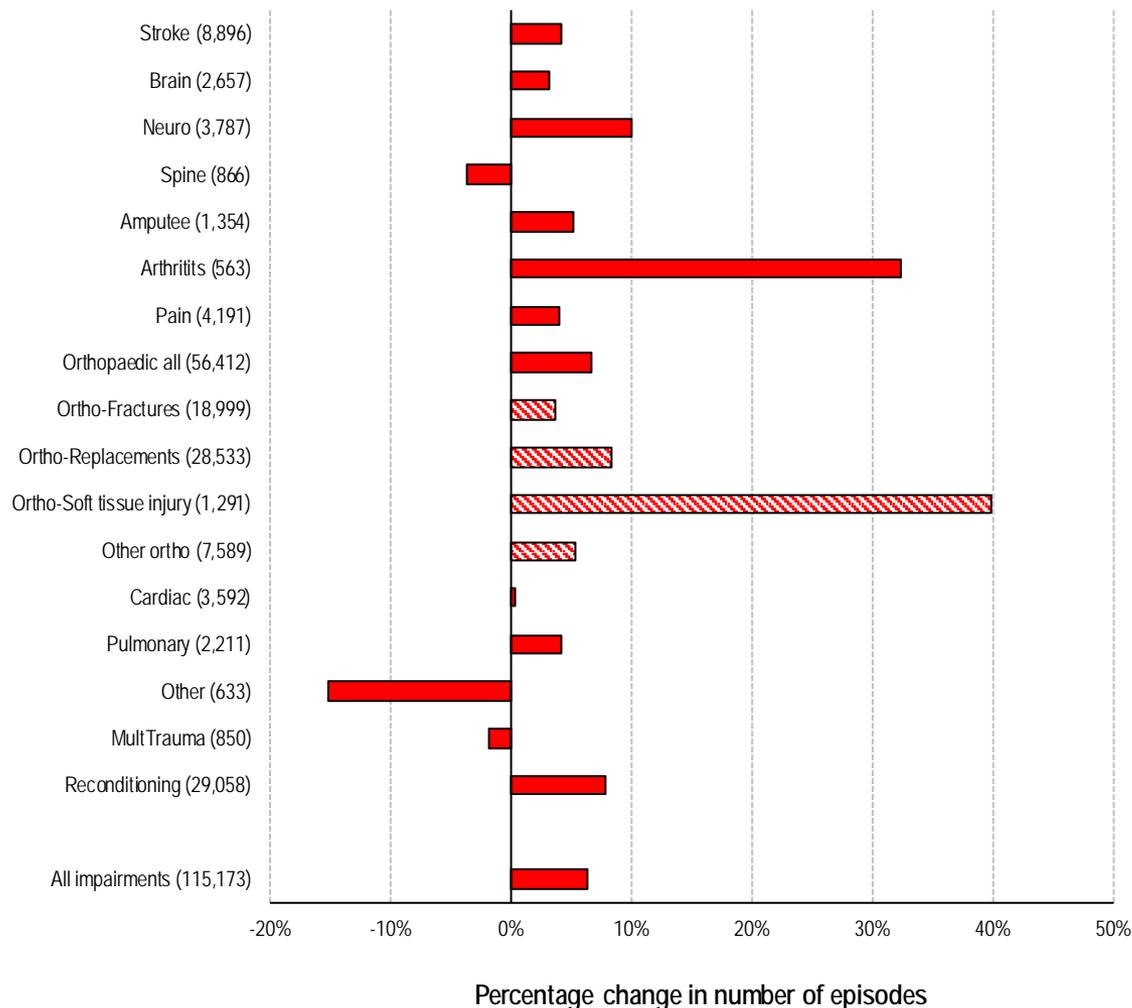


Changes in rehabilitation – compared to last year

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, 2014 to 2015

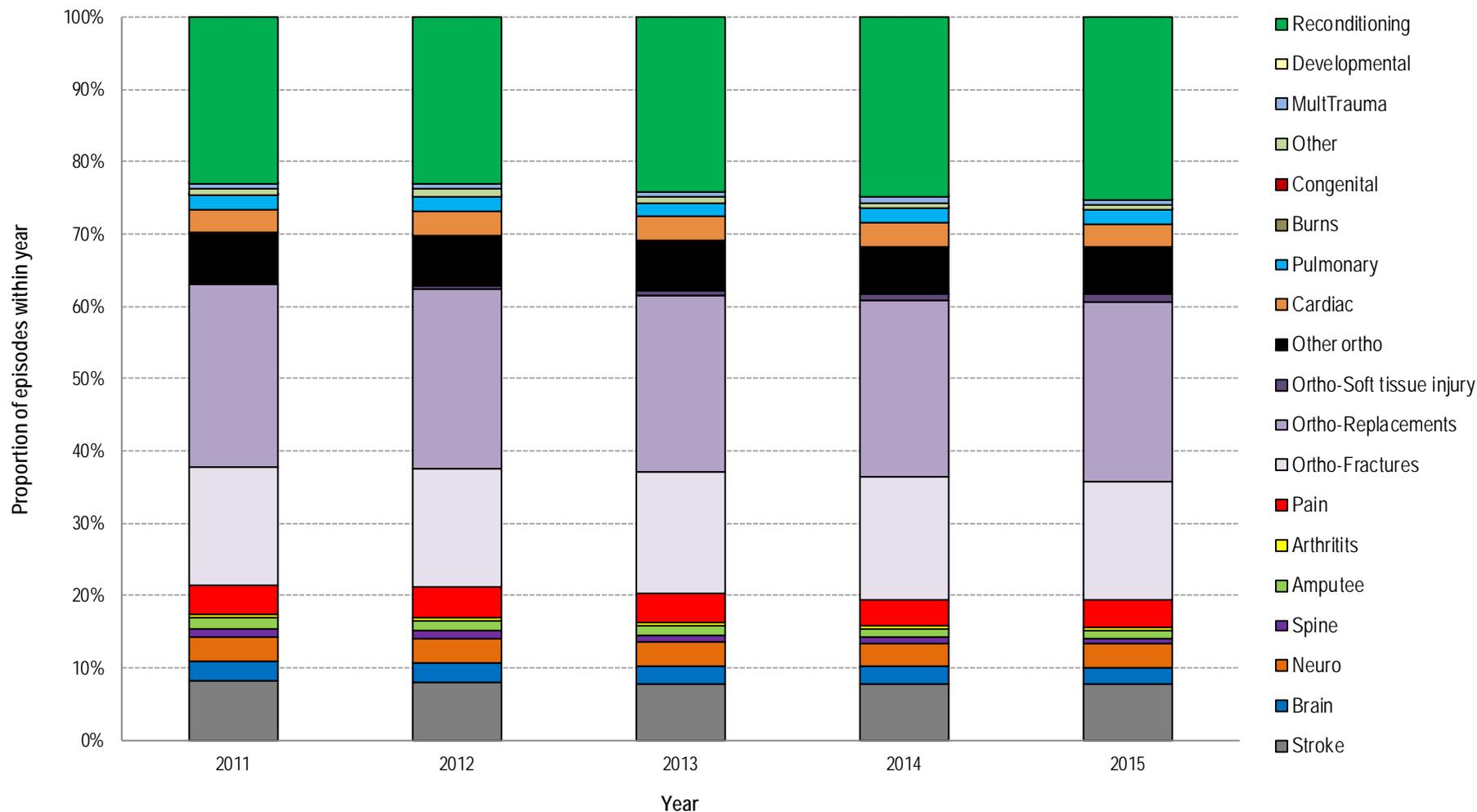


Changes in rehabilitation – compared to five years ago

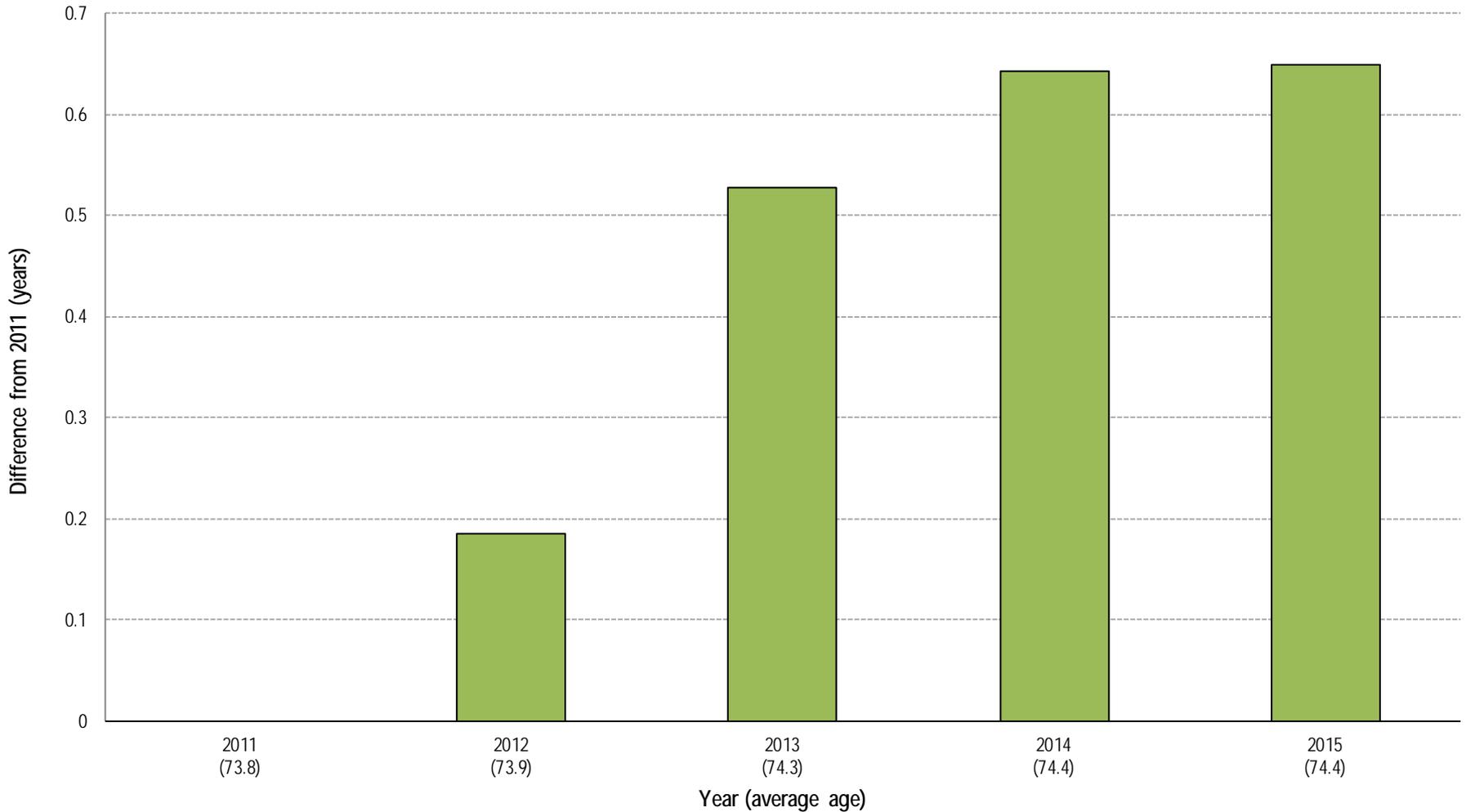
The following figures look at changes in rehabilitation over the last 5 years:

- The first 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 second 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 scores as a proportion of the total score possible
 - FIM change as a proportion of the total change possible
 - FIM efficiency

Proportion of episodes by impairment group, 2011 to 2015

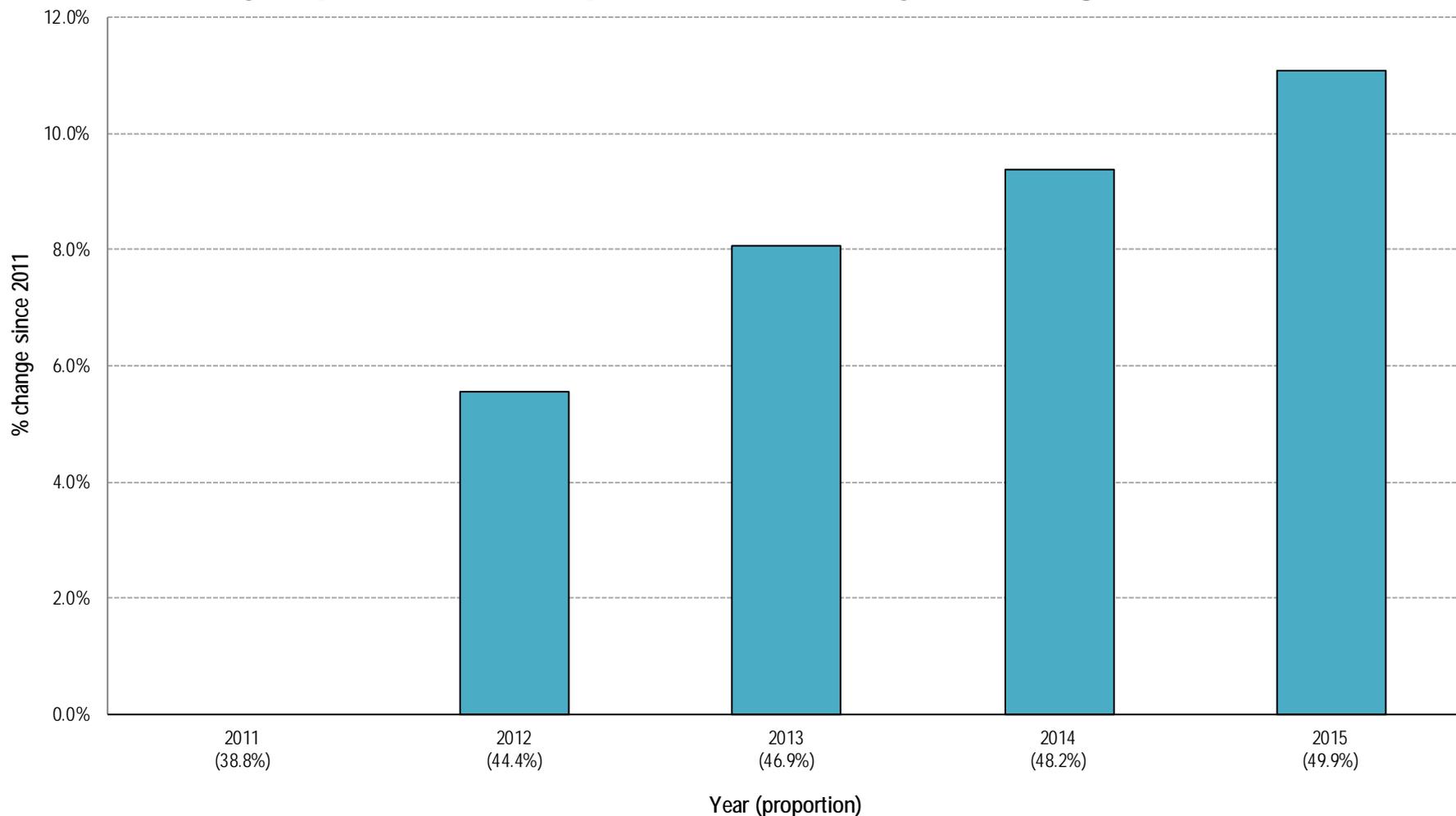


Average age compared to five years ago



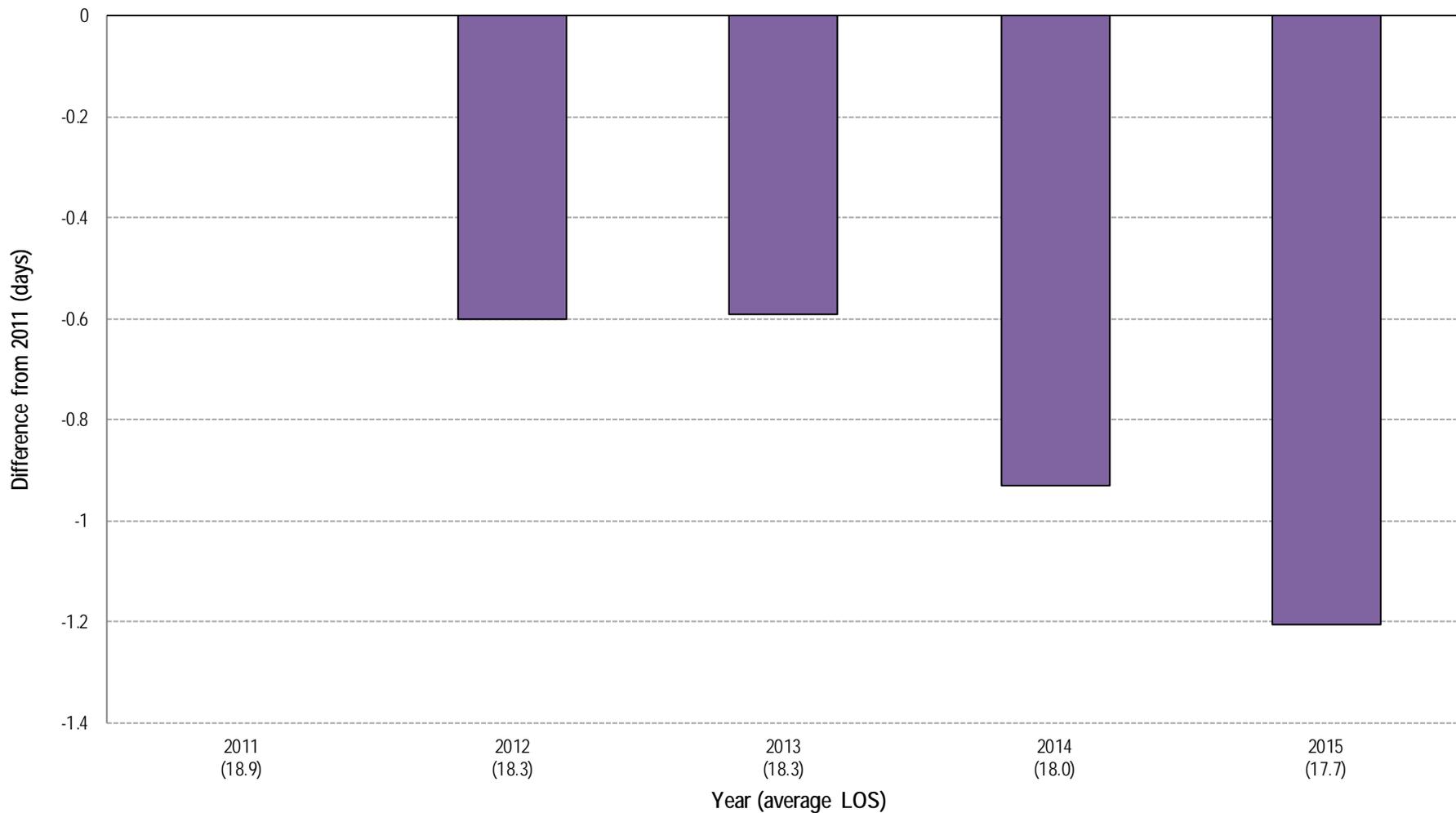
Over the last five years patients have been getting slightly older; patients in 2015 were $\frac{2}{3}$ year older than in 2011.

Admission to rehabilitation within a week of injury or onset of symptoms compared to five years ago



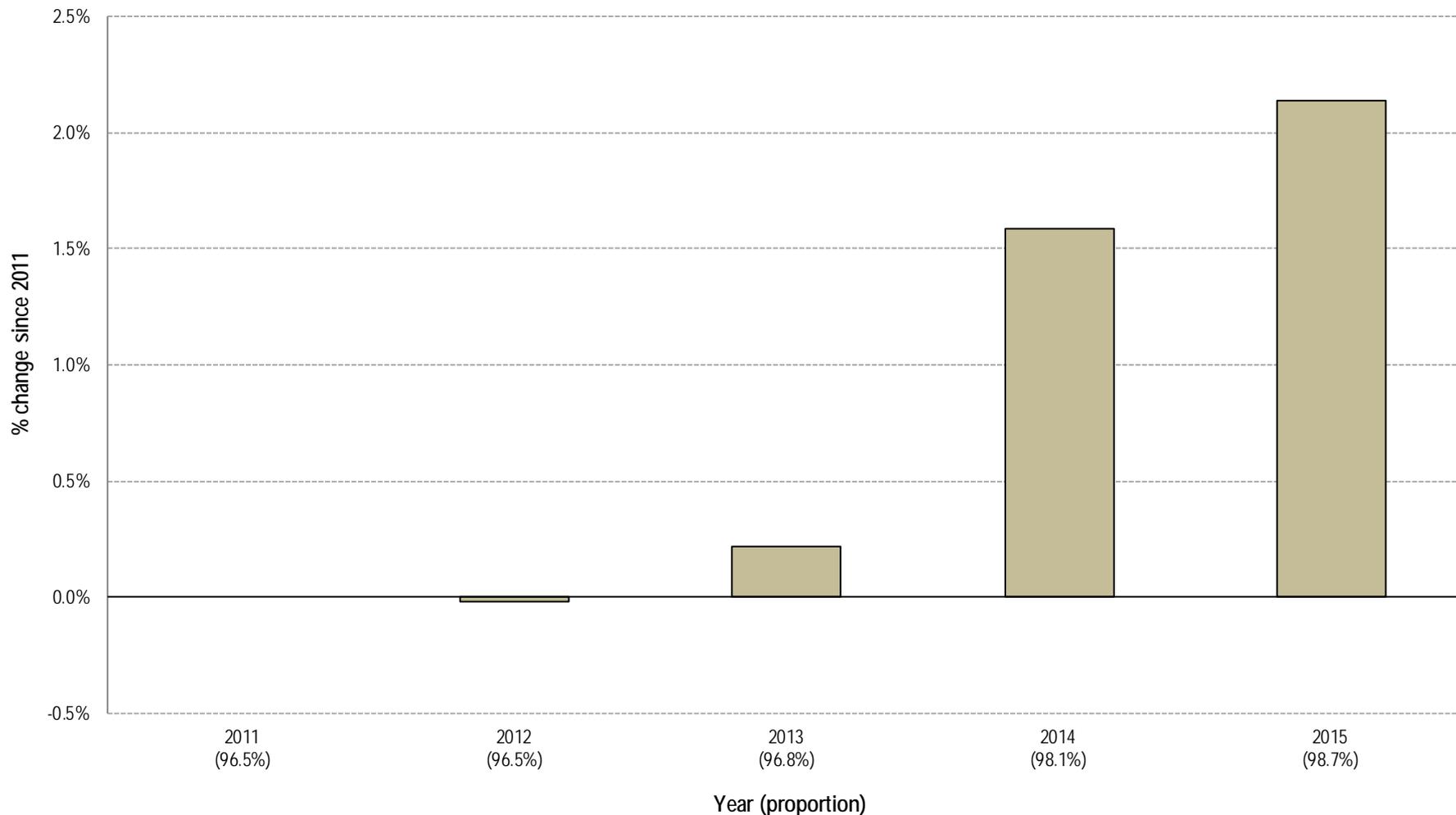
Over the last five years patients have been commencing rehabilitation sooner after their injury /onset of symptoms; in 2015 11% more patients were admitted to rehabilitation within a week of onset compared to in 2011.

Length of stay compared to five years ago



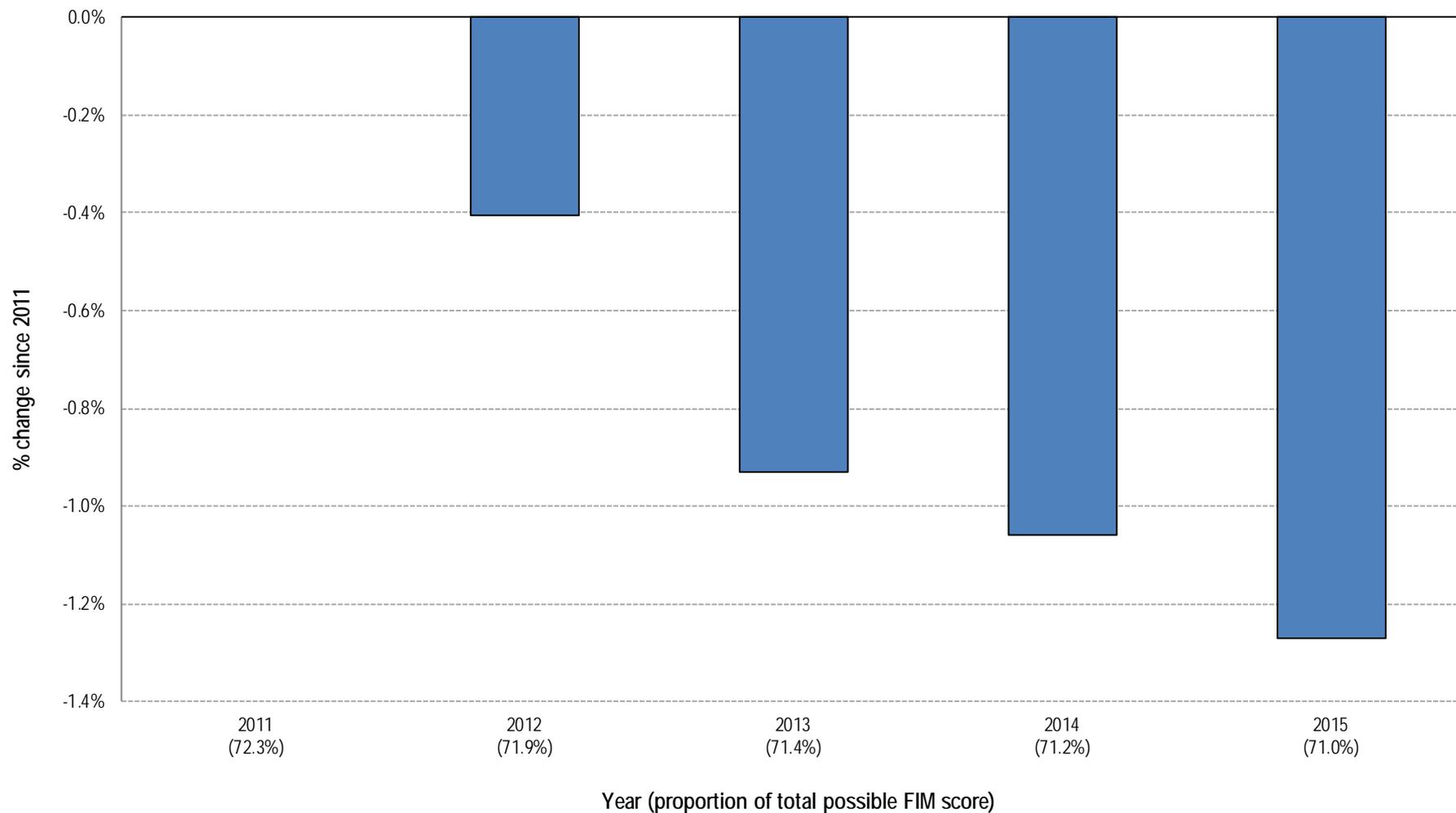
Over the last five years rehabilitation length of stay (LOS) has been declining slowly; in 2015 patients stayed just over 1 day less than they did in 2011.

Timeliness of FIM assessment within 72 hours compared to five years ago



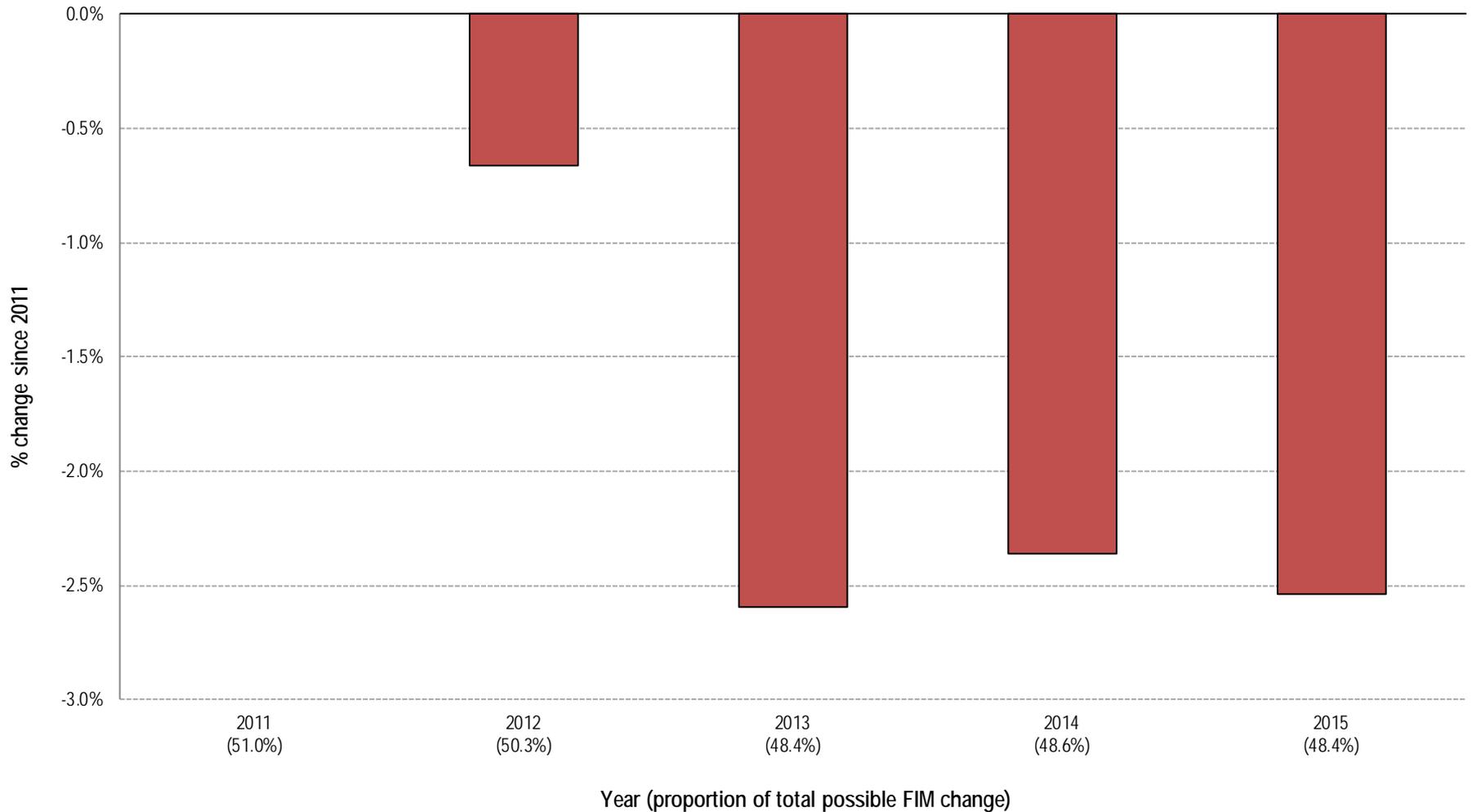
Over the last five years more patients have been assessed for their functional ability within three days of rehabilitation commencing; in 2015 2% more patients were assessed within three days compared to in 2011.

FIM scores at admission as a proportion of total possible compared to five years ago



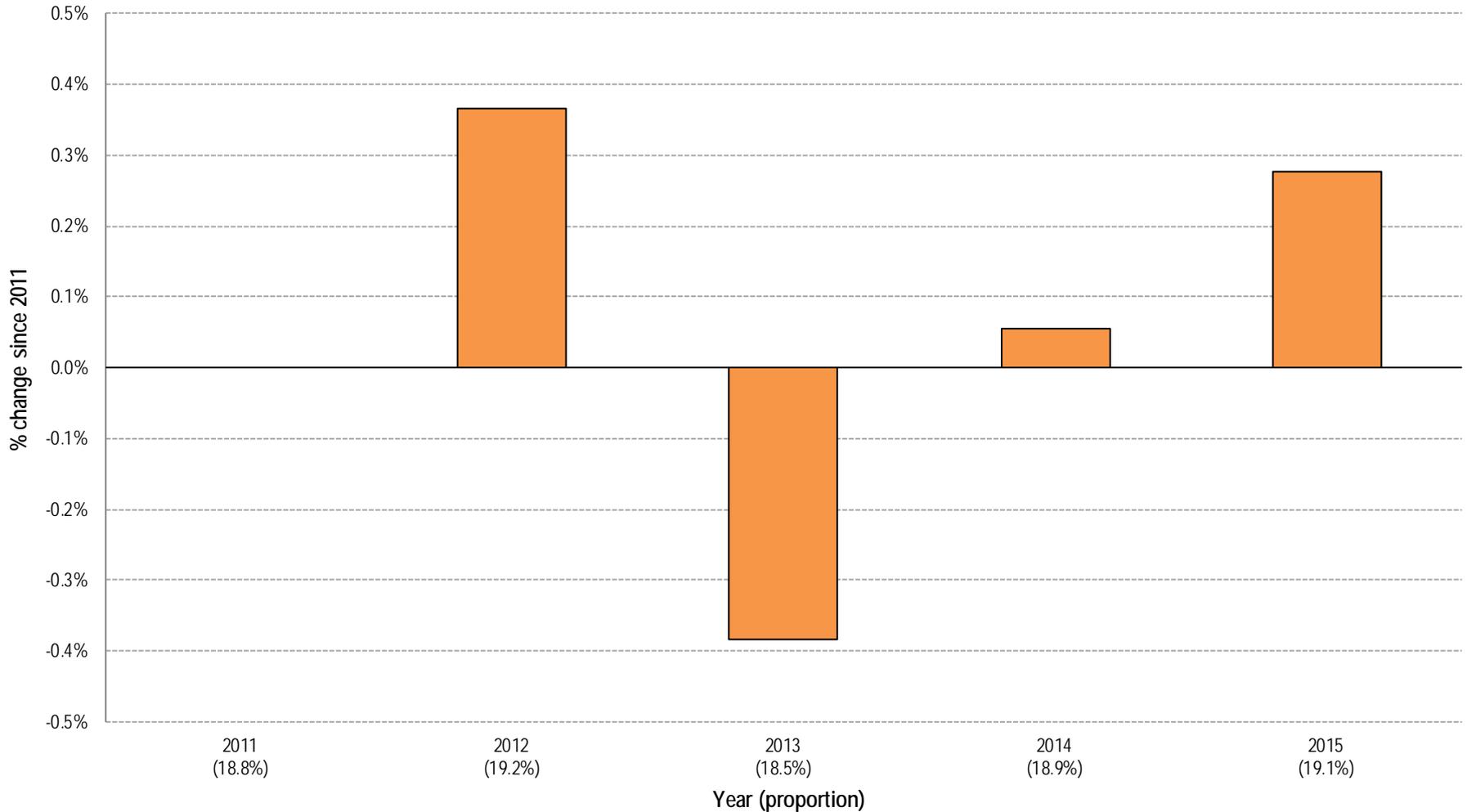
Over the last five years the FIM admission score has declined slightly, just over 1% lower in 2015 compared to in 2011.

FIM change as a proportion of total possible compared to five years ago



Change in FIM score possible from admission to discharge over the last three years has been static and about 2½% lower than it was in 2011. In 2015 48% of FIM gain possible was achieved.

FIM efficiency per week compared to five years ago



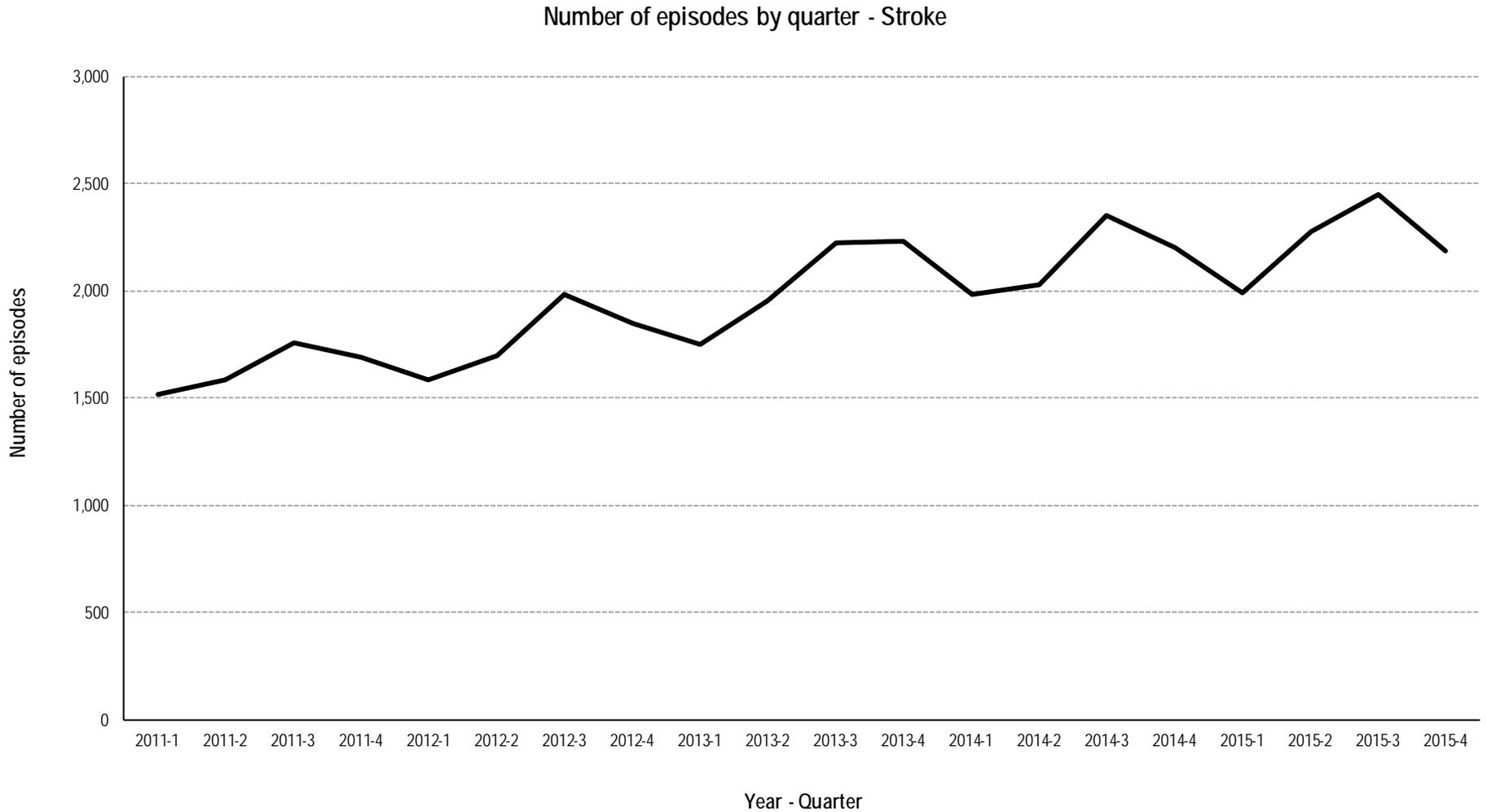
Over the last five years weekly FIM efficiency (change in FIM score possible from admission to discharge divided by length of stay x7) has not changed significantly; in 2015 it was marginally higher than it was in 2011. The 0.7% increase from 2013 to 2015 is in keeping with the observed decline in LOS and static FIM change over this period.

Outcomes by impairment

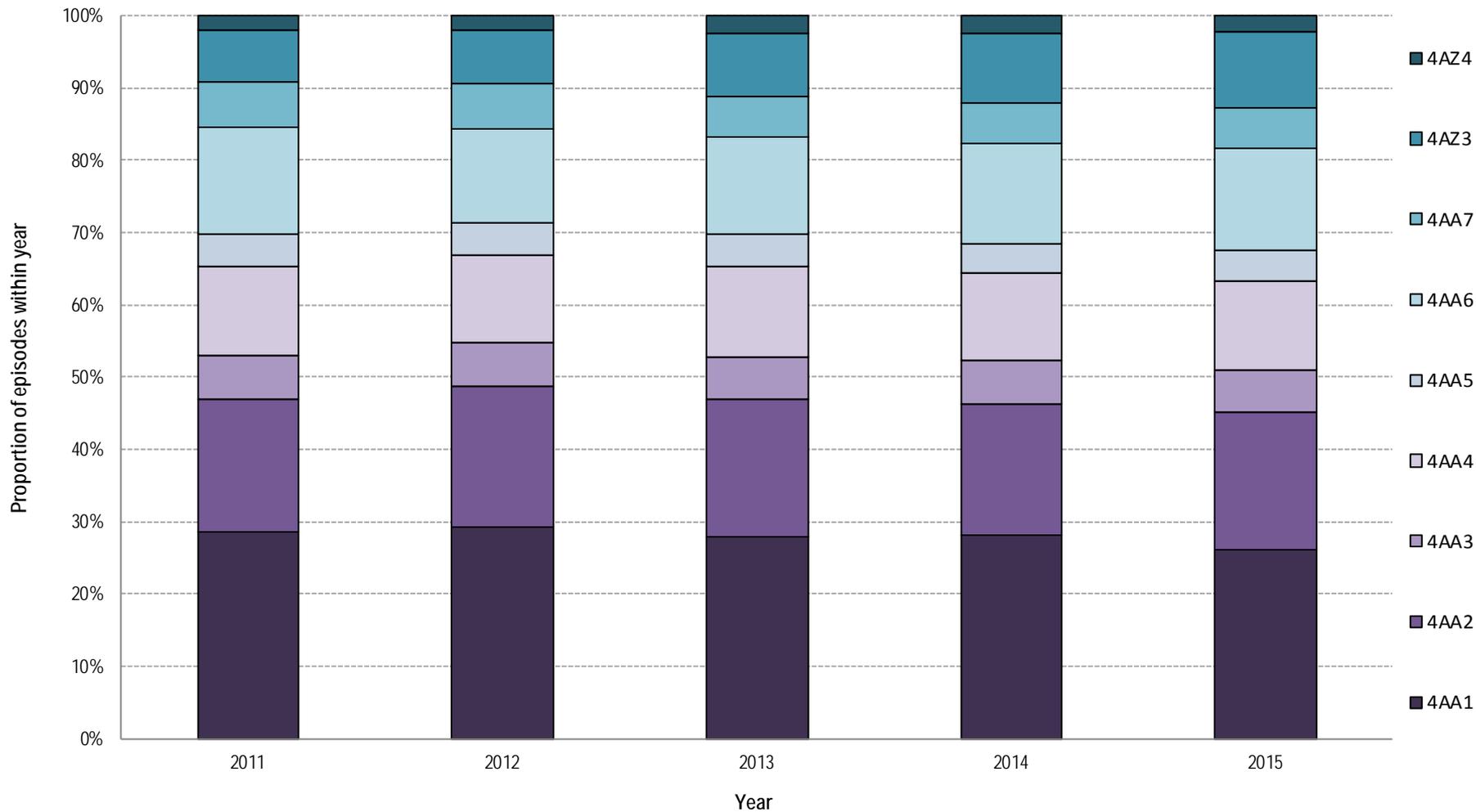
A series of figures and tables are provided for each impairment group; these outline the key descriptive data for this year, changes in episode volumes over the last 5 years, and changes in rehabilitation outcome measures between last year and this year:

- 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 over the 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 year's actual values are presented on the left side of the graph.

Stroke episodes over time



Stroke casemix over time

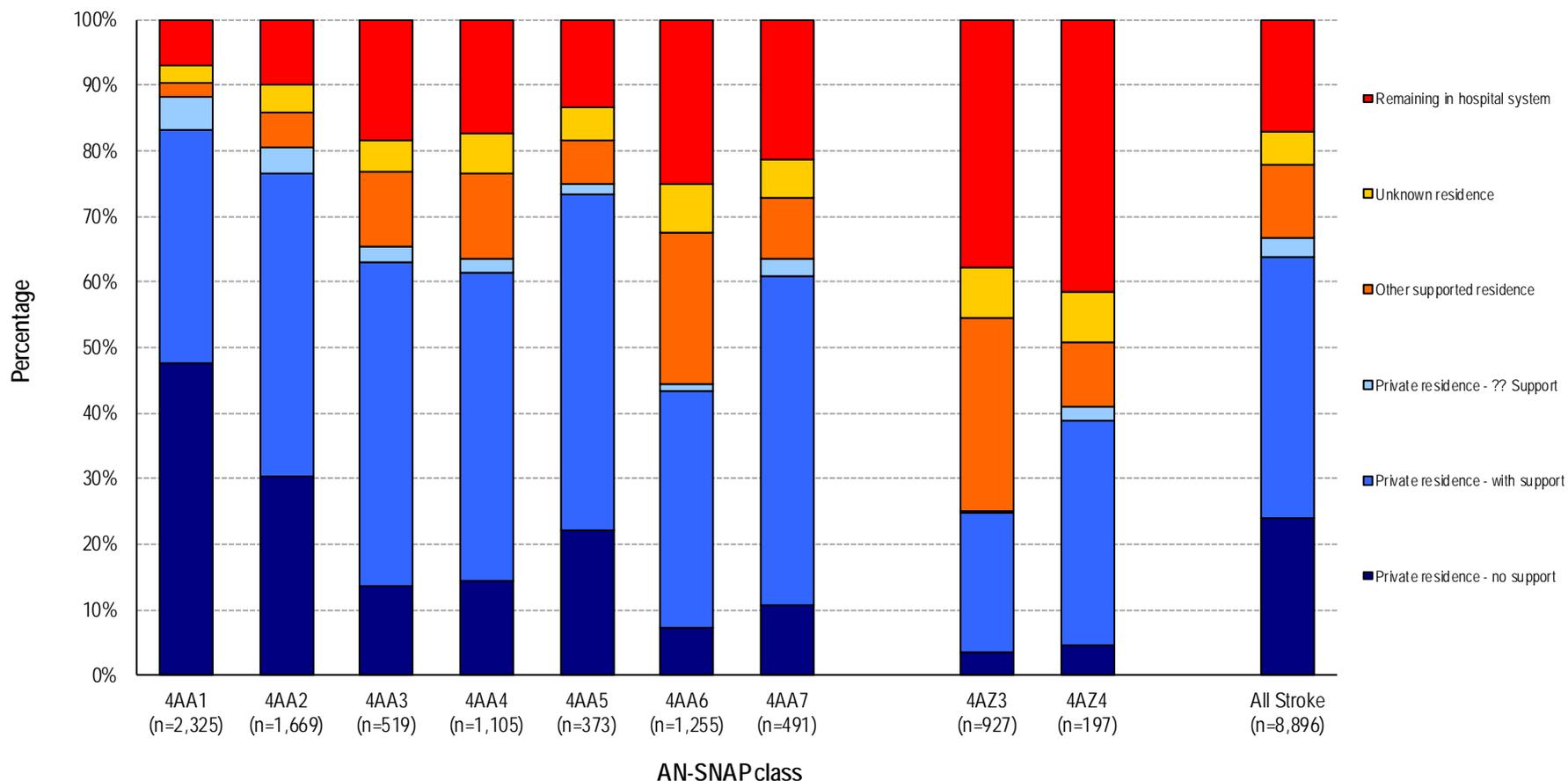


Stroke episodes in 2015

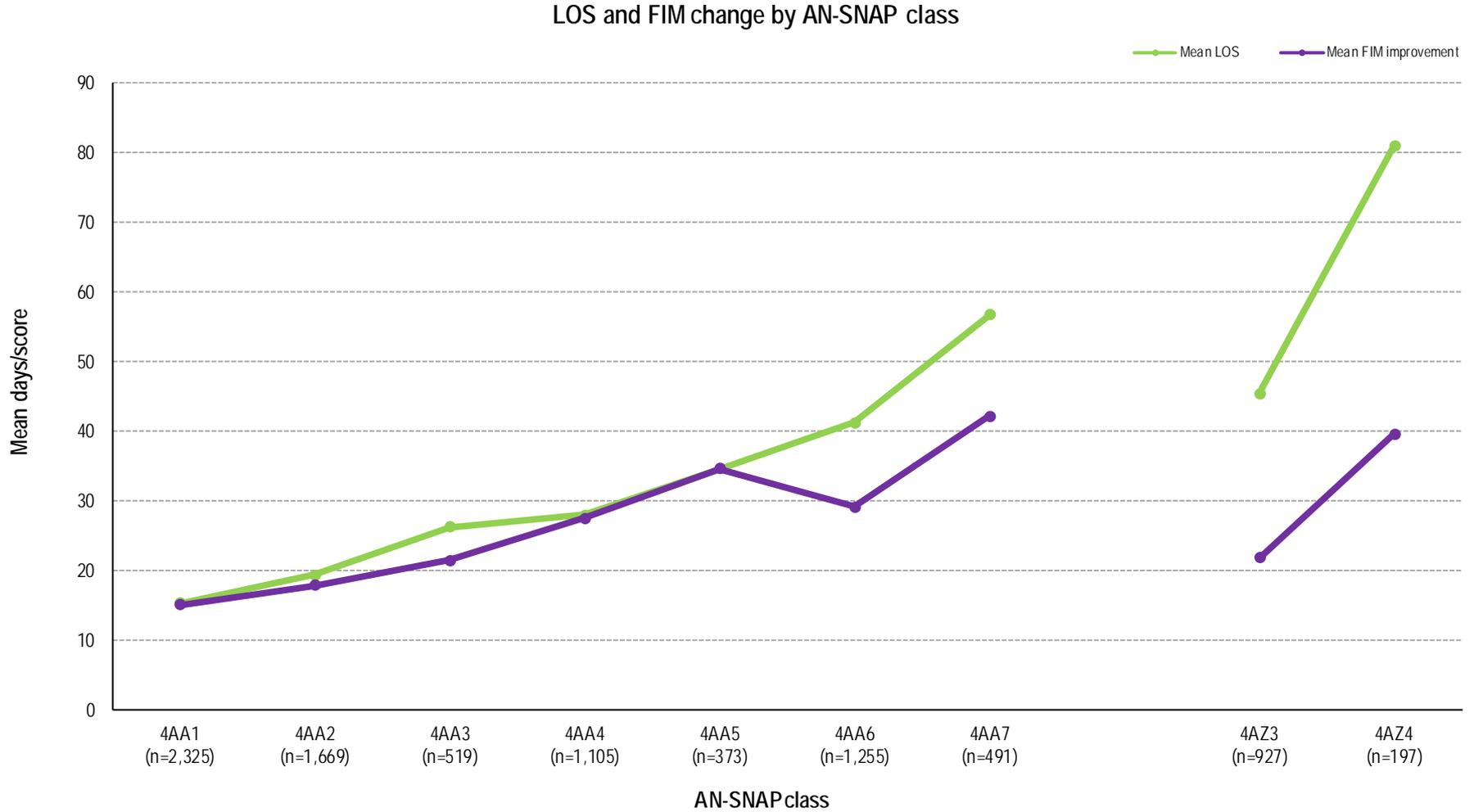
AN-SNAP class:	4AA1	4AA2	4AA3	4AA4	4AA5	4AA6	4AA7	4AZ3	4AZ4	All Stroke
Number of episodes	2,325	1,669	519	1,105	373	1,255	491	927	197	8,896
Proportion of episodes	26.1%	18.8%	5.8%	12.4%	4.2%	14.1%	5.5%	10.4%	2.2%	100.0%
Sector (%)										
<i>Private</i>	29.3%	24.5%	17.0%	23.9%	9.1%	17.9%	9.0%	10.7%	4.1%	20.9%
<i>Public</i>	70.7%	75.5%	83.0%	76.1%	90.9%	82.1%	91.0%	89.3%	95.9%	79.1%
Gender (%)										
<i>Female</i>	44.1%	43.8%	41.6%	48.7%	38.6%	50.0%	36.9%	50.1%	33.5%	45.0%
<i>Male</i>	55.9%	56.2%	58.4%	51.3%	61.4%	50.0%	63.1%	49.9%	66.5%	55.0%
Age (Mean+95%CI)	71.2 (70.6-71.8)	73.3 (72.6-74.0)	73.0 (71.8-74.2)	80.7 (80.3-81.1)	56.3 (55.3-57.3)	80.8 (80.4-81.2)	56.1 (55.3-57.0)	79.5 (79.0-80.0)	53.7 (52.3-55.1)	73.2 (73.0-73.5)
Admission FIM (Mean+95%CI)	101.3 (100.8-101.8)	90.3 (89.7-90.8)	78.2 (77.1-79.3)	66.9 (66.3-67.4)	68.4 (67.4-69.3)	48.3 (47.6-48.9)	49.1 (48.1-50.2)	29.3 (28.6-29.9)	29.0 (27.5-30.5)	75.3 (74.7-75.9)
LOS (Mean+95%CI)	15.4 (14.8-16.0)	19.4 (18.8-20.0)	26.3 (24.5-28.0)	28.0 (27.0-29.0)	34.7 (32.0-37.3)	41.2 (39.7-42.7)	56.8 (53.4-60.2)	45.5 (43.3-47.7)	81.1 (72.1-90.0)	28.3 (27.8-28.9)
Discharge destination (%)										
<i>Discharged to community</i>	93.1%	90.2%	81.7%	82.7%	86.6%	75.0%	78.8%	62.2%	58.5%	83.1%
<i>Remaining in hospital system</i>	6.9%	9.8%	18.3%	17.3%	13.4%	25.0%	21.2%	37.8%	41.5%	16.9%
FIM change (Mean+95%CI)	15.1 (14.7-15.6)	18.0 (17.4-18.5)	21.5 (20.2-22.8)	27.5 (26.6-28.5)	34.7 (33.0-36.3)	29.1 (27.9-30.4)	42.2 (40.2-44.2)	21.9 (20.1-23.8)	39.6 (34.8-44.4)	22.7 (22.3-23.1)
FIM efficiency (FIM change/LOS)	1.0	0.9	0.8	1.0	1.0	0.7	0.7	0.5	0.5	0.8

Stroke discharge destination by AN-SNAP class

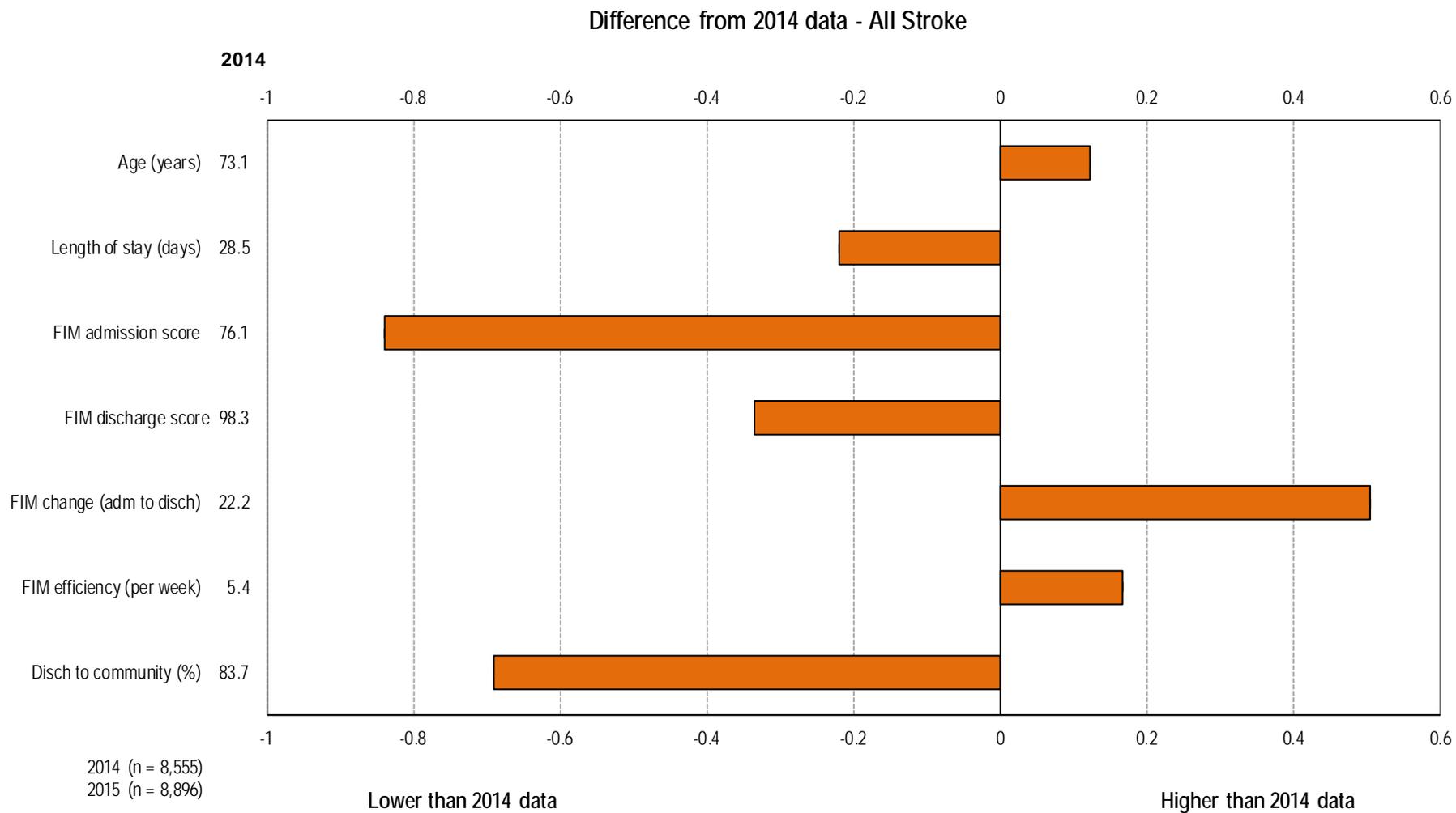
Discharge destination - Stroke



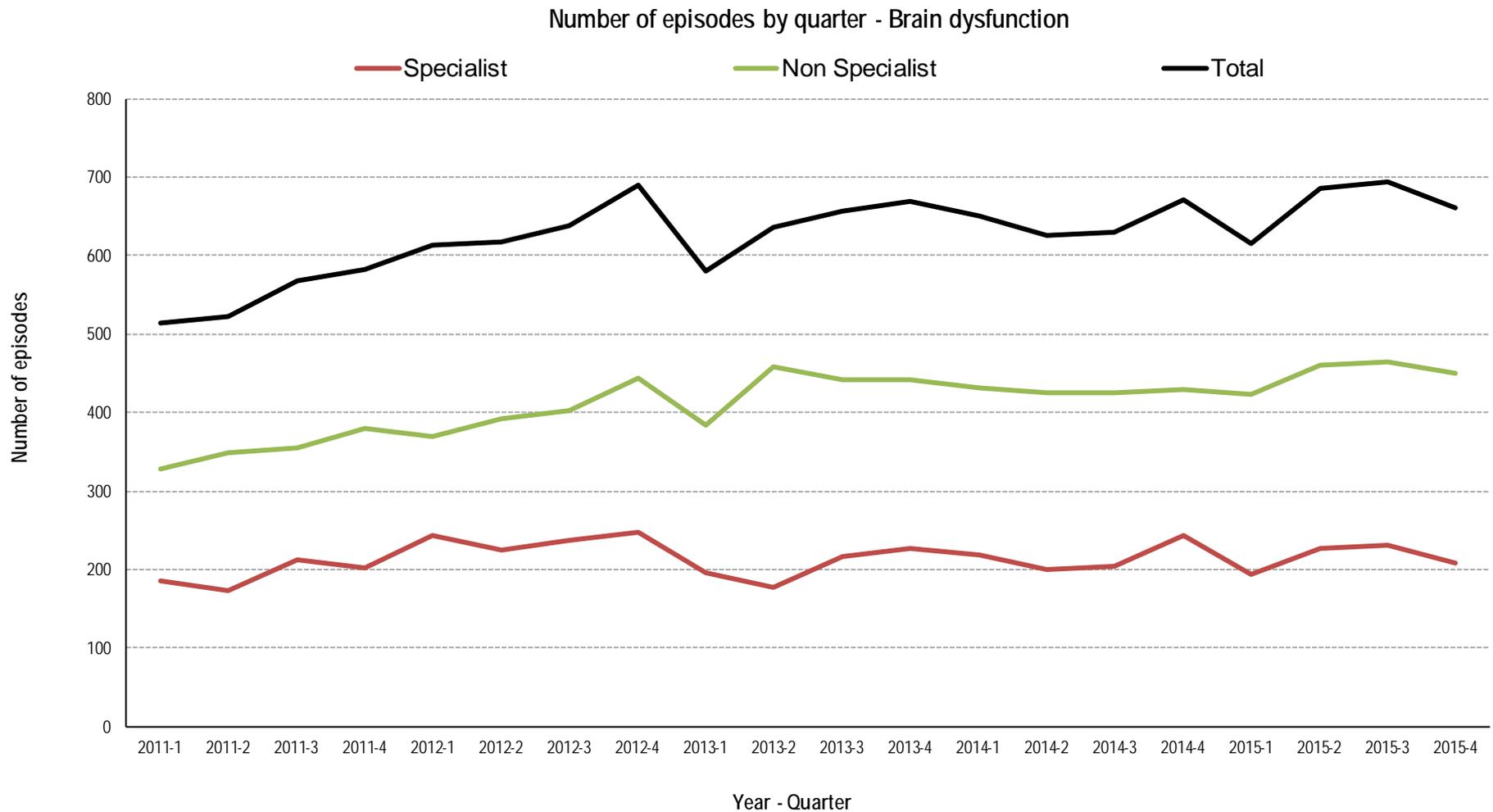
Stroke LOS and FIM change by AN-SNAP class



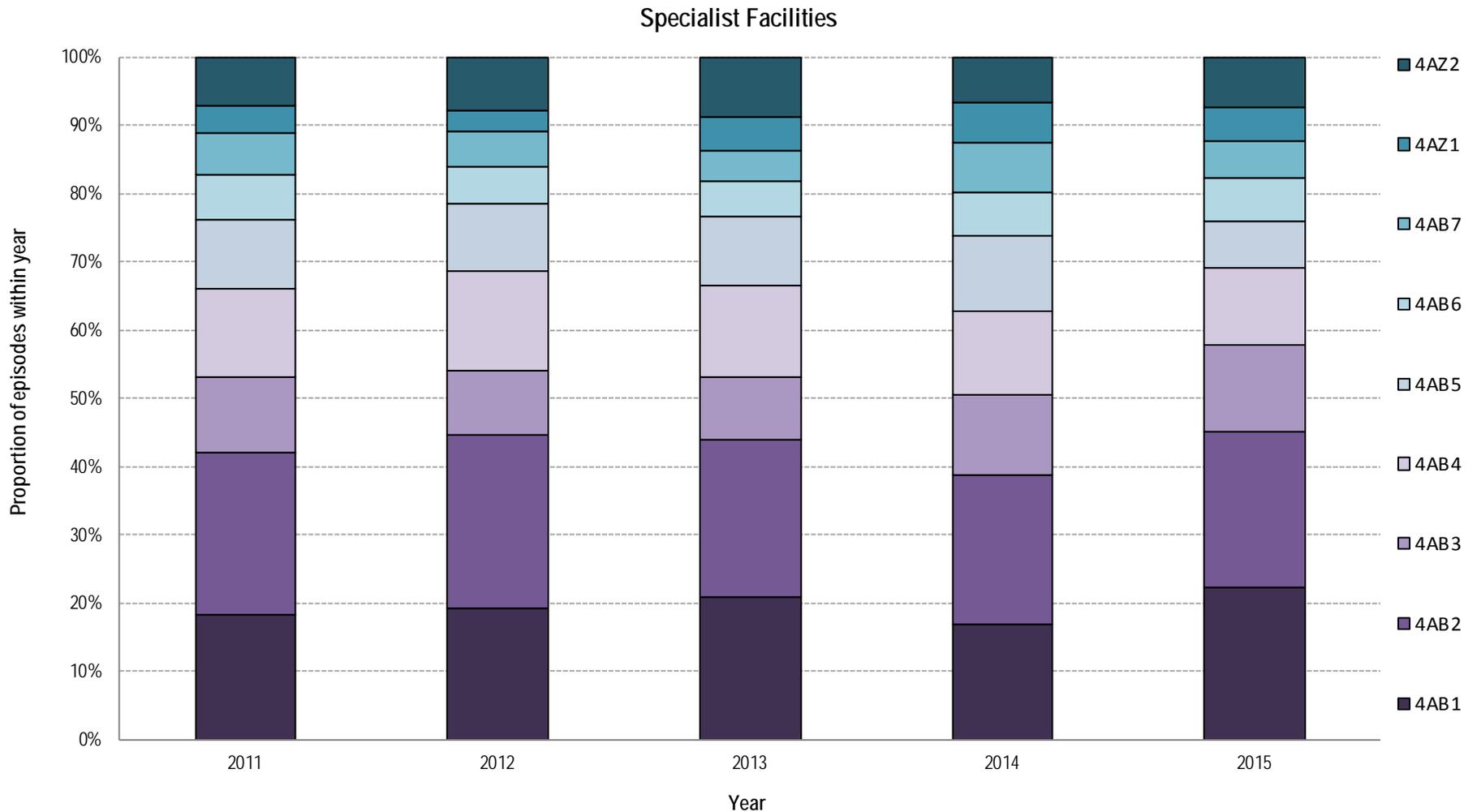
Change in outcome measures in stroke, 2014 to 2015



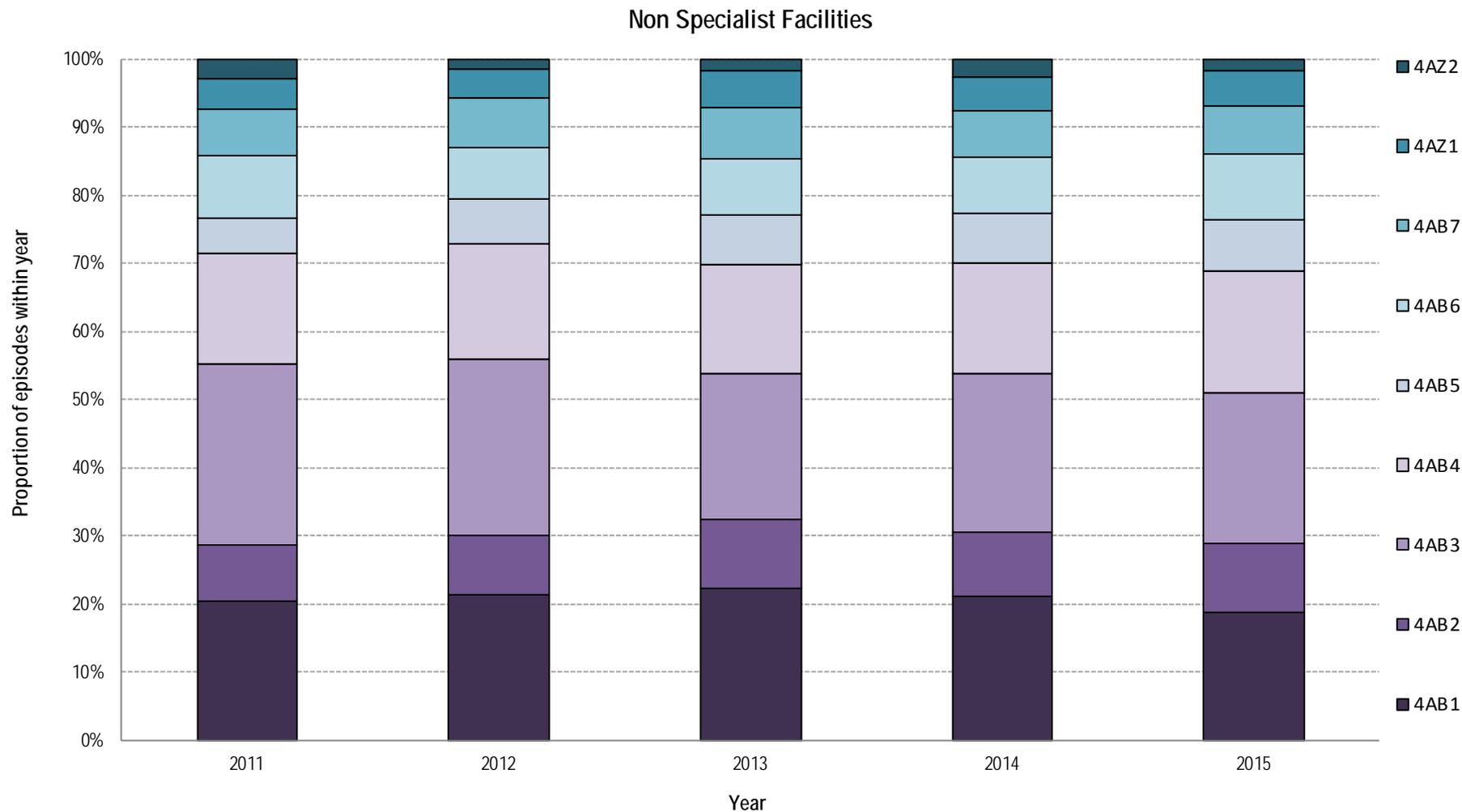
Brain dysfunction episodes over time



Brain dysfunction casemix over time – Specialist facilities



Brain dysfunction casemix over time – Non specialist facilities



Brain dysfunction episodes in 2015 - Specialist facilities

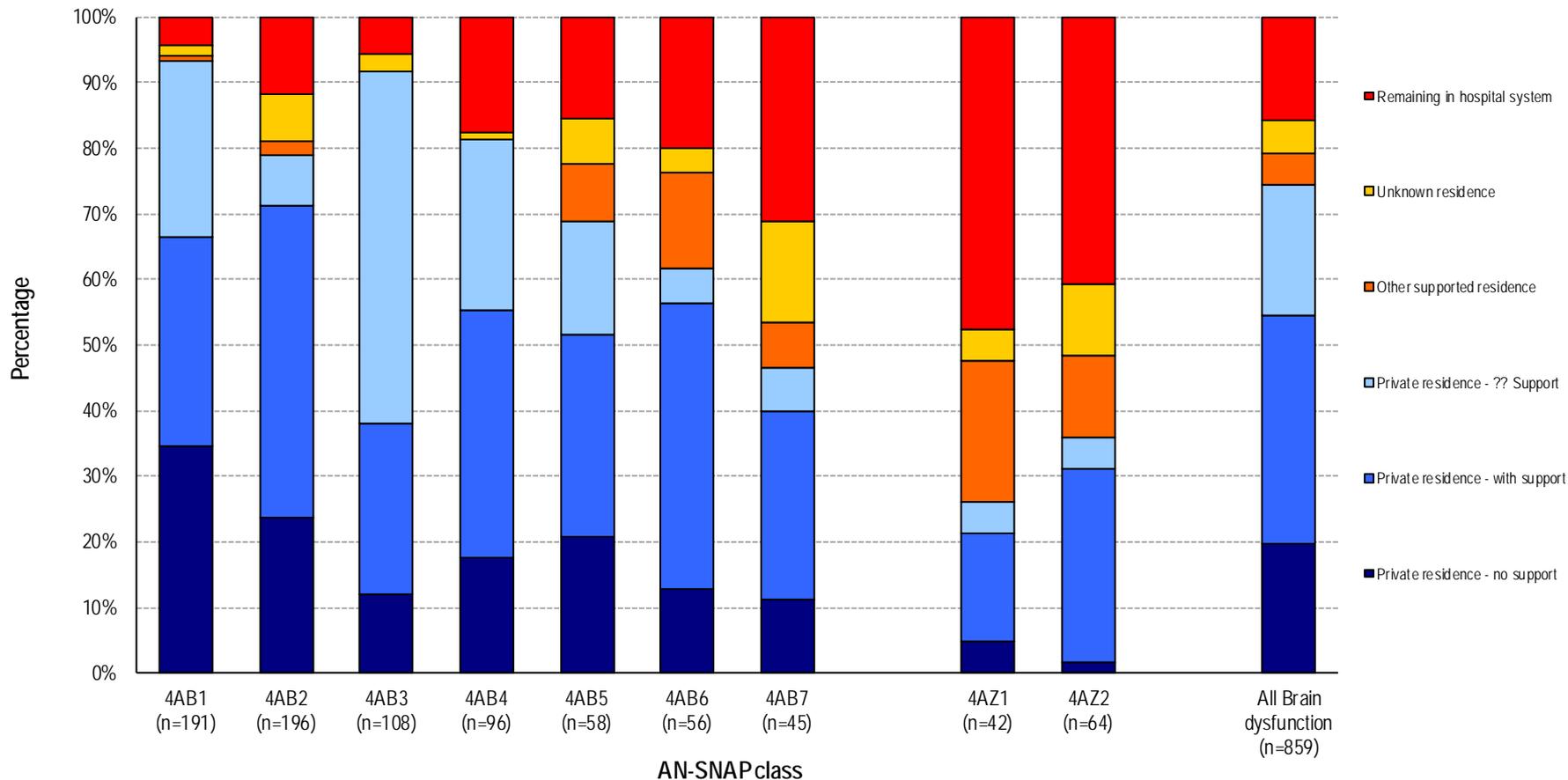
AN-SNAP class:	4AB1	4AB2	4AB3	4AB4	4AB5	4AB6	4AB7	4AZ1	4AZ2	All Brain dysfunction
Number of episodes	191	196	108	96	58	56	45	42	64	859
Proportion of episodes	22.2%	22.8%	12.6%	11.2%	6.8%	6.5%	5.2%	4.9%	7.5%	100.0%
Sector (%)										
<i>Private</i>	20.9%	7.1%	43.5%	15.6%	17.2%	8.9%	6.7%	4.8%	6.3%	16.3%
<i>Public</i>	79.1%	92.9%	56.5%	84.4%	82.8%	91.1%	93.3%	95.2%	93.8%	83.7%
Gender (%)										
<i>Female</i>	36.1%	26.5%	40.7%	36.5%	39.7%	25.0%	26.7%	33.3%	29.7%	32.9%
<i>Male</i>	63.9%	73.5%	59.3%	63.5%	60.3%	75.0%	73.3%	66.7%	70.3%	67.1%
Age (Mean+95%CI)	48.7 (46.1-51.2)	43.8 (41.6-45.9)	58.5 (54.6-62.3)	49.2 (45.3-53.1)	47.1 (41.9-52.2)	49.8 (44.9-54.7)	51.5 (46.0-57.0)	59.2 (56.7-61.7)	31.8 (29.3-34.2)	48.3 (47.0-49.5)
Admission FIM (Mean+95%CI)	112.4 (111.3-113.5)	124.4 (101.0-103.9)	86.0 (84.1-87.9)	77.7 (75.9-79.5)	66.1 (63.5-68.7)	48.7 (46.5-50.9)	35.4 (32.8-38.0)	21.1 (19.3-22.9)	23.6 (21.7-25.5)	83.9 (81.7-86.1)
LOS (Mean+95%CI)	13.9 (12.8-15.1)	26.9 (23.3-30.5)	22.6 (20.0-25.3)	31.1 (26.5-35.7)	55.4 (42.3-68.6)	61.0 (47.7-74.3)	65.9 (51.7-80.0)	11.5 (86.7-136.3)	2.3 (116.3-188.4)	38.7 (35.1-42.4)
Discharge destination (%)										
<i>Discharged to community</i>	88.0%	80.0%	68.0%	53.4%	55.1%	47.3%	34.1%	24.4%	51.4%	62.2%
<i>Remaining in hospital system</i>	12.0%	20.0%	32.0%	46.6%	44.9%	52.7%	65.9%	75.6%	48.6%	37.8%
FIM change (Mean+95%CI)	9.1 (8.1-10.2)	13.8 (12.4-15.2)	27.0 (24.6-29.4)	36.4 (33.9-38.8)	37.5 (32.6-42.3)	46.5 (39.5-53.4)	48.5 (36.7-60.3)	46.5 (32.5-60.5)	48.4 (37.2-59.5)	25.2 (23.6-26.9)
FIM efficiency (FIM change/LOS)	0.7	0.5	1.2	1.2	0.7	0.8	0.7	0.4	0.3	0.7

Brain dysfunction episodes in 2015 - Non specialist facilities

AN-SNAP class:	4AB1	4AB2	4AB3	4AB4	4AB5	4AB6	4AB7	4AZ1	4AZ2	All Brain dysfunction
Number of episodes	338	181	394	318	138	170	127	94	31	1,798
Proportion of episodes	18.8%	10.1%	21.9%	17.7%	7.7%	9.5%	7.1%	5.2%	1.7%	100.0%
Sector (%)										
<i>Private</i>	32.0%	21.0%	41.9%	38.1%	24.6%	25.9%	23.6%	19.1%	22.6%	31.4%
<i>Public</i>	68.0%	79.0%	58.1%	61.9%	75.4%	74.1%	76.4%	80.9%	77.4%	68.6%
Gender (%)										
<i>Female</i>	45.0%	35.4%	52.3%	47.2%	42.8%	43.5%	44.9%	45.7%	25.8%	45.3%
<i>Male</i>	55.0%	64.6%	47.7%	52.8%	57.2%	56.5%	55.1%	54.3%	74.2%	54.7%
Age (Mean+95%CI)	60.9 (58.9-62.9)	57.3 (54.7-60.0)	71.4 (70.0-72.8)	71.0 (69.2-72.8)	70.0 (67.6-72.5)	67.4 (64.6-70.2)	67.1 (64.2-70.0)	67.8 (65.4-70.3)	35.4 (32.5-38.2)	66.4 (65.6-67.2)
Admission FIM (Mean+95%CI)	108.9 (108.1-109.8)	98.6 (97.3-99.9)	88.1 (87.2-89.0)	77.3 (76.3-78.4)	64.0 (62.4-65.6)	52.5 (51.0-53.9)	39.3 (37.3-41.2)	25.8 (23.8-27.9)	22.8 (19.8-25.7)	81.2 (79.9-82.4)
LOS (Mean+95%CI)	12.9 (12.0-13.8)	23.6 (18.3-29.0)	18.8 (17.4-20.2)	23.1 (21.4-24.8)	27.3 (23.3-31.4)	32.3 (28.8-35.7)	44.1 (38.0-50.2)	64.0 (46.3-81.7)	64.4 (44.2-84.6)	24.1 (22.9-25.4)
Discharge destination (%)										
<i>Discharged to community</i>	92.8%	78.9%	88.0%	79.3%	72.4%	72.6%	57.1%	39.8%	36.8%	77.2%
<i>Remaining in hospital system</i>	7.2%	21.1%	12.0%	20.7%	27.6%	27.4%	42.9%	60.2%	63.2%	22.8%
FIM change (Mean+95%CI)	9.9 (9.1-10.7)	13.3 (11.9-14.6)	21.5 (20.4-22.6)	24.6 (23.0-26.2)	29.2 (26.2-32.2)	32.5 (28.9-36.1)	34.5 (29.0-40.1)	31.1 (23.0-39.2)	42.0 (26.2-57.8)	21.6 (20.7-22.4)
FIM efficiency (FIM change/LOS)	0.8	0.6	1.1	1.1	1.1	1.0	0.8	0.5	0.7	0.9

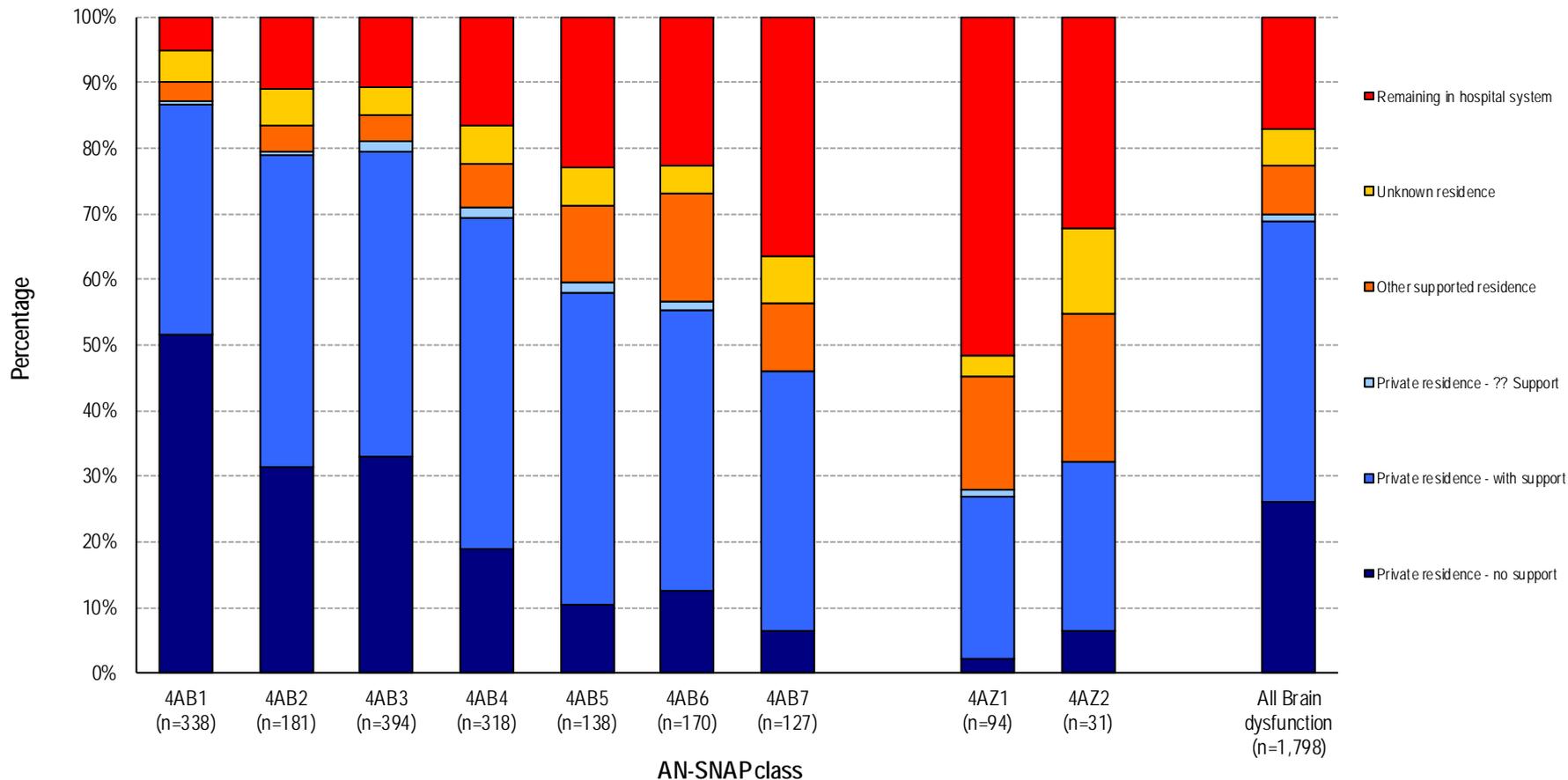
Brain dysfunction discharge destination by AN-SNAP Class – Specialist facilities

Specialist - Discharge destination - Brain dysfunction



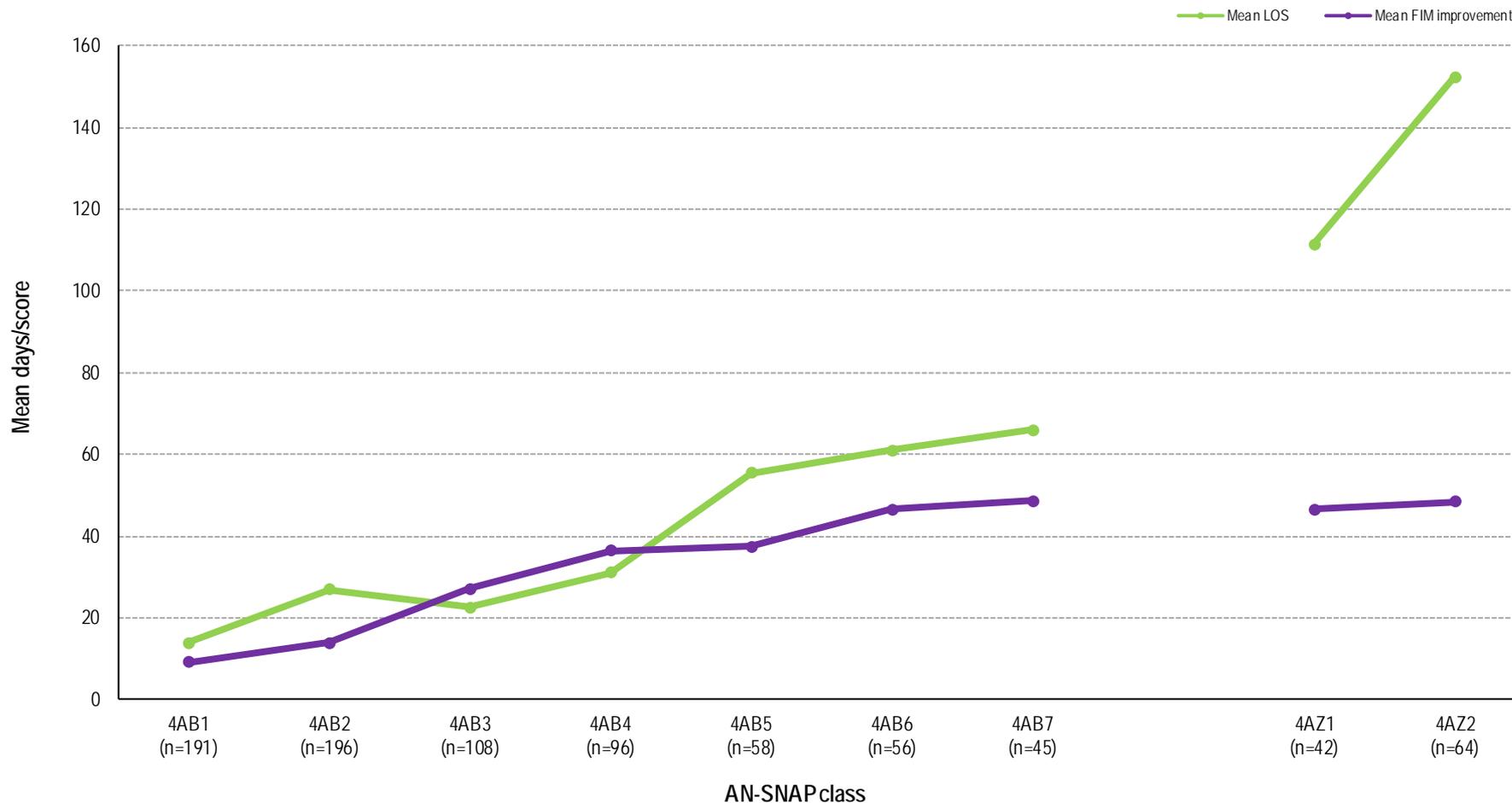
Brain dysfunction discharge destination by AN-SNAP Class – Non specialist facilities

Non specialist - Discharge destination - Brain dysfunction



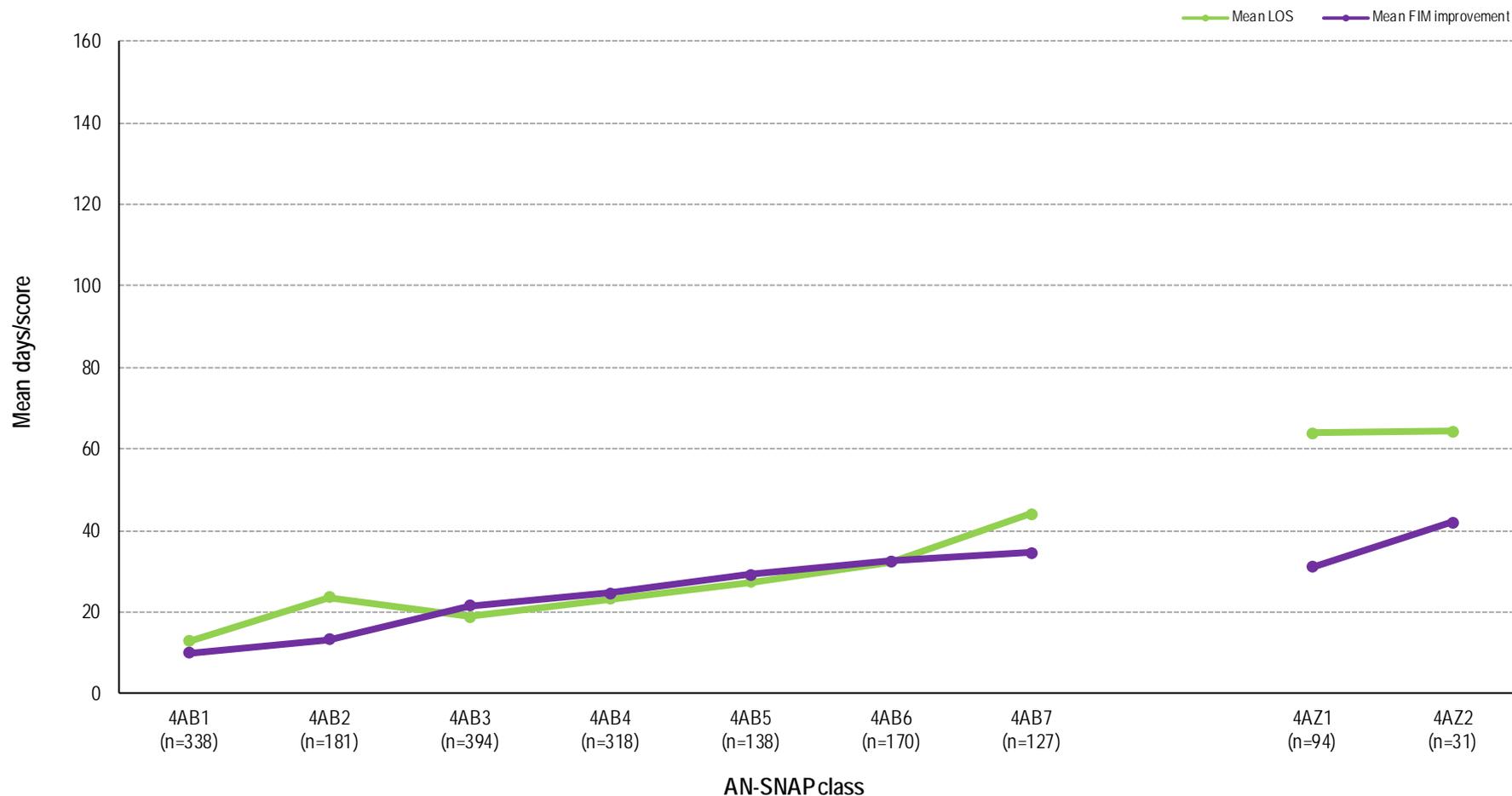
Brain dysfunction LOS and FIM change by AN-SNAP Class – Specialist facilities

Specialist - LOS and FIM change by AN-SNAP class



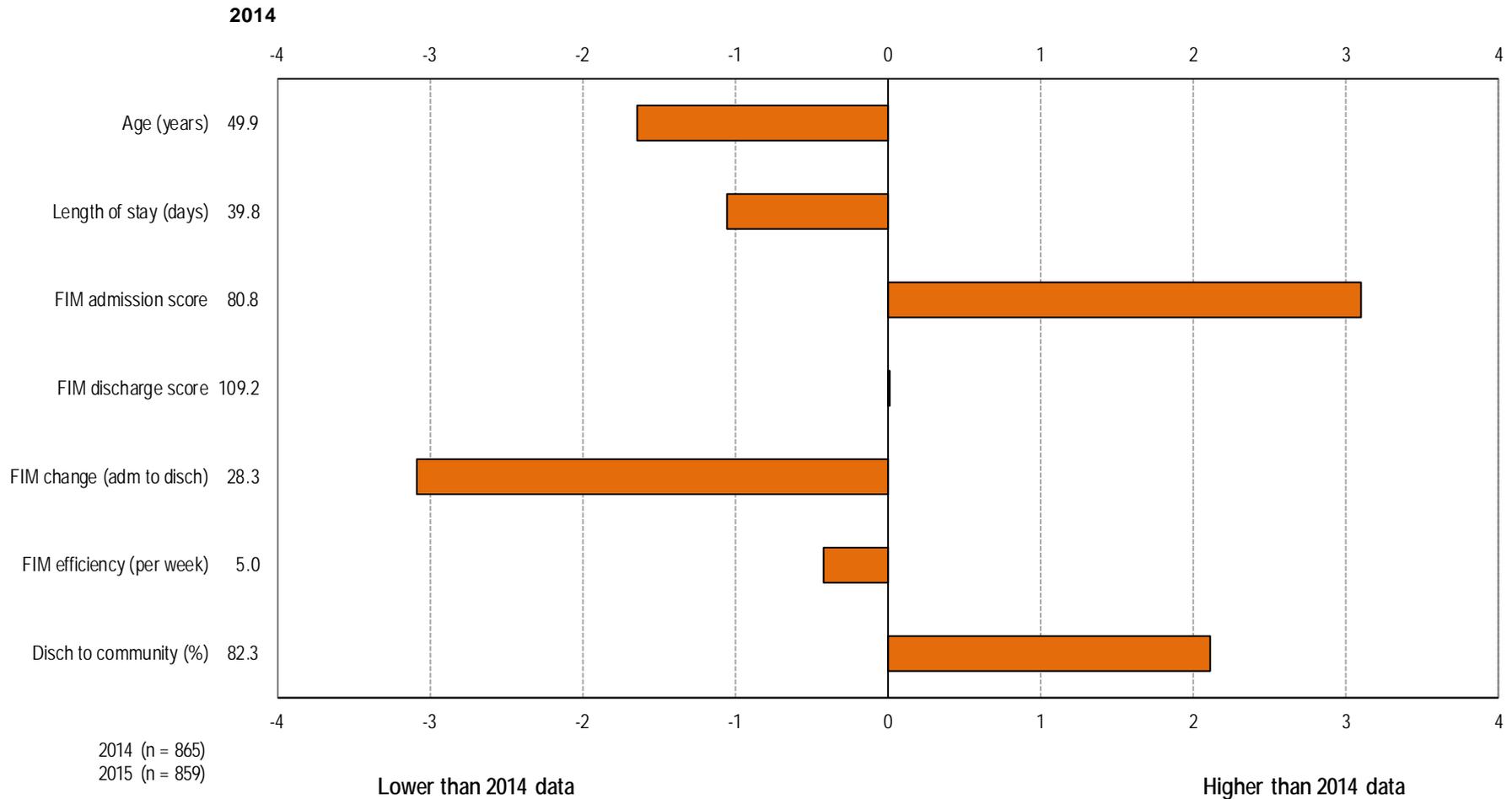
Brain dysfunction LOS and FIM change by AN-SNAP Class – Non specialist facilities

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



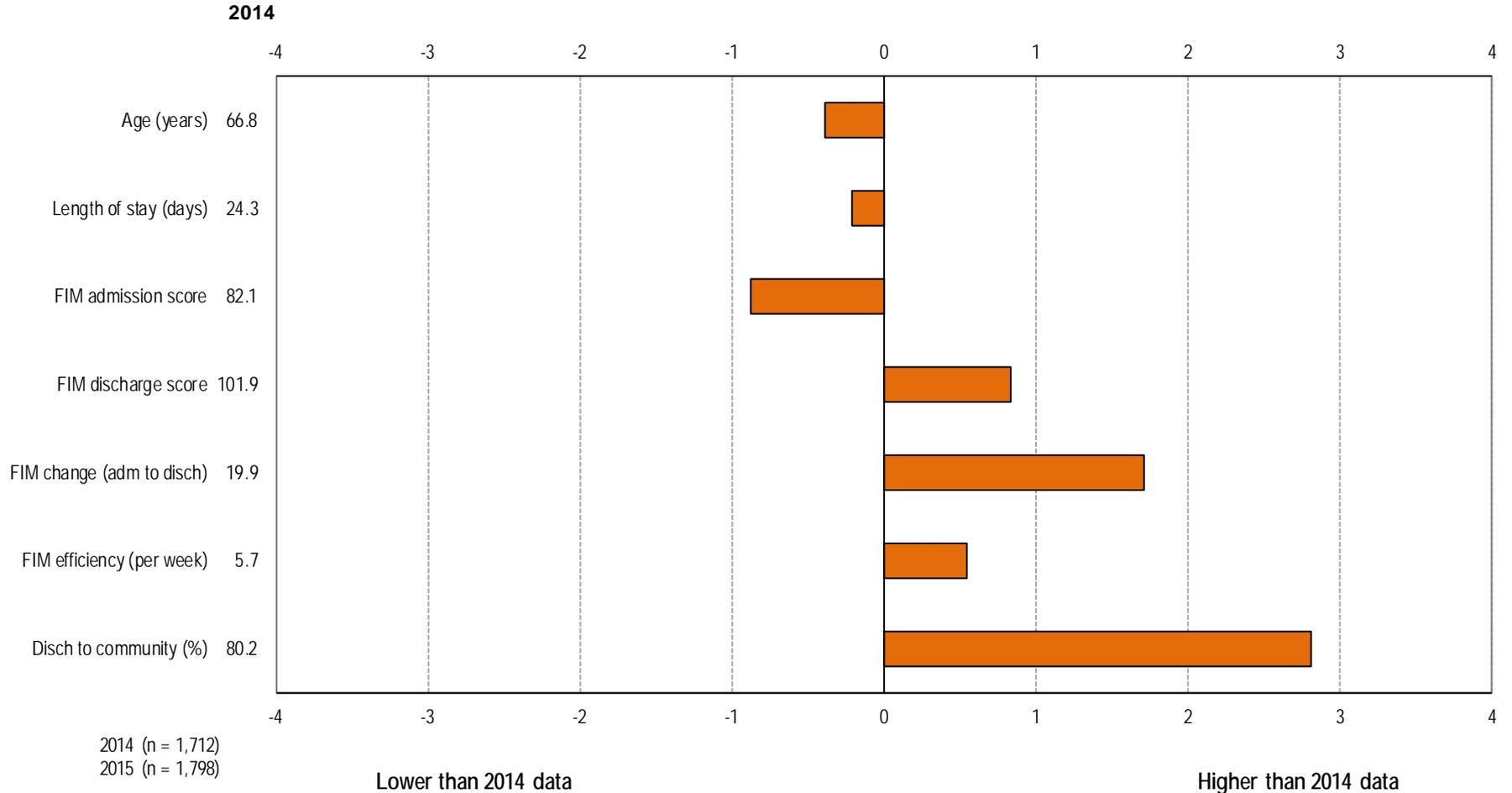
Change in outcome measures in brain dysfunction, 2014 to 2015 - Specialist facilities

Specialist - Difference from 2014 data - All Brain dysfunction



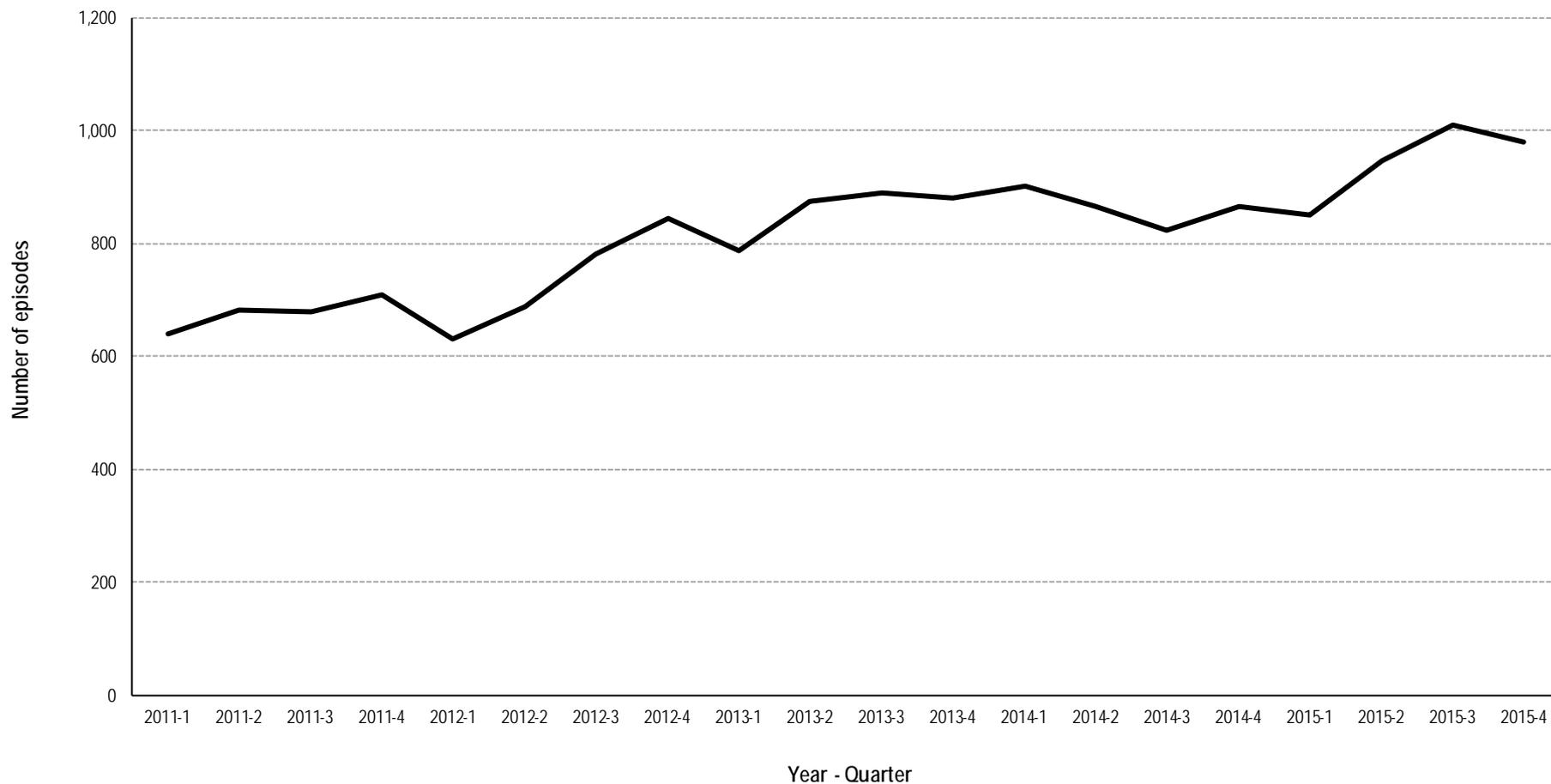
Change in outcome measures in brain dysfunction, 2014 to 2015 - Non specialist facilities

Non specialist - Difference from 2014 data - All Brain dysfunction

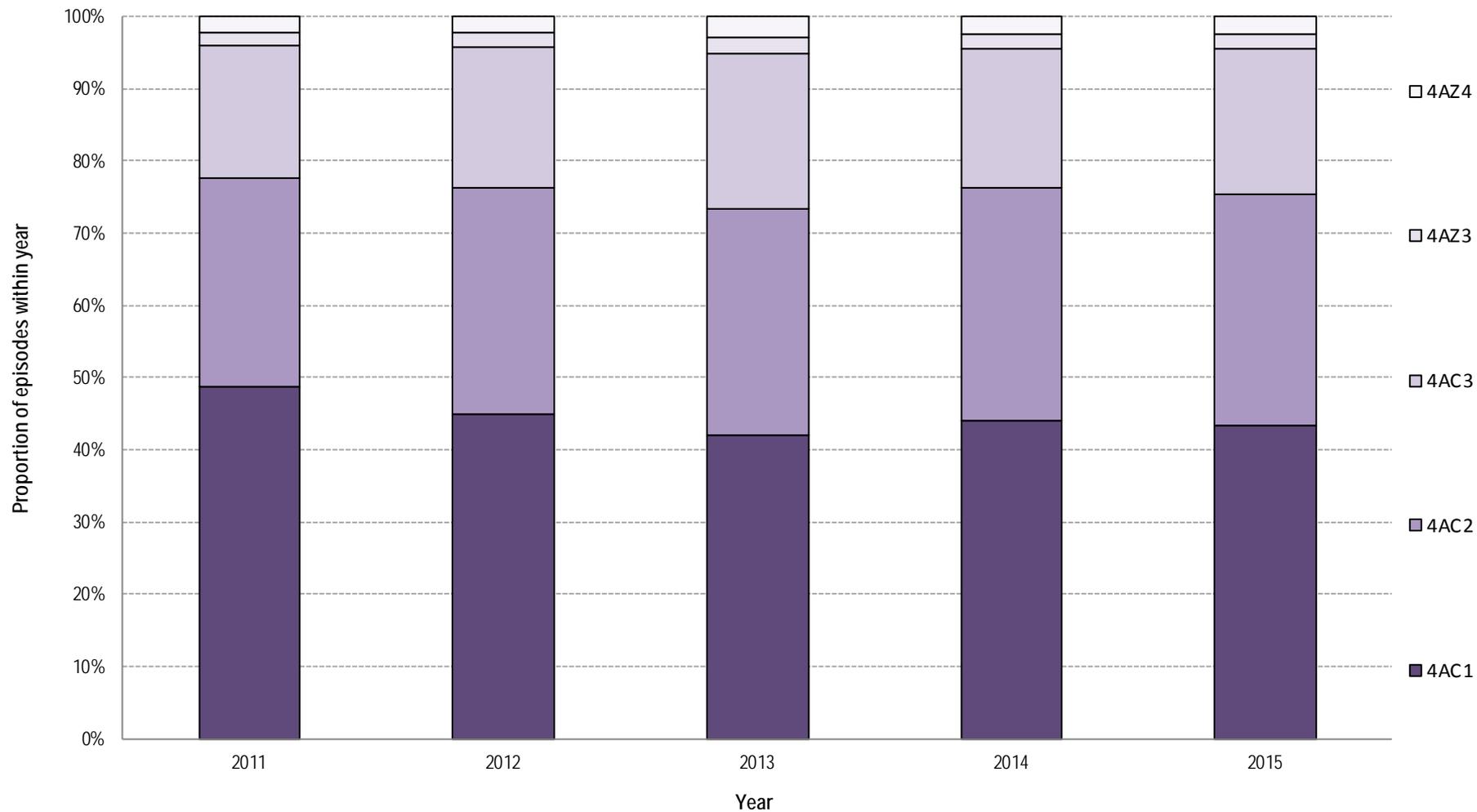


Neurological conditions episodes over time

Number of episodes by quarter - Neurological conditions



Neurological conditions casemix over time



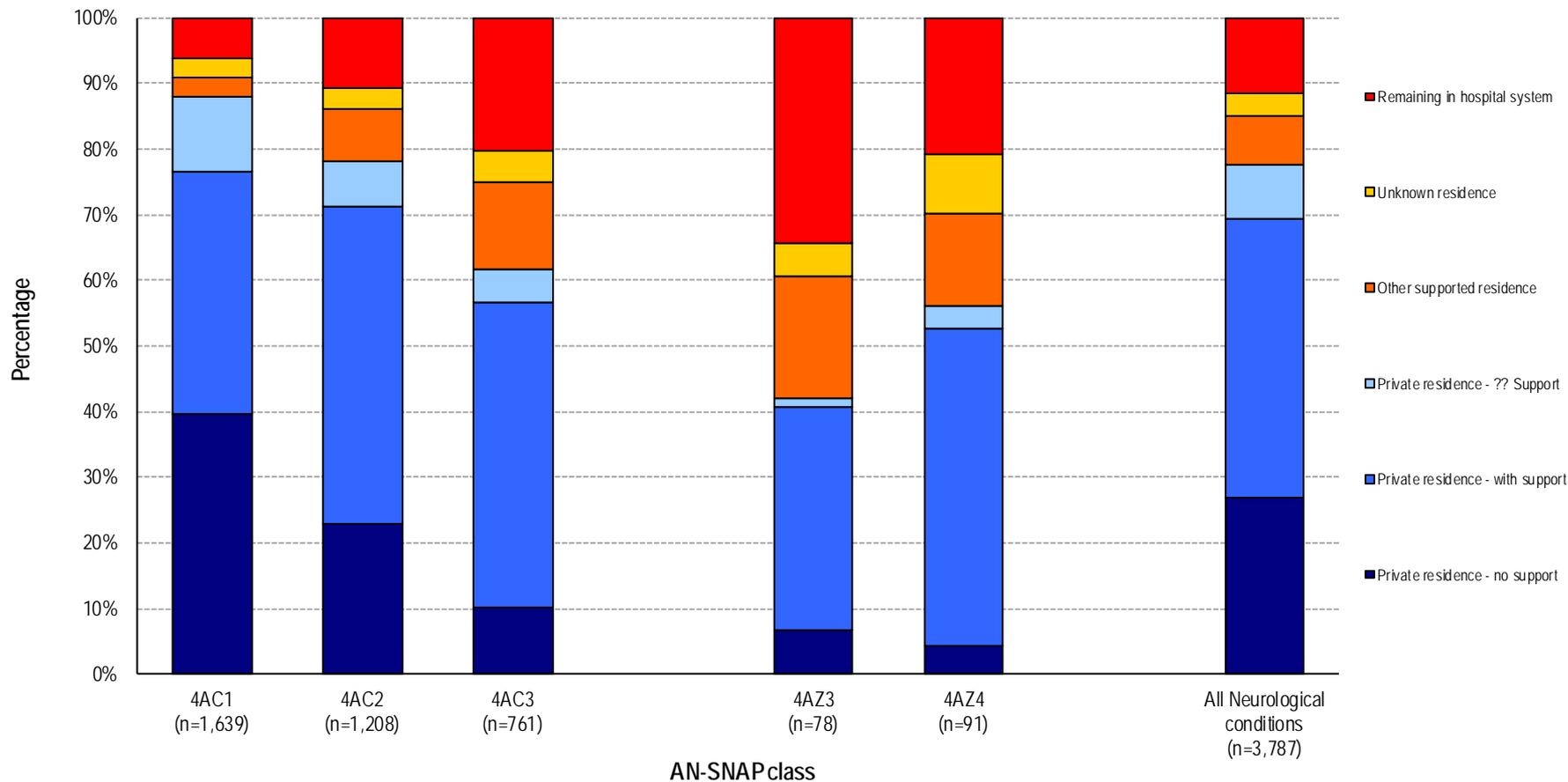
Neurological conditions episodes in 2015



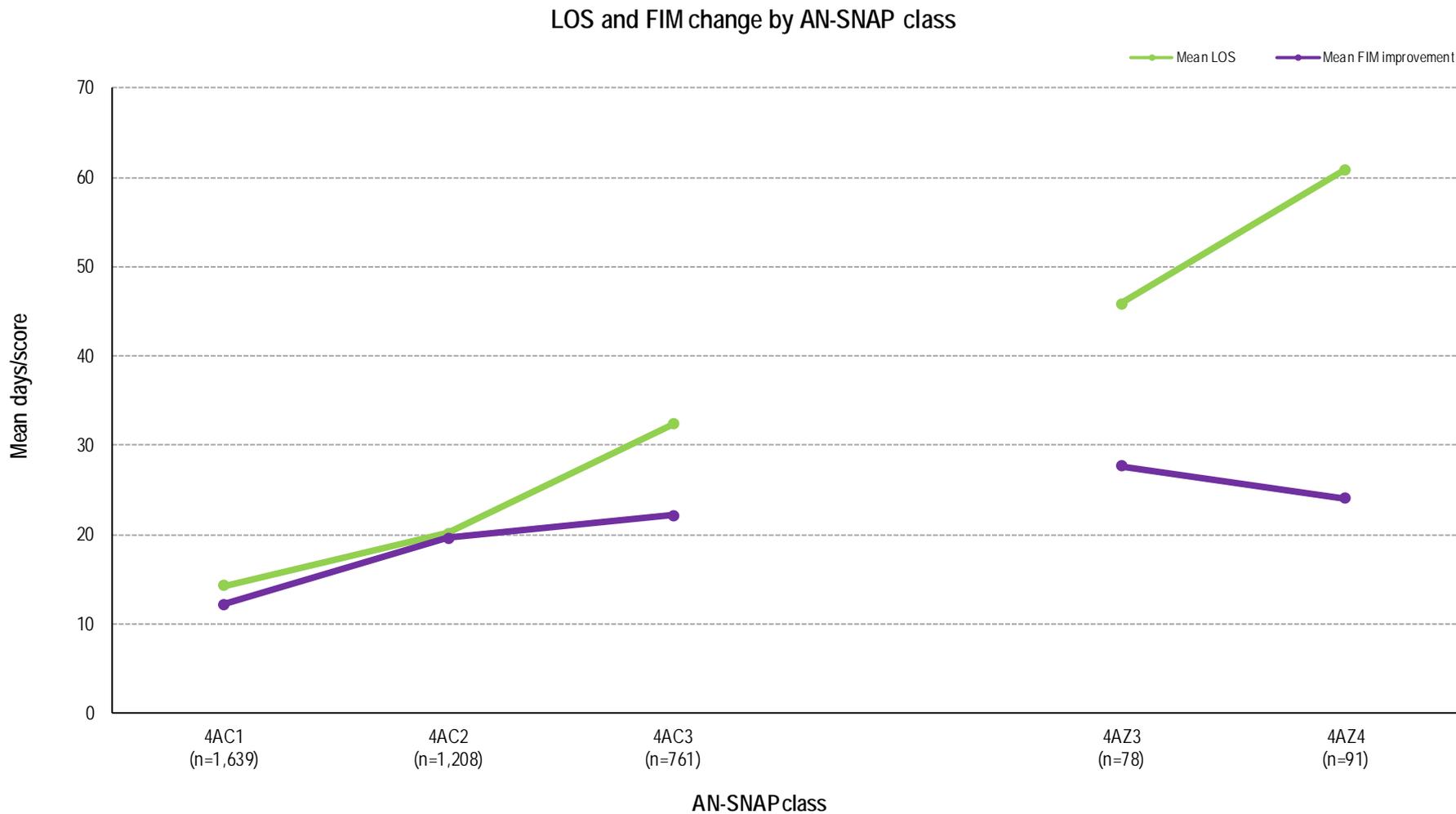
AN-SNAP class:	4AC1	4AC2	4AC3	4AZ3	4AZ4	All Neurological conditions
Number of episodes	1,639	1,208	761	78	91	3,787
Proportion of episodes	43.3%	31.9%	20.1%	2.1%	2.4%	100.0%
Sector (%)						
<i>Private</i>	52.2%	49.0%	31.4%	25.6%	19.8%	45.6%
<i>Public</i>	47.8%	51.0%	68.6%	74.4%	80.2%	54.4%
Gender (%)						
<i>Female</i>	51.4%	49.3%	48.5%	43.6%	53.8%	50.0%
<i>Male</i>	48.6%	50.7%	51.5%	56.4%	46.2%	50.0%
Age (Mean+95%CI)	64.3 (63.5-65.1)	70.0 (69.1-70.9)	66.5 (65.4-67.7)	78.0 (76.1-79.8)	45.6 (42.9-48.3)	66.4 (65.9-67.0)
Admission FIM (Mean+95%CI)	101.9 (101.5-102.4)	80.1 (79.6-80.6)	57.8 (56.9-58.7)	34.0 (31.2-36.9)	38.7 (36.4-41.1)	84.4 (83.7-85.1)
LOS (Mean+95%CI)	14.3 (13.8-14.8)	20.2 (19.4-21.0)	32.4 (30.1-34.6)	45.9 (33.5-58.2)	60.8 (44.5-77.2)	21.0 (20.2-21.7)
Discharge destination (%)						
<i>Discharged to community</i>	93.8%	89.2%	79.7%	65.8%	79.1%	88.6%
<i>Remaining in hospital system</i>	6.2%	10.8%	20.3%	34.2%	20.9%	11.4%
FIM change (Mean+95%CI)	12.2 (11.8-12.6)	19.7 (19.0-20.4)	22.2 (20.7-23.6)	27.7 (20.1-35.3)	24.1 (18.0-30.1)	16.9 (16.5-17.4)
FIM efficiency (FIM change/LOS)	0.9	1.0	0.7	0.6	0.4	0.8

Neurological conditions discharge destination by AN-SNAP class

Discharge destination - Neurological conditions

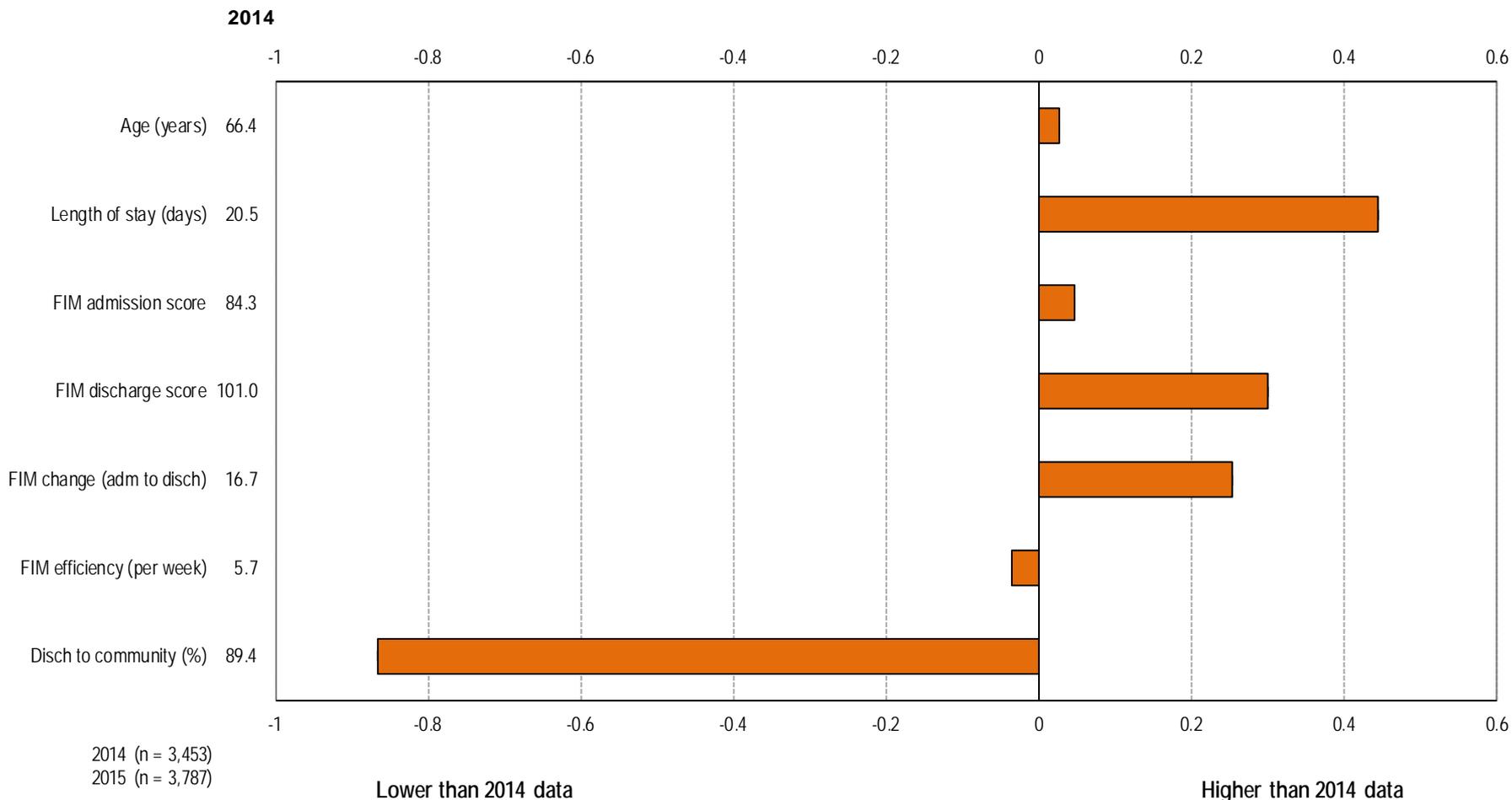


Neurological conditions LOS and FIM change by AN-SNAP class

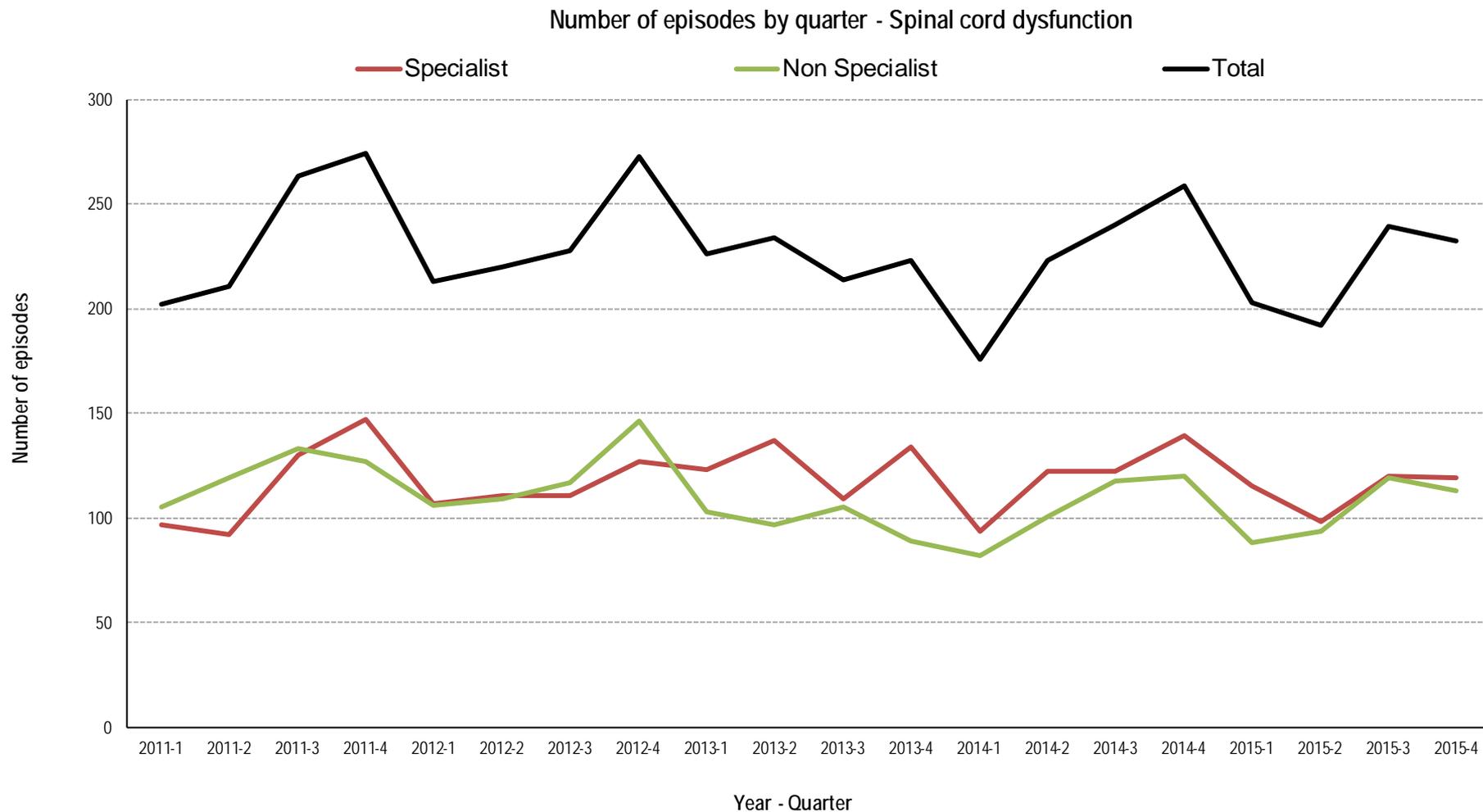


Change in outcome measures in neurological conditions, 2014 to 2015

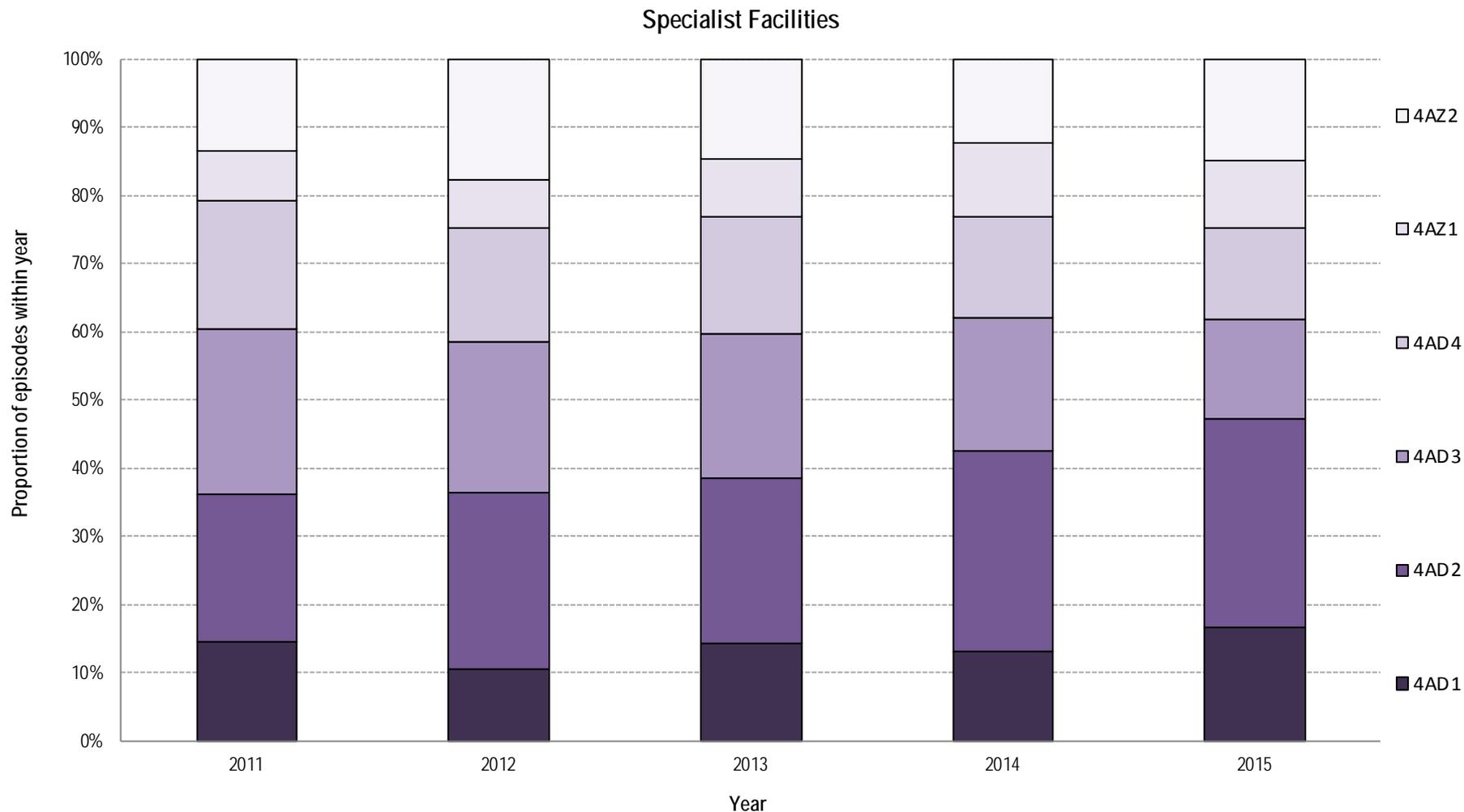
Difference from 2014 data - All Neurological conditions



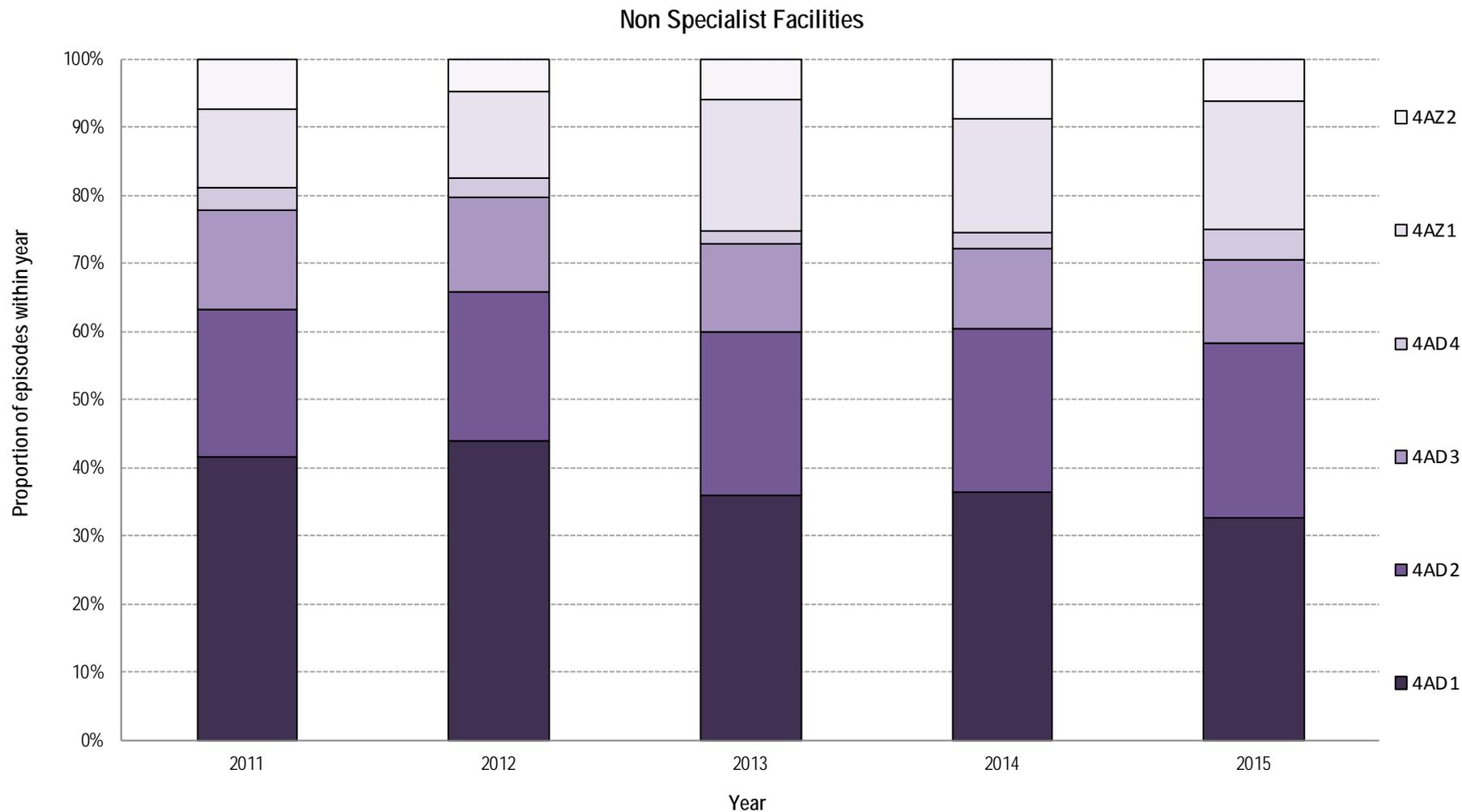
Spinal cord dysfunction episodes over time



Spinal cord dysfunction casemix over time – Specialist facilities



Spinal cord dysfunction casemix over time – Non specialist facilities



Spinal cord dysfunction episodes in 2015 - Specialist facilities



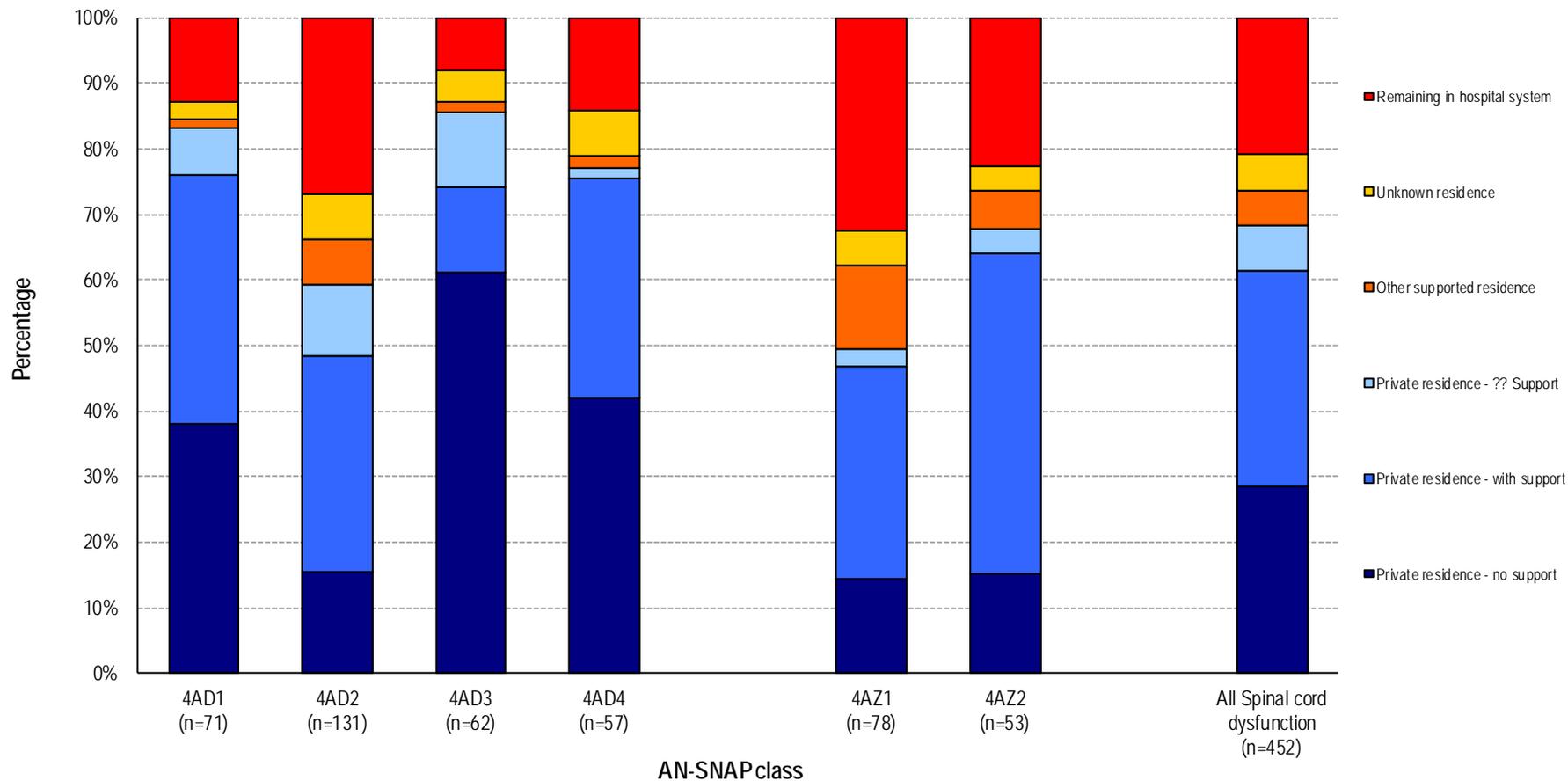
AN-SNAP class:	4AD1	4AD2	4AD3	4AD4	4AZ1	4AZ2	All Spinal cord dysfunction
Number of episodes	71	131	62	57	78	53	452
Proportion of episodes	15.7%	29.0%	13.7%	12.6%	17.3%	11.7%	100.0%
Sector (%)							
<i>Private</i>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<i>Public</i>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gender (%)							
<i>Female</i>	33.8%	39.7%	25.8%	29.8%	29.5%	9.4%	30.3%
<i>Male</i>	66.2%	60.3%	74.2%	70.2%	70.5%	90.6%	69.7%
Age (Mean+95%CI)	63.1 (60.9-65.3)	67.4 (65.8-69.0)	35.1 (32.7-37.6)	34.1 (31.8-36.5)	66.2 (63.9-68.5)	33.2 (30.4-36.1)	53.9 (52.2-55.6)
Admission FIM (Mean+95%CI)	93.7 (91.1-96.3)	60.9 (59.2-62.6)	95.2 (91.1-99.2)	61.1 (59.5-62.7)	44.2 (41.7-46.7)	48.9 (47.8-50.1)	68.3 (66.0-70.6)
LOS (Mean+95%CI)	47.9 (34.0-61.8)	87.6 (75.7-99.4)	35.8 (27.1-44.6)	92.3 (74.8-109.8)	27.5 (106.7-148.3)	44.5 (114.6-174.4)	85.3 (77.7-92.9)
Discharge destination (%)							
<i>Discharged to community</i>	60.8%	54.0%	87.7%	77.8%	55.9%	73.2%	64.1%
<i>Remaining in hospital system</i>	39.2%	46.0%	12.3%	22.2%	44.1%	26.8%	35.9%
FIM change (Mean+95%CI)	17.4 (13.7-21.1)	33.6 (29.6-37.6)	19.0 (15.4-22.5)	42.8 (37.3-48.3)	28.4 (20.9-35.8)	27.2 (18.8-35.5)	28.2 (25.9-30.5)
FIM efficiency (FIM change/LOS)	0.4	0.4	0.5	0.5	0.2	0.2	0.3

Spinal cord dysfunction episodes in 2015 - Non specialist facilities

AN-SNAP class:	4AD1	4AD2	4AD3	4AD4	4AZ1	4AZ2	All Spinal cord dysfunction
Number of episodes	163	127	61	22	31	8	414
Proportion of episodes	39.4%	30.7%	14.7%	5.3%	7.5%	1.9%	100.0%
Sector (%)							
<i>Private</i>	22.7%	11.8%	21.3%	9.1%	6.5%	0.0%	16.7%
<i>Public</i>	77.3%	88.2%	78.7%	90.9%	93.5%	100.0%	83.3%
Gender (%)							
<i>Female</i>	39.9%	49.6%	49.2%	45.5%	38.7%	25.0%	44.4%
<i>Male</i>	60.1%	50.4%	50.8%	54.5%	61.3%	75.0%	55.6%
Age (Mean+95%CI)	68.3 (66.6-69.9)	71.7 (69.7-73.6)	36.7 (34.4-38.9)	37.3 (33.7-40.8)	73.9 (69.6-78.2)	35.4 (27.3-43.5)	62.7 (61.0-64.4)
Admission FIM (Mean+95%CI)	95.0 (93.0-97.1)	59.6 (57.8-61.5)	97.4 (93.6-101.2)	59.8 (55.9-63.8)	40.2 (36.2-44.2)	49.5 (44.9-54.1)	80.4 (77.9-82.9)
LOS (Mean+95%CI)	19.9 (17.5-22.3)	48.0 (39.5-56.5)	24.5 (19.2-29.8)	75.9 (34.5-117.3)	60.6 (40.5-80.6)	35.3 (20.3-50.3)	33.2 (29.4-37.0)
Discharge destination (%)							
<i>Discharged to community</i>	76.7%	49.7%	87.9%	53.3%	26.8%	25.0%	60.7%
<i>Remaining in hospital system</i>	23.3%	50.3%	12.1%	46.7%	73.2%	75.0%	39.3%
FIM change (Mean+95%CI)	15.9 (14.2-17.7)	23.3 (19.6-27.0)	16.5 (13.2-19.9)	30.3 (18.2-42.5)	19.1 (10.8-27.3)	21.5 (-2.5-45.5)	18.9 (17.2-20.5)
FIM efficiency (FIM change/LOS)	0.8	0.5	0.7	0.4	0.3	0.6	0.6

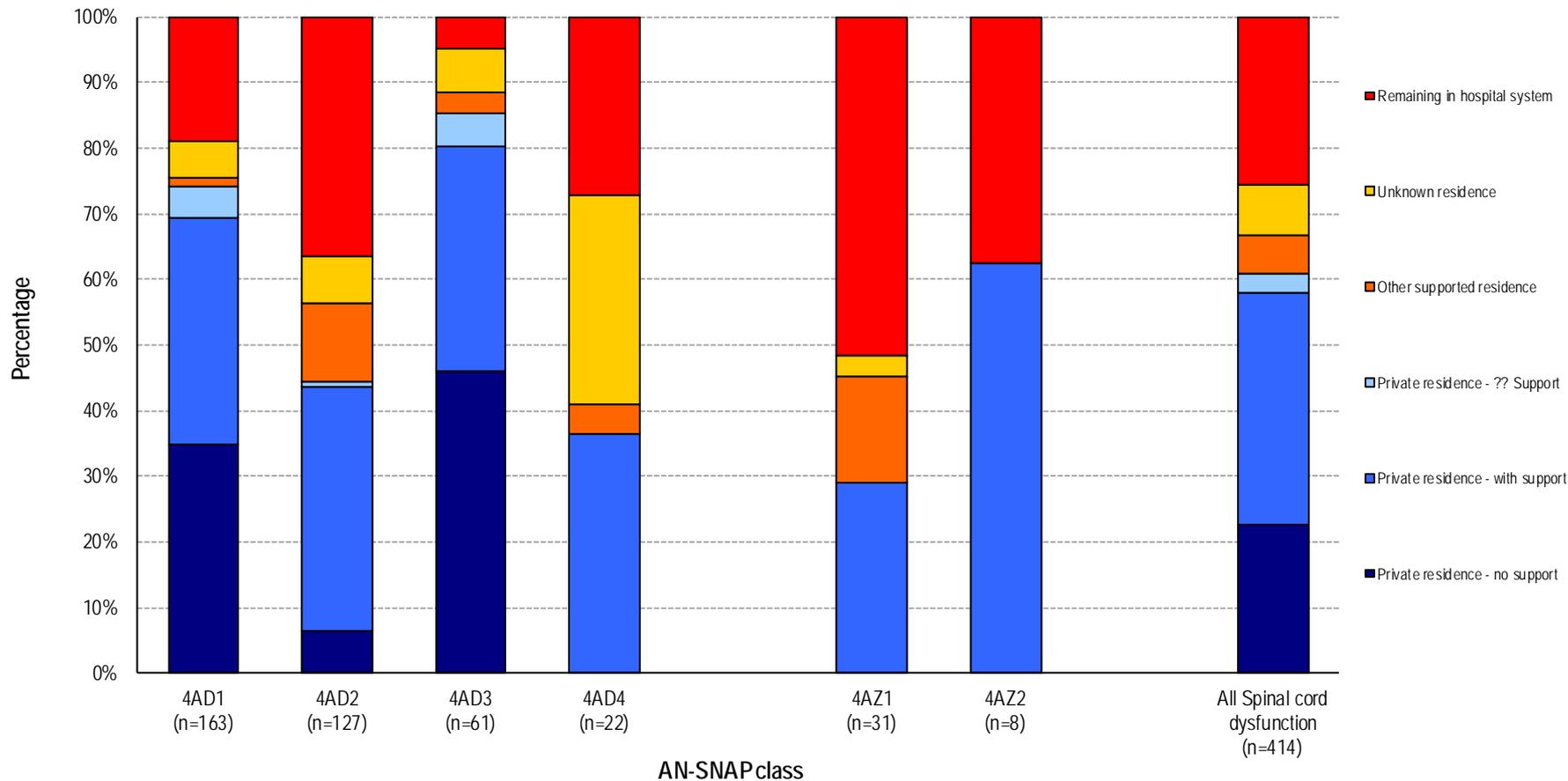
Spinal cord dysfunction discharge destination by AN-SNAP class – Specialist facilities

Specialist - Discharge destination - Spinal cord dysfunction



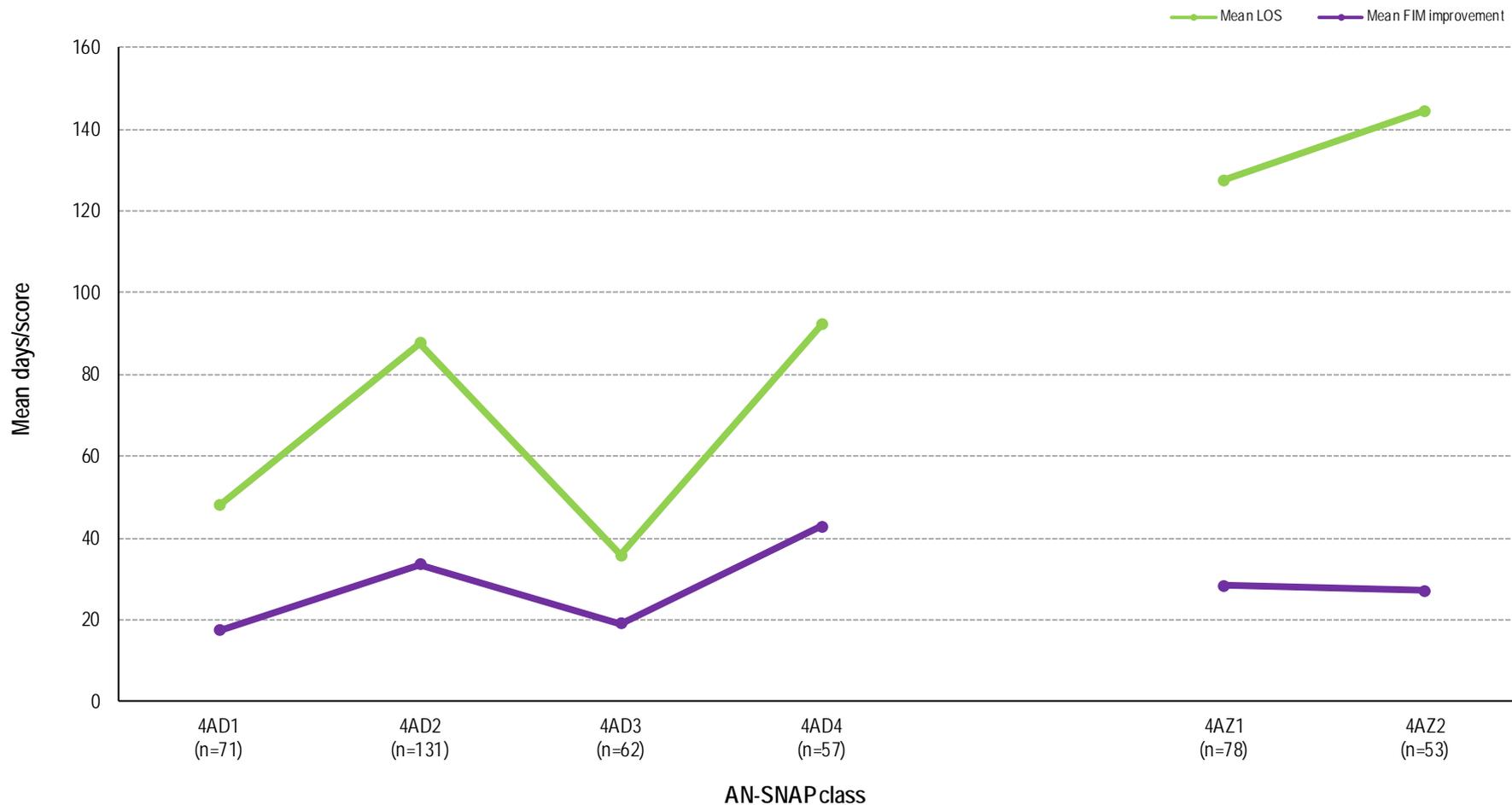
Spinal cord dysfunction discharge destination by AN-SNAP class – Non specialist facilities

Non specialist - Discharge destination - Spinal cord dysfunction



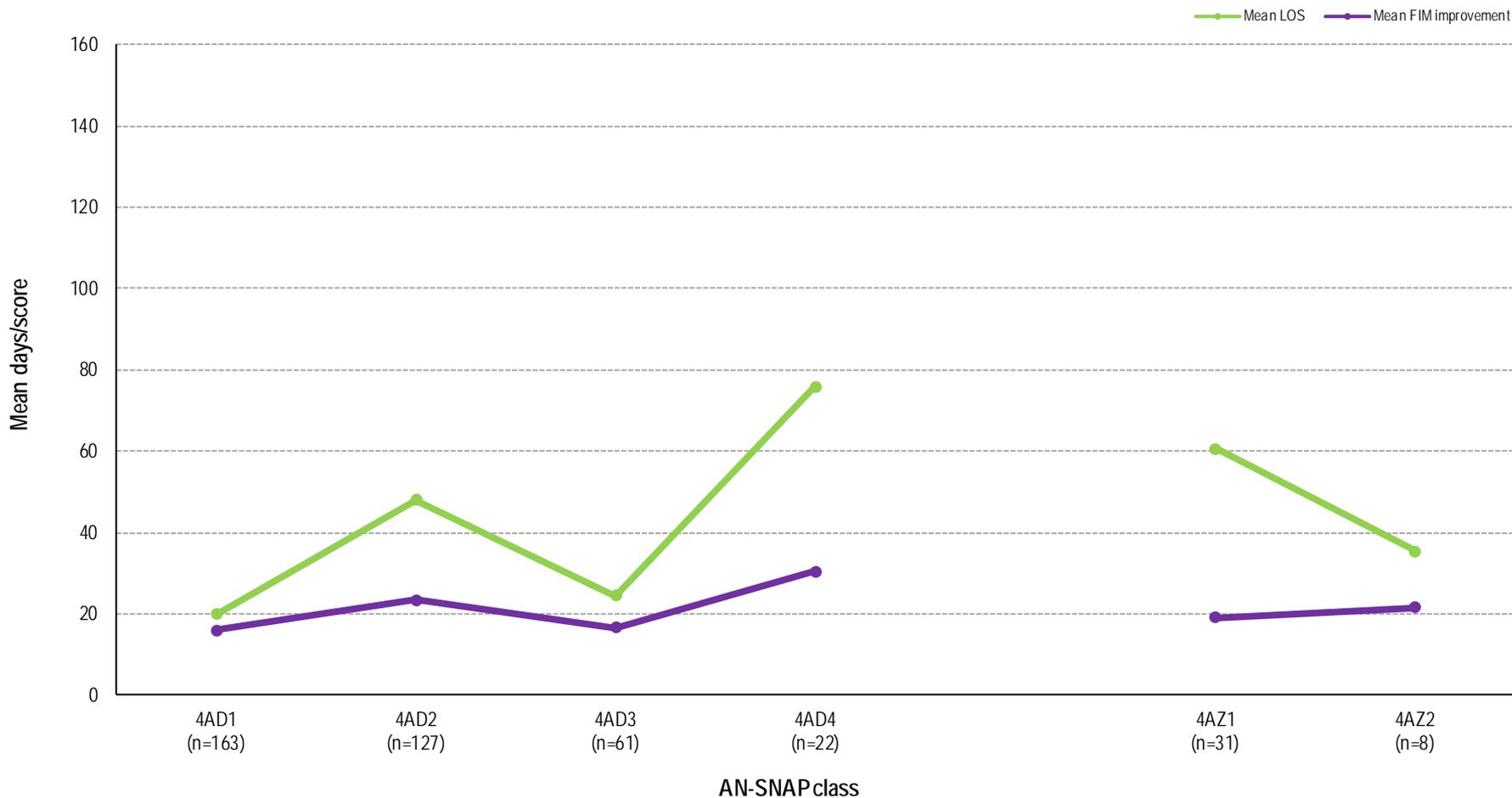
Spinal cord dysfunction LOS and FIM change by AN-SNAP class – Specialist facilities

Specialist - LOS and FIM change by AN-SNAP class



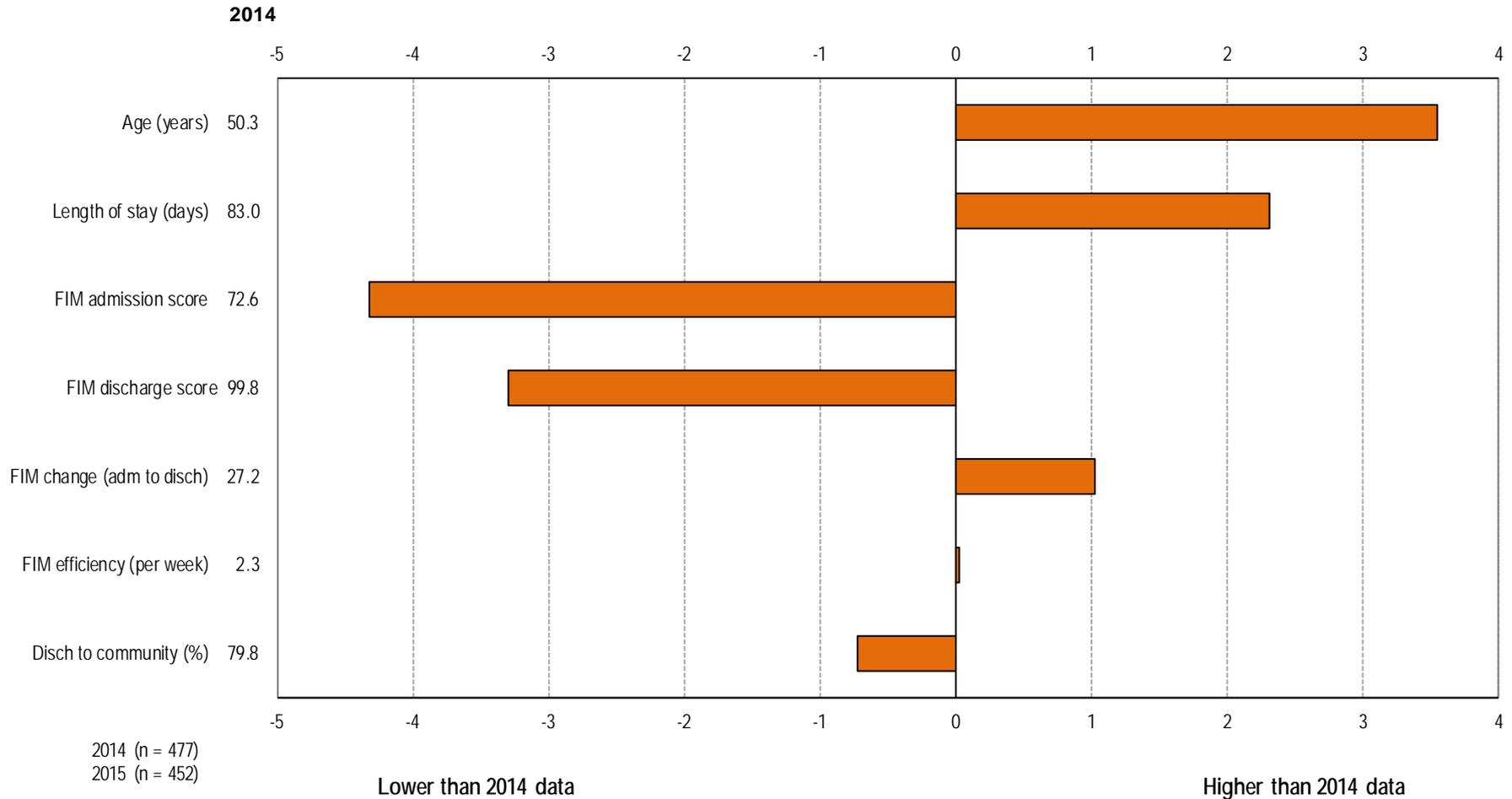
Spinal cord dysfunction LOS and FIM change by AN-SNAP class – Non specialist facilities

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



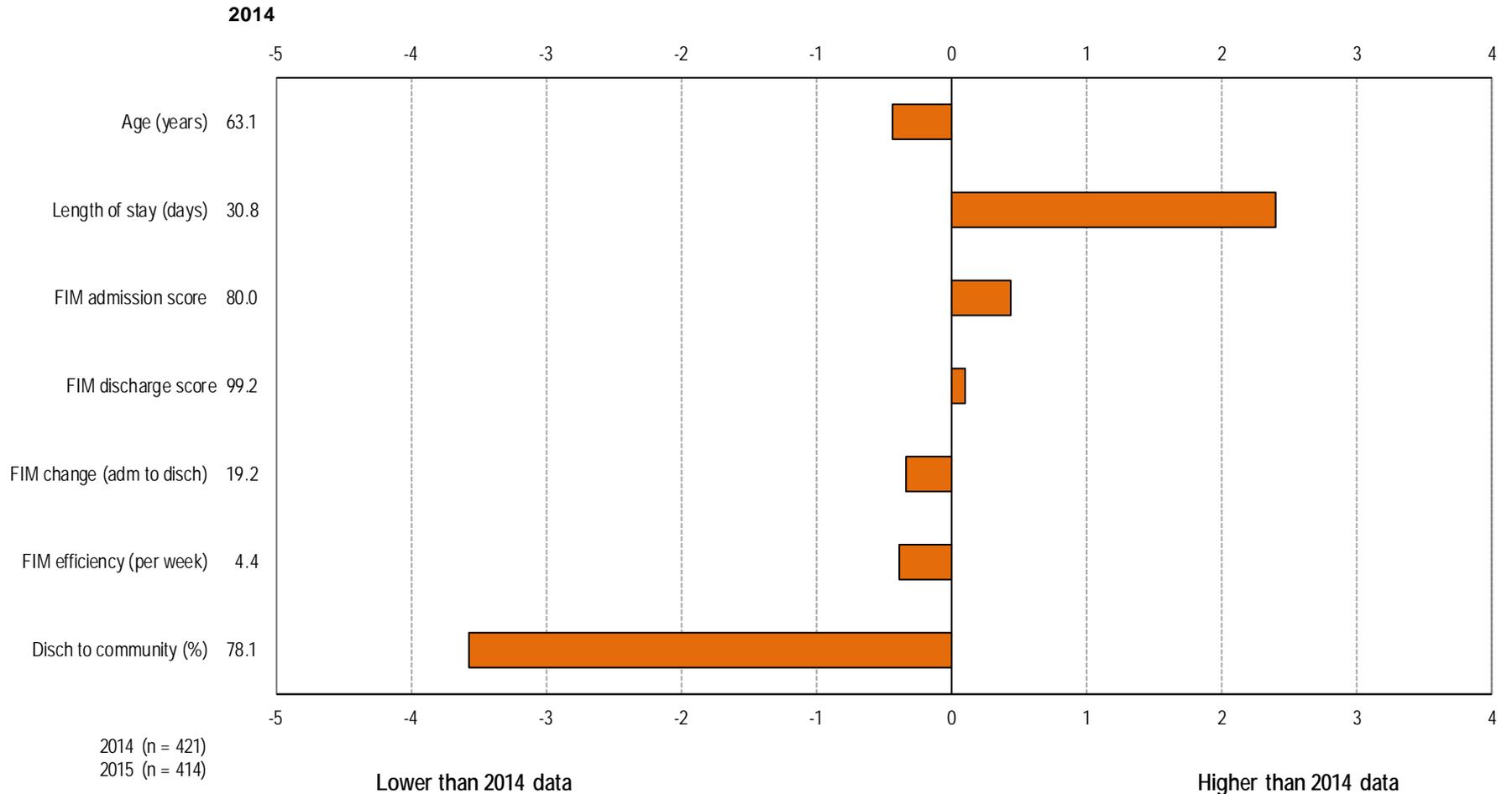
Change in outcome measures in spinal cord dysfunction, 2014 to 2015 - Specialist facilities

Specialist - Difference from 2014 data - All Spinal cord dysfunction



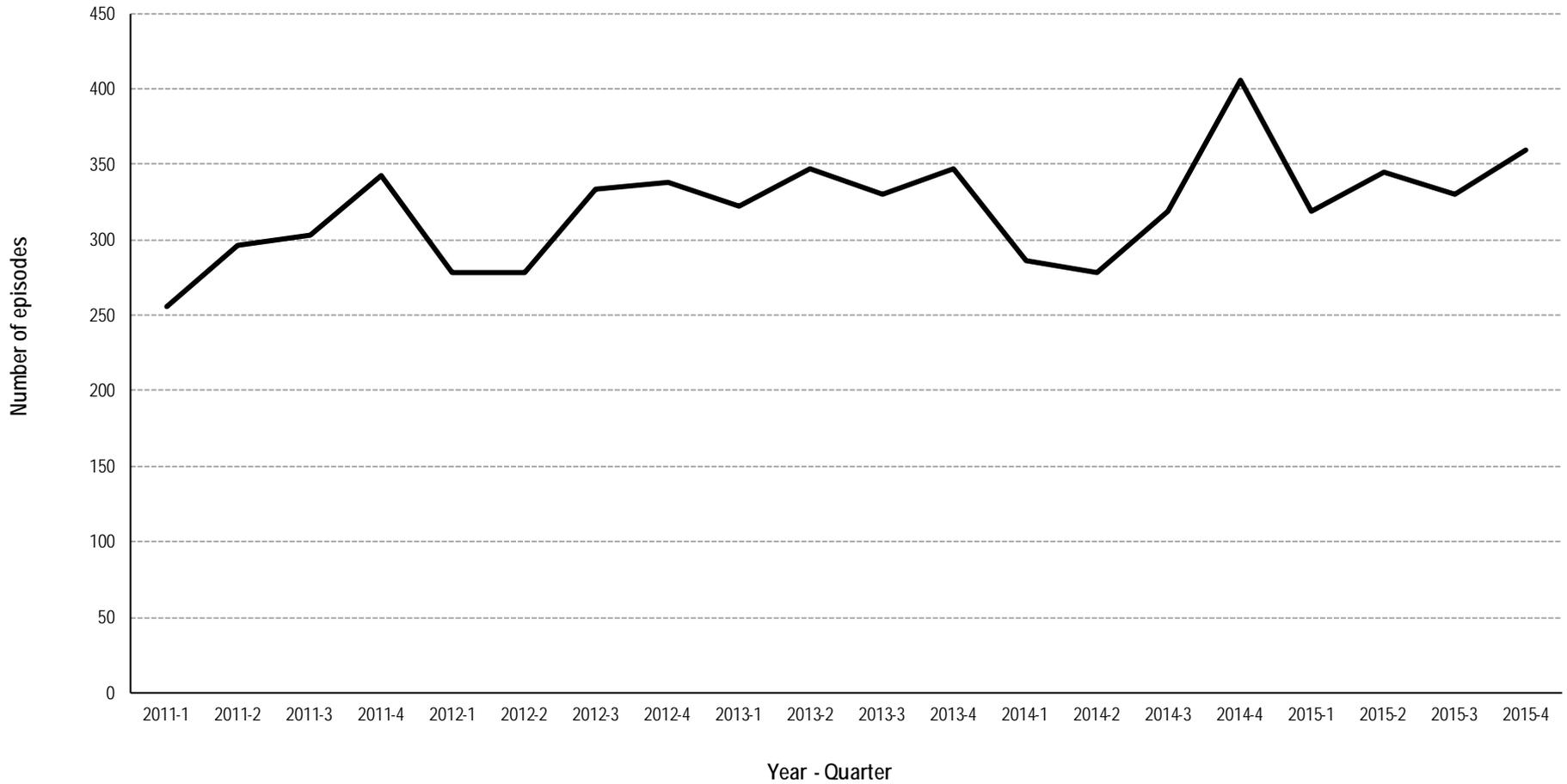
Change in outcome measures in spinal cord dysfunction, 2014 to 2015 - Non specialist facilities

Non specialist - Difference from 2014 data - All Spinal cord dysfunction

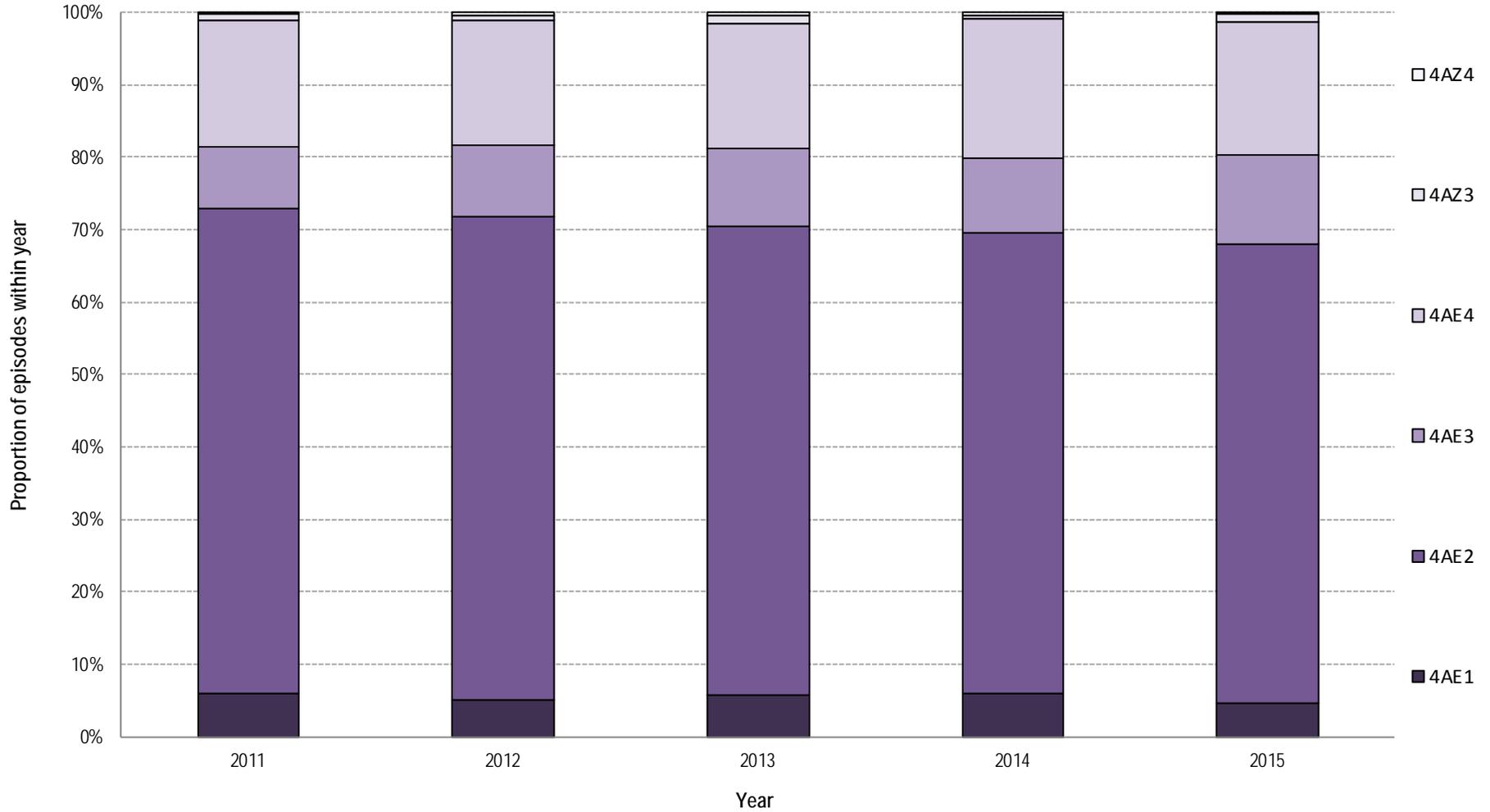


Amputation episodes over time

Number of episodes by quarter - Amputation of limb



Amputation casemix over time



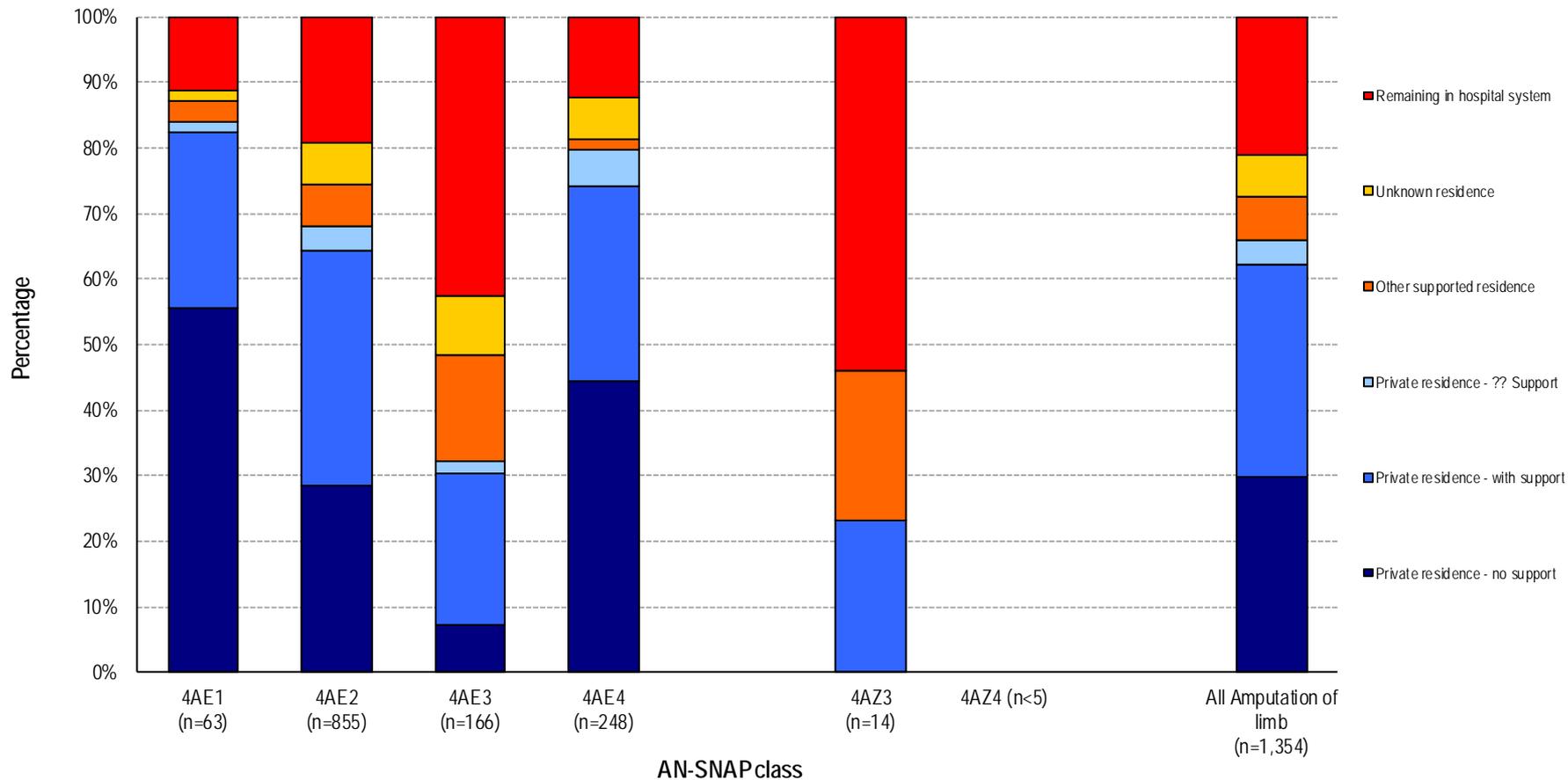
Amputation episodes in 2015



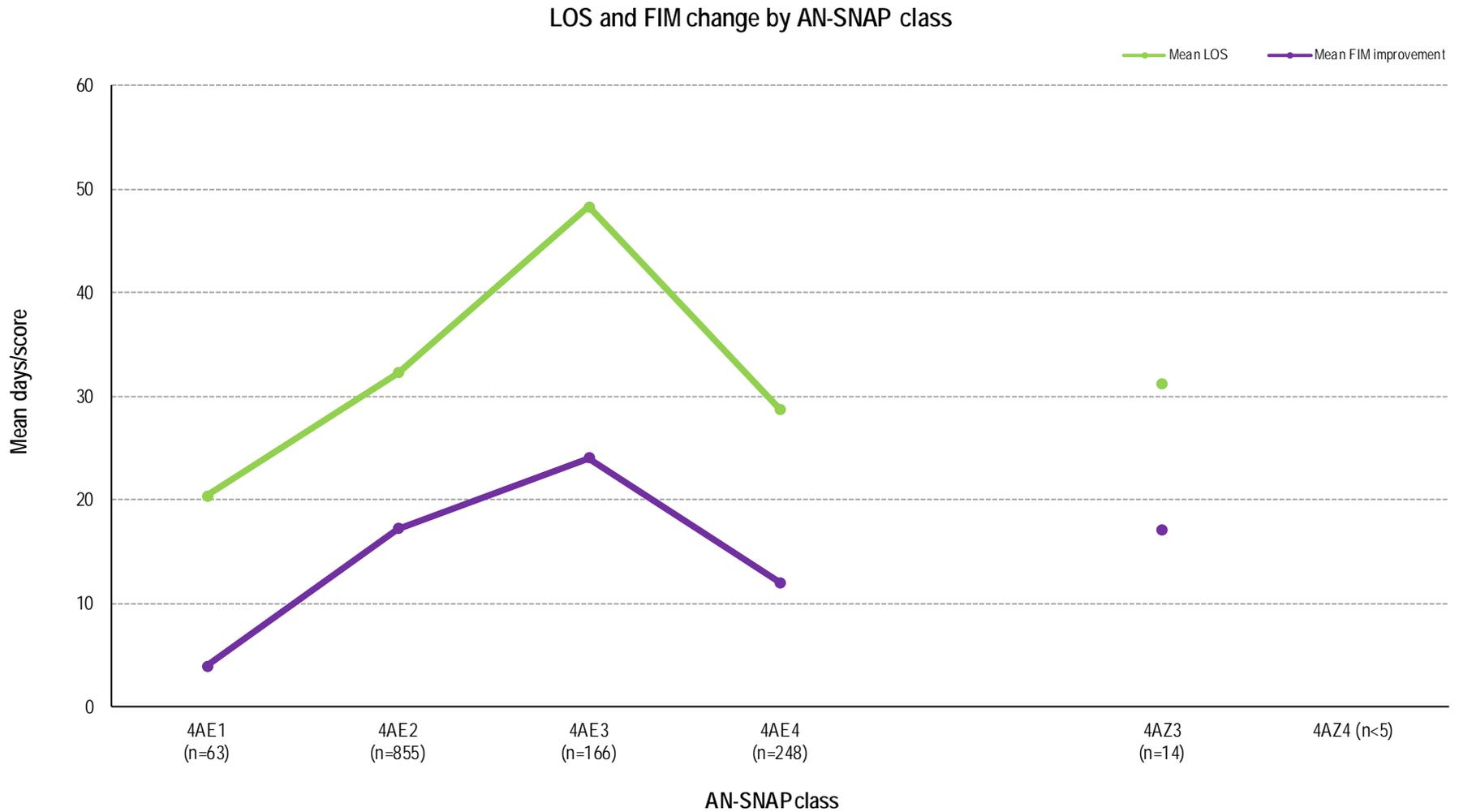
AN-SNAP class:	4AE1	4AE2	4AE3	4AE4	4AZ3	4AZ4	All Amputation of limb
Number of episodes	63	855	166	248	14	4	1,354
Proportion of episodes	4.7%	63.1%	12.3%	18.3%	1.0%	n < 5	100.0%
Sector (%)							
<i>Private</i>	19.0%	16.4%	11.4%	11.3%	7.1%	n < 5	14.8%
<i>Public</i>	81.0%	83.6%	88.6%	88.7%	92.9%	n < 5	85.2%
Gender (%)							
<i>Female</i>	23.8%	30.1%	33.7%	32.7%	7.1%	n < 5	30.6%
<i>Male</i>	76.2%	69.9%	66.3%	67.3%	92.9%	n < 5	69.4%
Age (Mean+95%CI)	65.9 (63.5-68.3)	70.8 (70.2-71.5)	74.3 (72.8-75.8)	42.9 (41.8-43.9)	80.1 (77.0-83.3)	n < 5	65.9 (65.2-66.7)
Admission FIM (Mean+95%CI)	113.3 (111.8-114.7)	88.6 (87.5-89.6)	55.2 (53.5-56.9)	100.8 (98.8-102.9)	29.1 (23.5-34.8)	n < 5	88.5 (87.4-89.7)
LOS (Mean+95%CI)	20.4 (16.0-24.8)	32.3 (30.6-33.9)	48.3 (42.4-54.1)	28.8 (25.1-32.4)	31.1 (14.9-47.4)	n < 5	32.5 (31.0-34.0)
Discharge destination (%)							
<i>Discharged to community</i>	88.9%	80.8%	57.6%	87.9%	46.2%	n < 5	79.1%
<i>Remaining in hospital system</i>	11.1%	19.2%	42.4%	12.1%	53.8%	n < 5	20.9%
FIM change (Mean+95%CI)	4.0 (2.9-5.0)	17.2 (16.4-18.0)	24.0 (20.3-27.8)	12.0 (10.4-13.6)	17.1 (-3.9-38.2)	n < 5	16.2 (15.4-16.9)
FIM efficiency (FIM change/LOS)	0.2	0.5	0.5	0.4	0.6	n < 5	0.5

Amputation discharge destination by AN-SNAP class

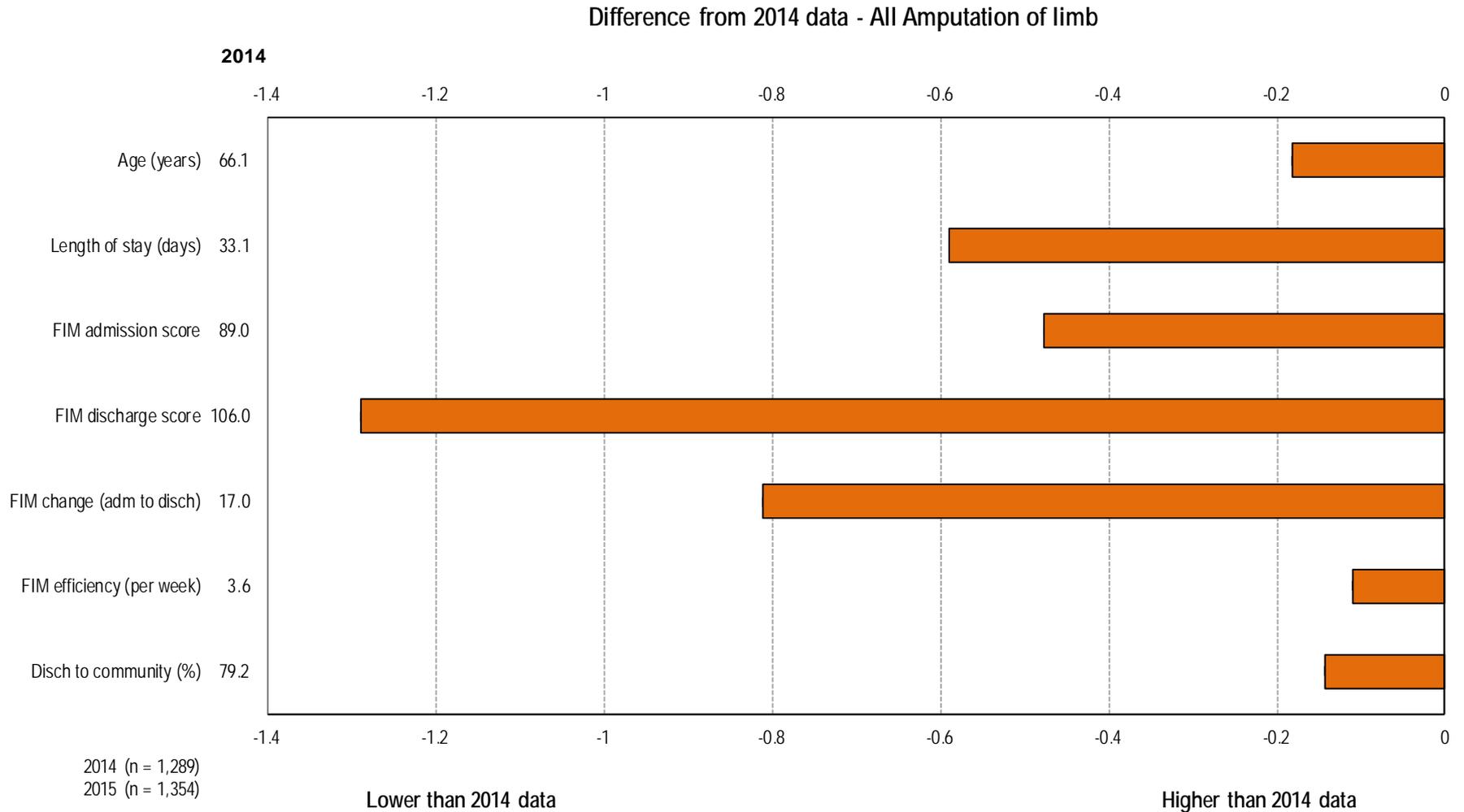
Discharge destination - Amputation of limb



Amputation LOS and FIM change by AN-SNAP class

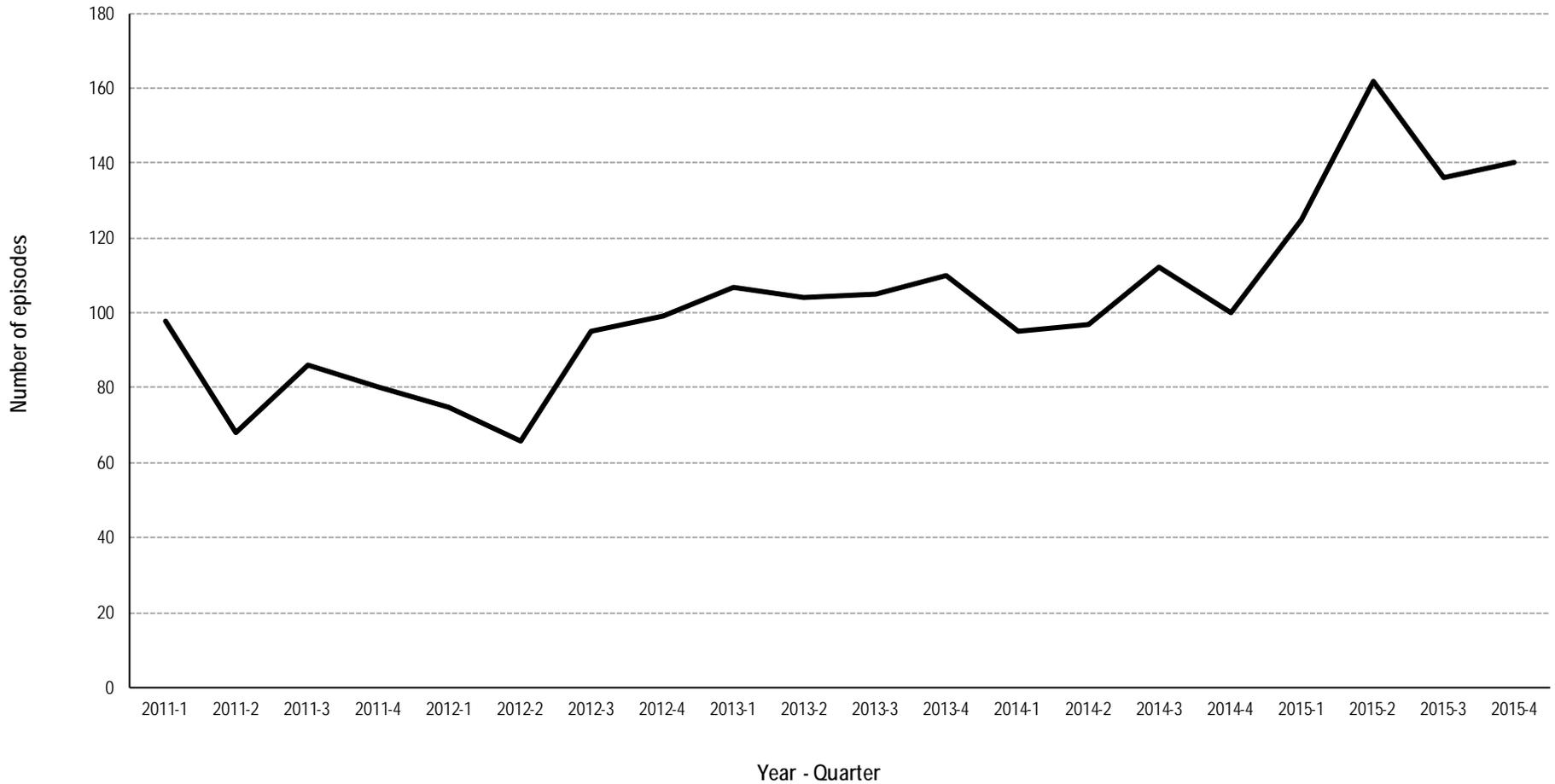


Change in outcome measures in amputation, 2014 to 2015

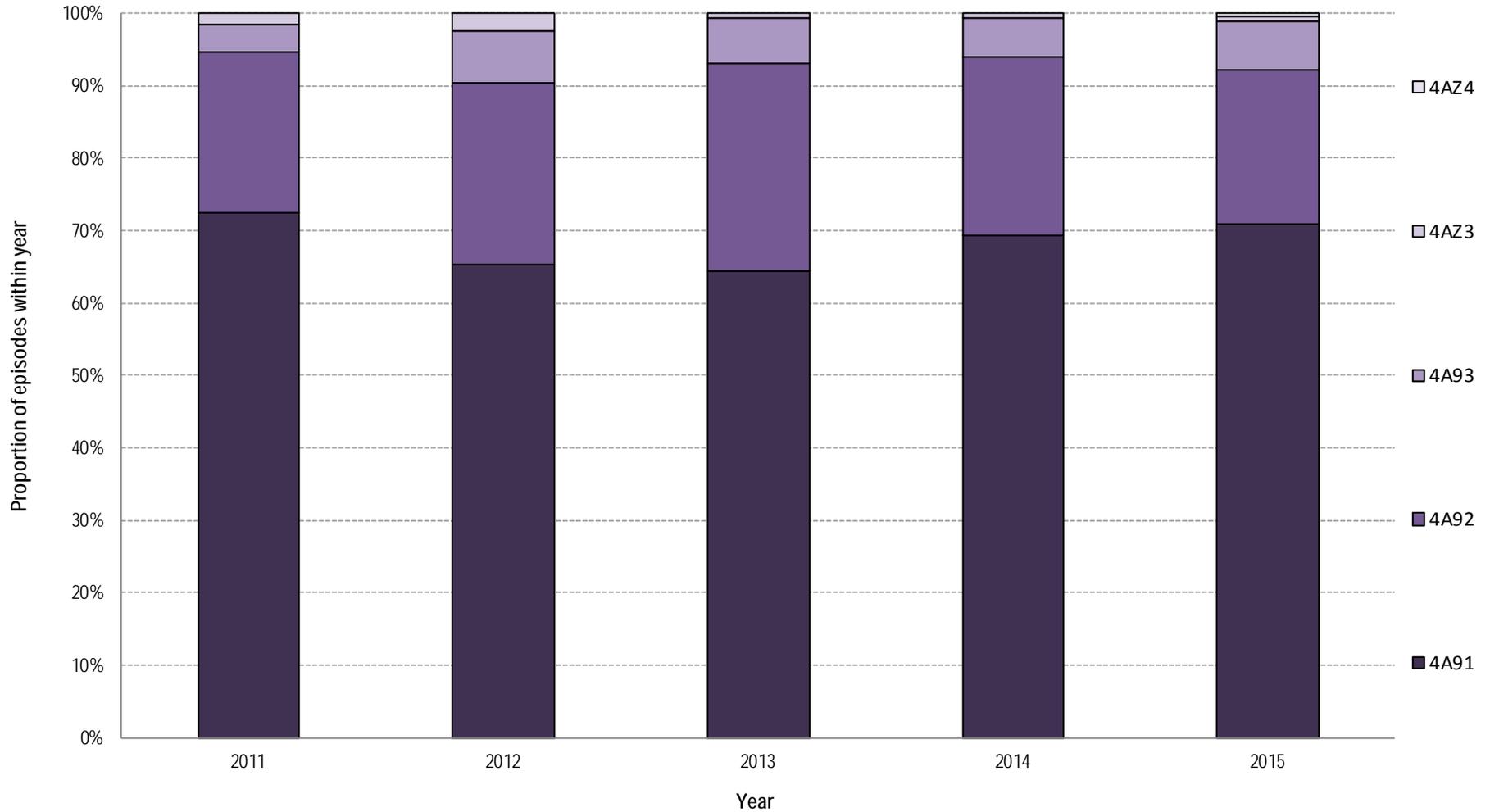


Arthritis episodes over time

Number of episodes by quarter - Arthritis



Arthritis casemix over time



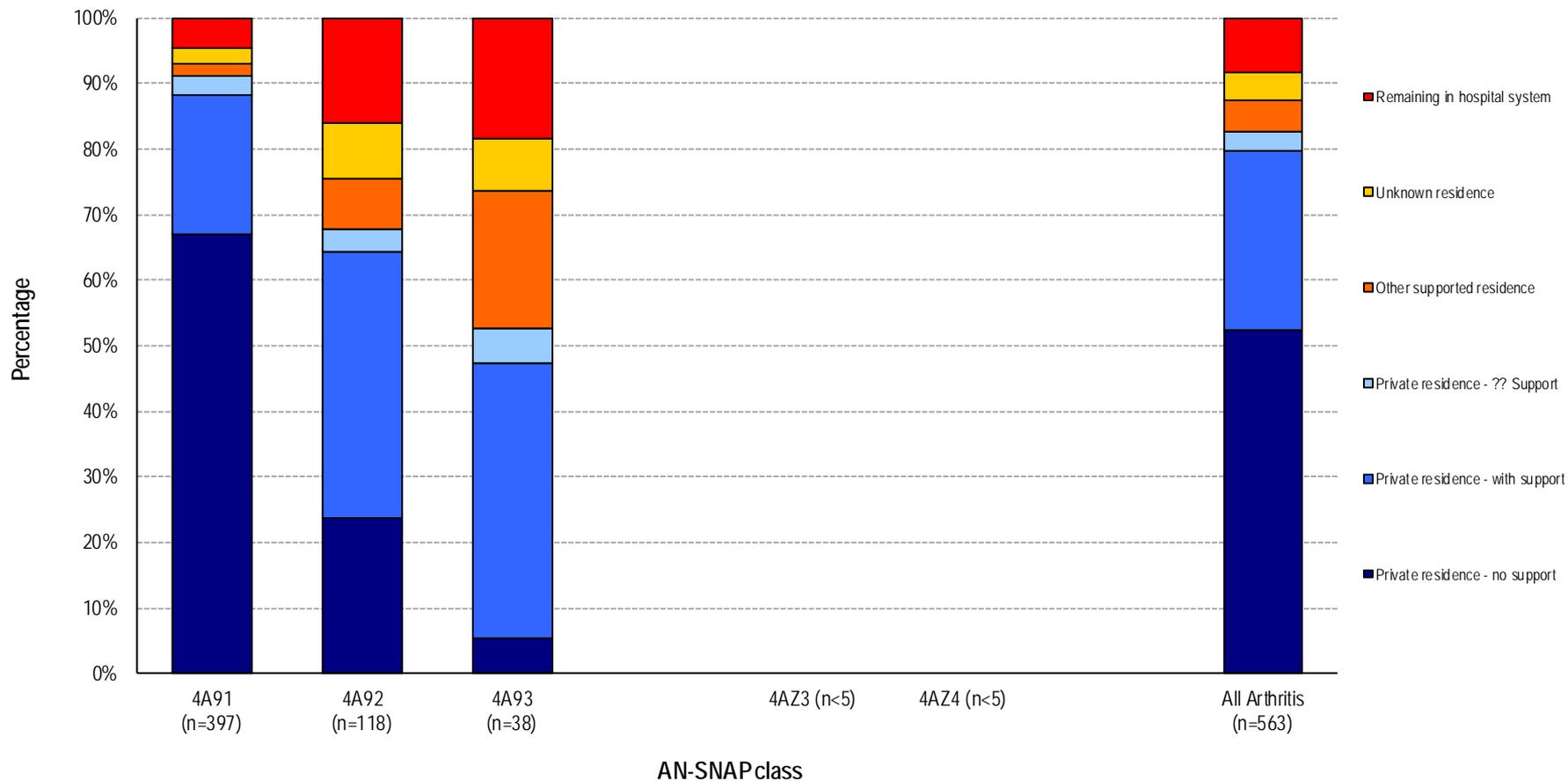
Arthritis episodes in 2015



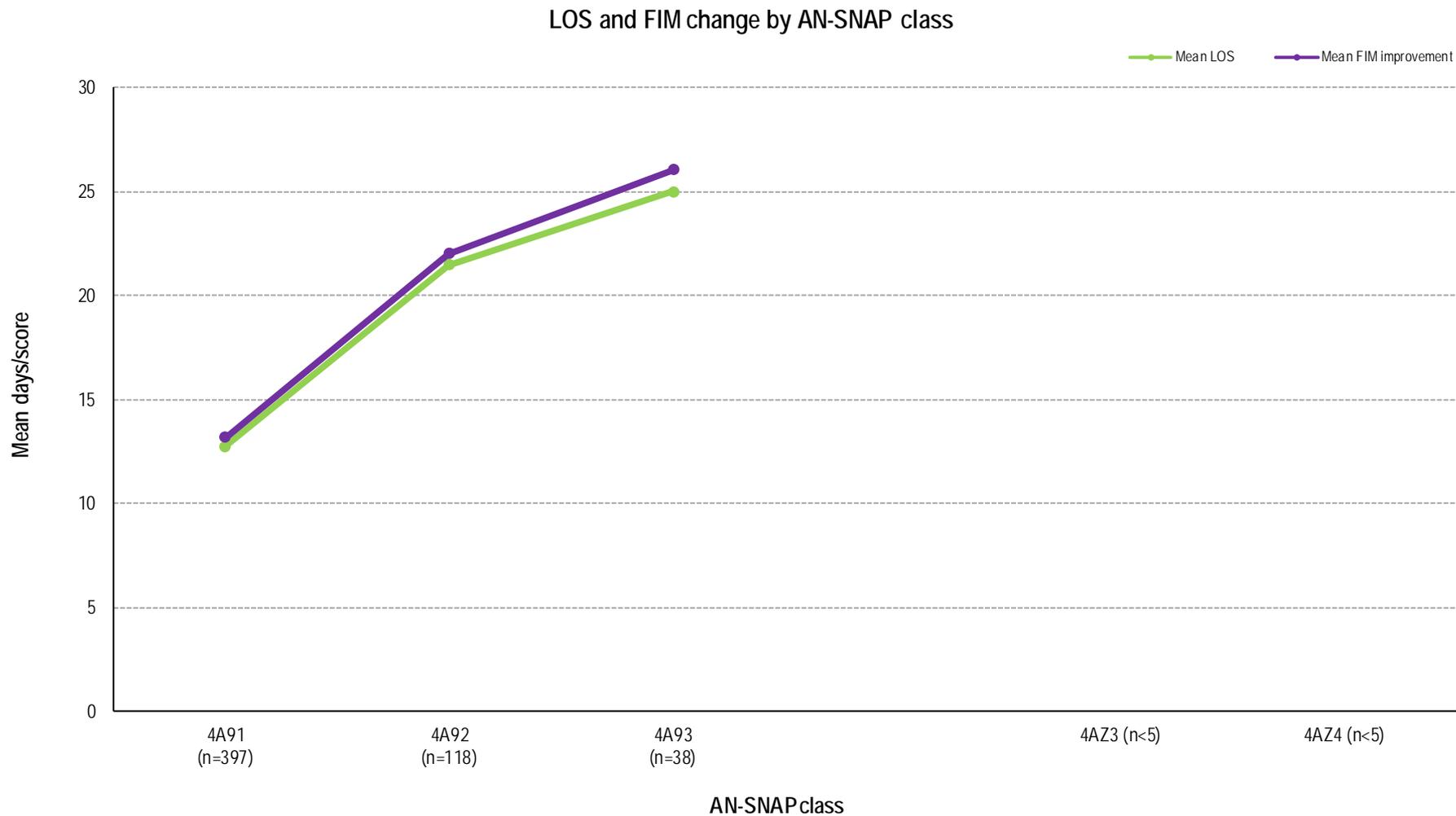
AN-SNAP class:	4A91	4A92	4A93	4AZ3	4AZ4	All Arthritis
Number of episodes	397	118	38	4	2	563
Proportion of episodes	70.5%	21.0%	6.7%	n < 5	n < 5	100.0%
Sector (%)						
<i>Private</i>	75.8%	35.6%	34.2%	n < 5	n < 5	64.1%
<i>Public</i>	24.2%	64.4%	65.8%	n < 5	n < 5	35.9%
Gender (%)						
<i>Female</i>	73.8%	68.6%	57.9%	n < 5	n < 5	71.4%
<i>Male</i>	25.9%	31.4%	42.1%	n < 5	n < 5	28.4%
Age (Mean+95%CI)	73.8 (72.5-75.1)	79.6 (77.5-81.7)	77.9 (74.1-81.7)	n < 5	n < 5	75.3 (74.2-76.3)
Admission FIM (Mean+95%CI)	99.9 (99.0-100.8)	74.2 (72.2-76.1)	53.3 (49.6-57.0)	n < 5	n < 5	91.6 (90.0-93.1)
LOS (Mean+95%CI)	12.8 (12.1-13.4)	21.5 (15.9-27.1)	25.0 (18.4-31.6)	n < 5	n < 5	15.4 (14.1-16.8)
Discharge destination (%)						
<i>Discharged to community</i>	95.5%	83.9%	81.6%	n < 5	n < 5	91.6%
<i>Remaining in hospital system</i>	4.5%	16.1%	18.4%	n < 5	n < 5	8.4%
FIM change (Mean+95%CI)	13.2 (12.4-14.0)	22.0 (19.8-24.2)	26.0 (20.0-32.1)	n < 5	n < 5	15.9 (15.0-16.9)
FIM efficiency (FIM change/LOS)	1.0	1.0	1.0	n < 5	n < 5	1.0

Arthritis discharge destination by AN-SNAP class

Discharge destination - Arthritis

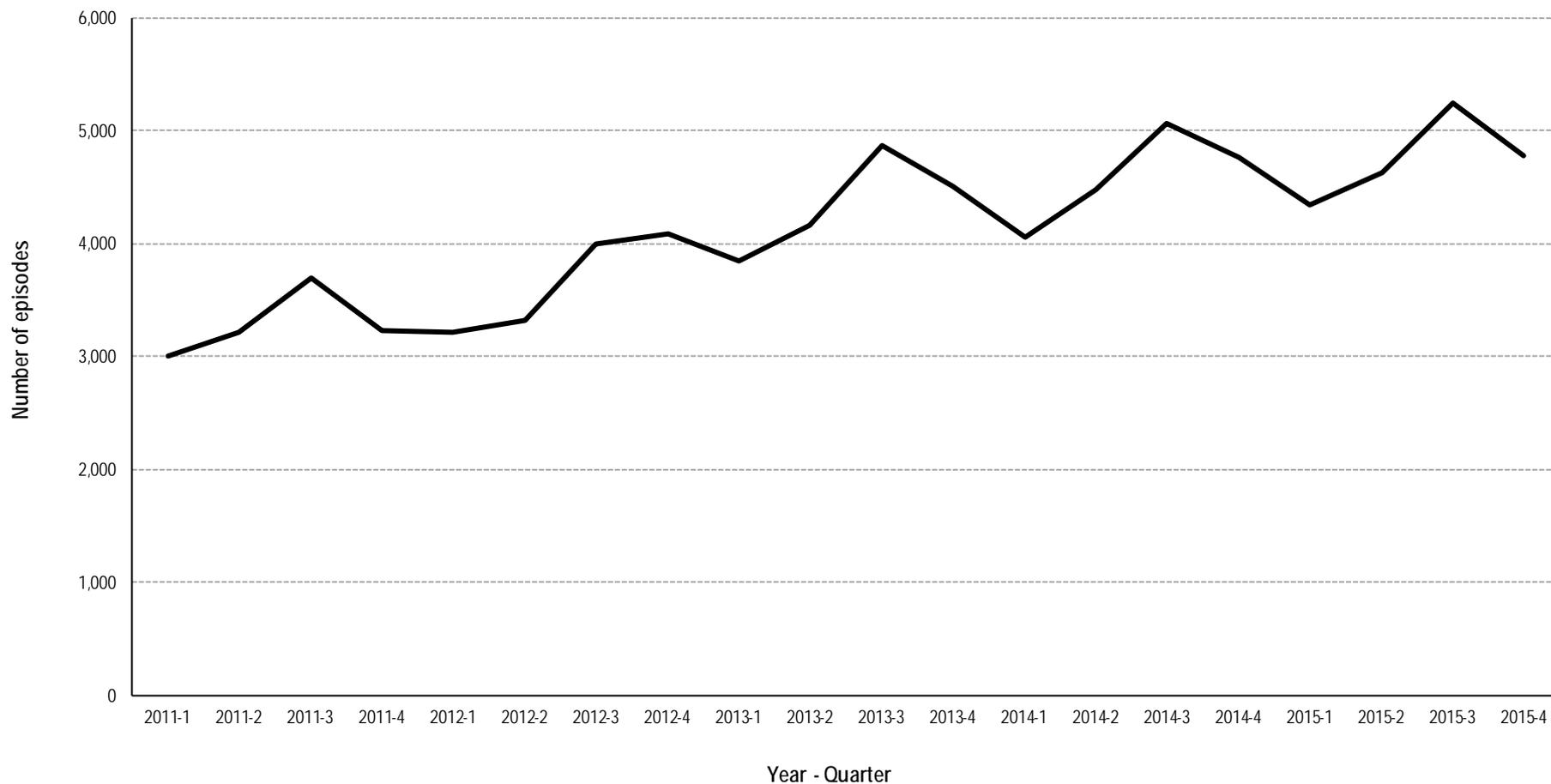


Arthritis LOS and FIM change by AN-SNAP class

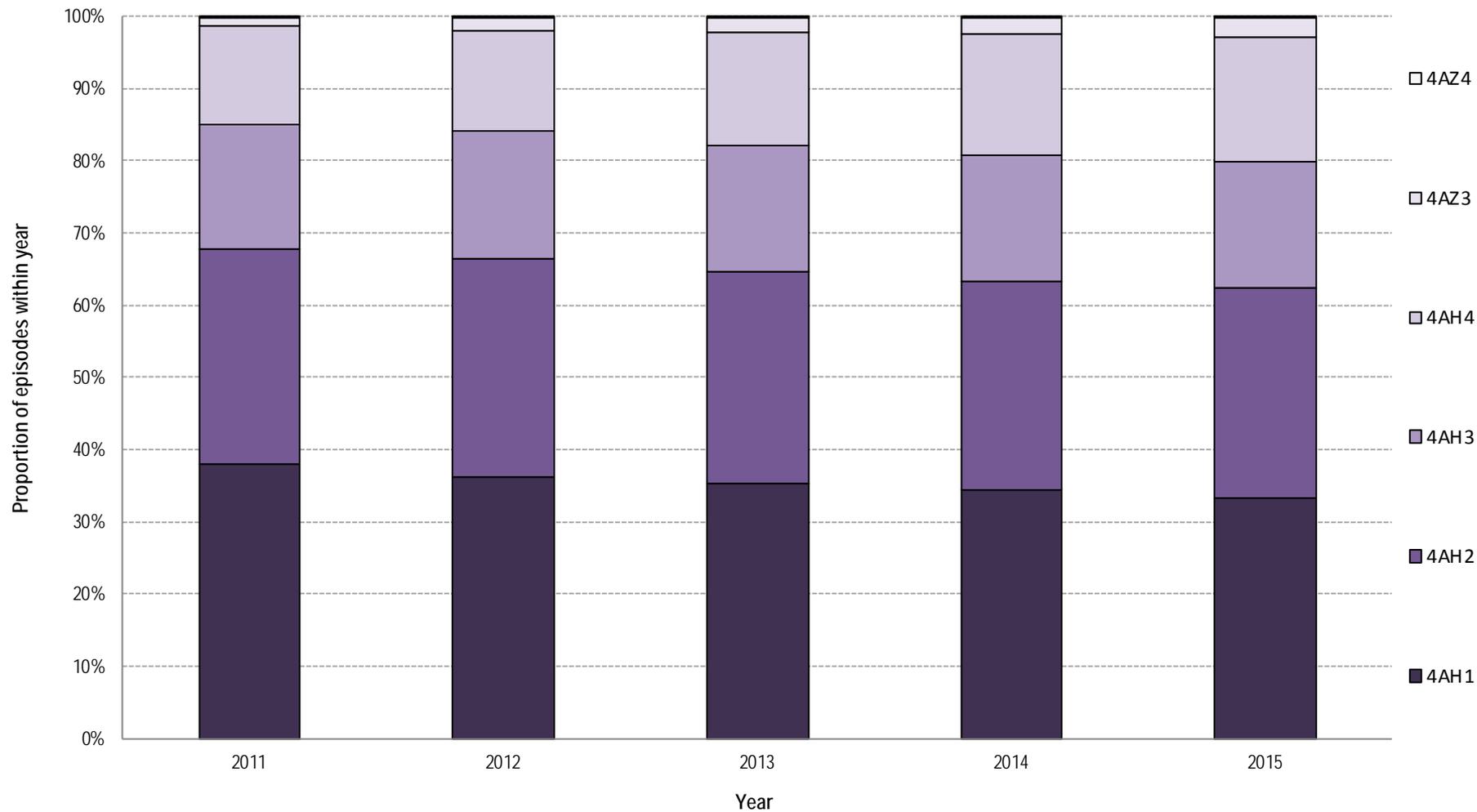


Orthopaedic fracture episodes over time

Number of episodes by quarter - Orthopaedic fractures



Orthopaedic fracture casemix over time



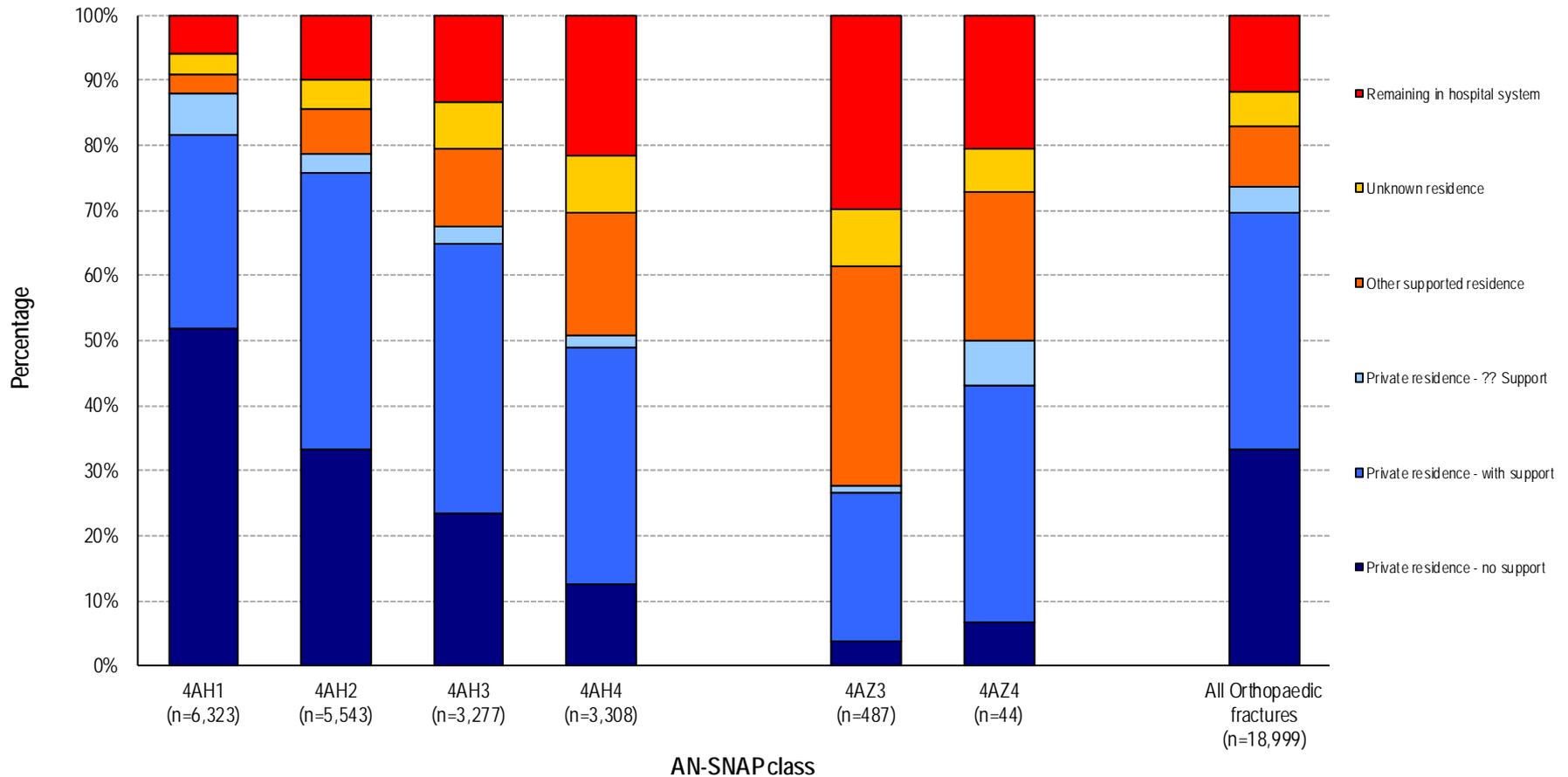
Orthopaedic fracture episodes in 2015



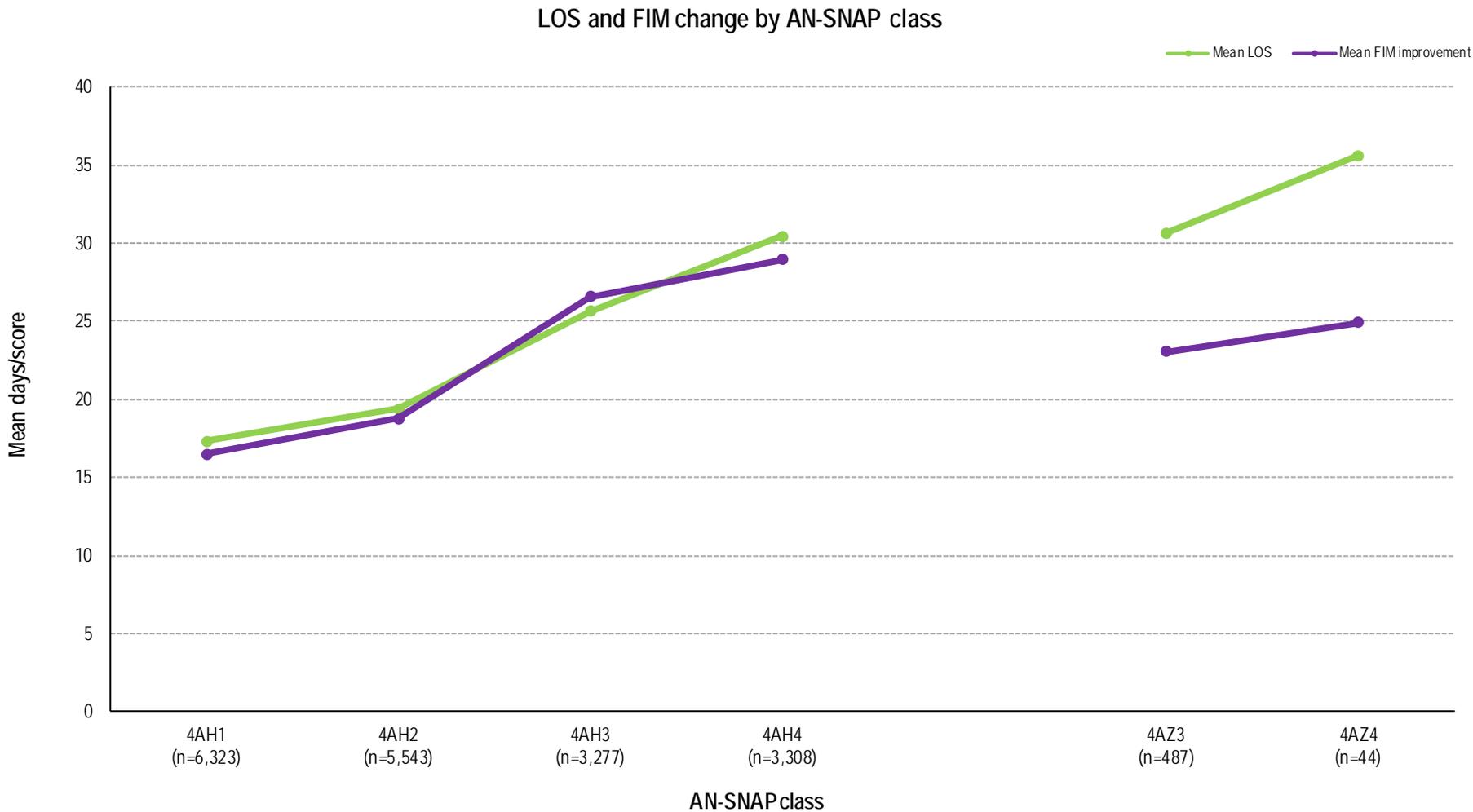
AN-SNAP class:	4AH1	4AH2	4AH3	4AH4	4AZ3	4AZ4	All Orthopaedic fractures
Number of episodes	6,323	5,543	3,277	3,308	487	44	18,999
Proportion of episodes	33.3%	29.2%	17.2%	17.4%	2.6%	0.2%	100.0%
Sector (%)							
<i>Private</i>	59.2%	50.5%	42.9%	31.8%	29.0%	18.2%	48.2%
<i>Public</i>	40.8%	49.5%	57.1%	68.2%	71.0%	81.8%	51.8%
Gender (%)							
<i>Female</i>	73.1%	71.2%	72.0%	70.2%	70.6%	45.5%	71.7%
<i>Male</i>	26.9%	28.8%	28.0%	29.7%	29.4%	54.5%	28.3%
Age (Mean+95%CI)	74.0 (73.6-74.3)	80.1 (79.8-80.4)	80.2 (79.7-80.6)	80.9 (80.5-81.4)	85.2 (84.5-85.9)	50.9 (47.3-54.5)	78.3 (78.1-78.5)
Admission FIM (Mean+95%CI)	96.8 (96.6-97.0)	85.3 (85.0-85.6)	70.9 (70.7-71.2)	54.4 (53.9-54.8)	31.4 (30.4-32.4)	35.5 (31.3-39.7)	80.9 (80.6-81.2)
LOS (Mean+95%CI)	17.3 (17.0-17.6)	19.4 (19.1-19.7)	25.6 (25.0-26.2)	30.4 (29.7-31.1)	30.6 (28.4-32.9)	35.6 (27.2-43.9)	21.7 (21.5-21.9)
Discharge destination (%)							
<i>Discharged to community</i>	94.1%	90.2%	86.5%	78.5%	70.2%	79.5%	88.3%
<i>Remaining in hospital system</i>	5.9%	9.8%	13.5%	21.5%	29.8%	20.5%	11.7%
FIM change (Mean+95%CI)	16.5 (16.3-16.7)	18.7 (18.5-19.0)	26.6 (26.1-27.0)	28.9 (28.3-29.6)	23.1 (20.7-25.5)	24.9 (17.1-32.7)	21.0 (20.8-21.2)
FIM efficiency (FIM change/LOS)	1.0	1.0	1.0	1.0	0.8	0.7	1.0

Orthopaedic fracture discharge destination by AN-SNAP class

Discharge destination - Orthopaedic fractures



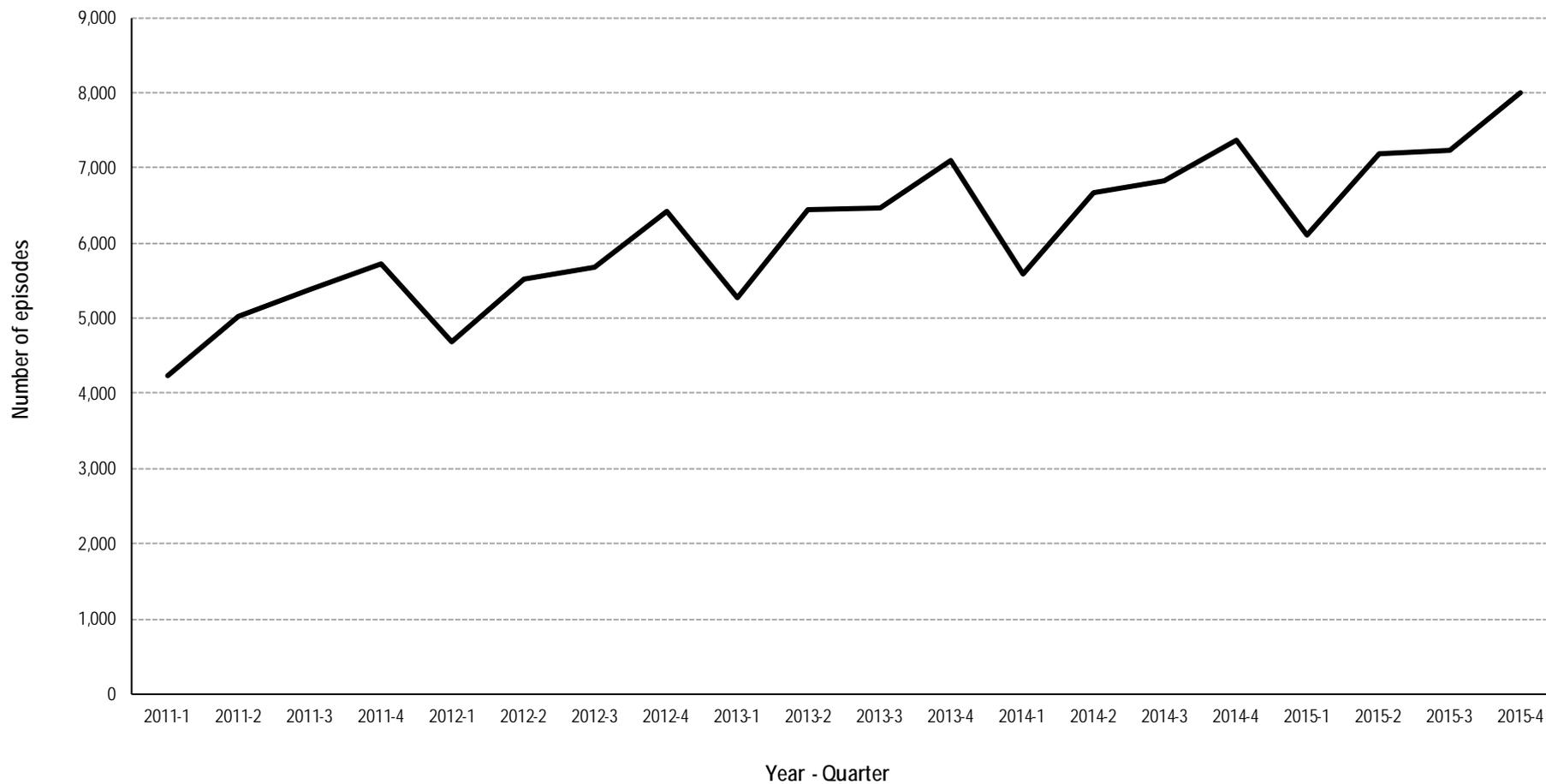
Orthopaedic fracture LOS and FIM change by AN-SNAP class



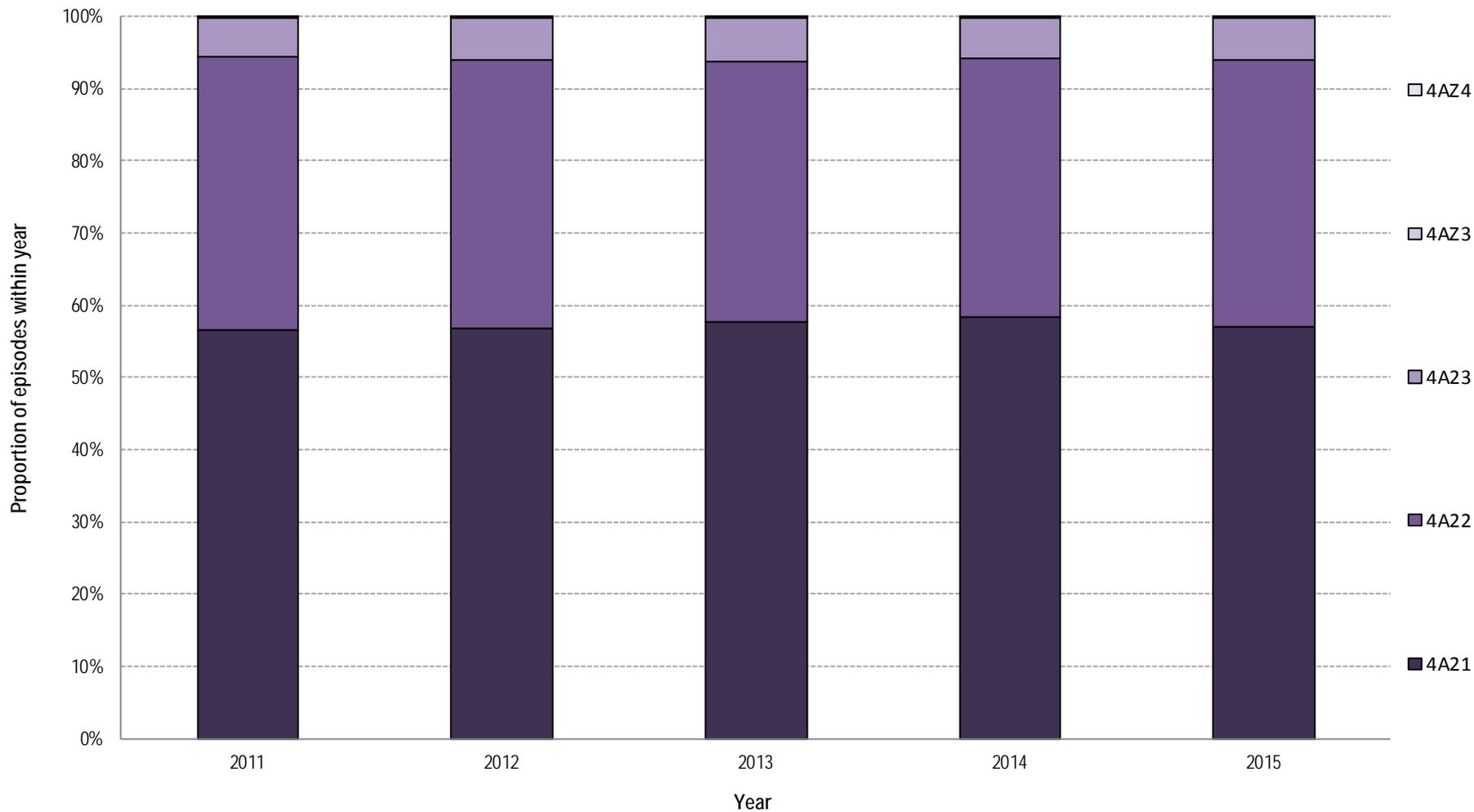
Orthopaedic replacement episodes over time



Number of episodes by quarter - Orthopaedic replacements



Orthopaedic replacement casemix over time



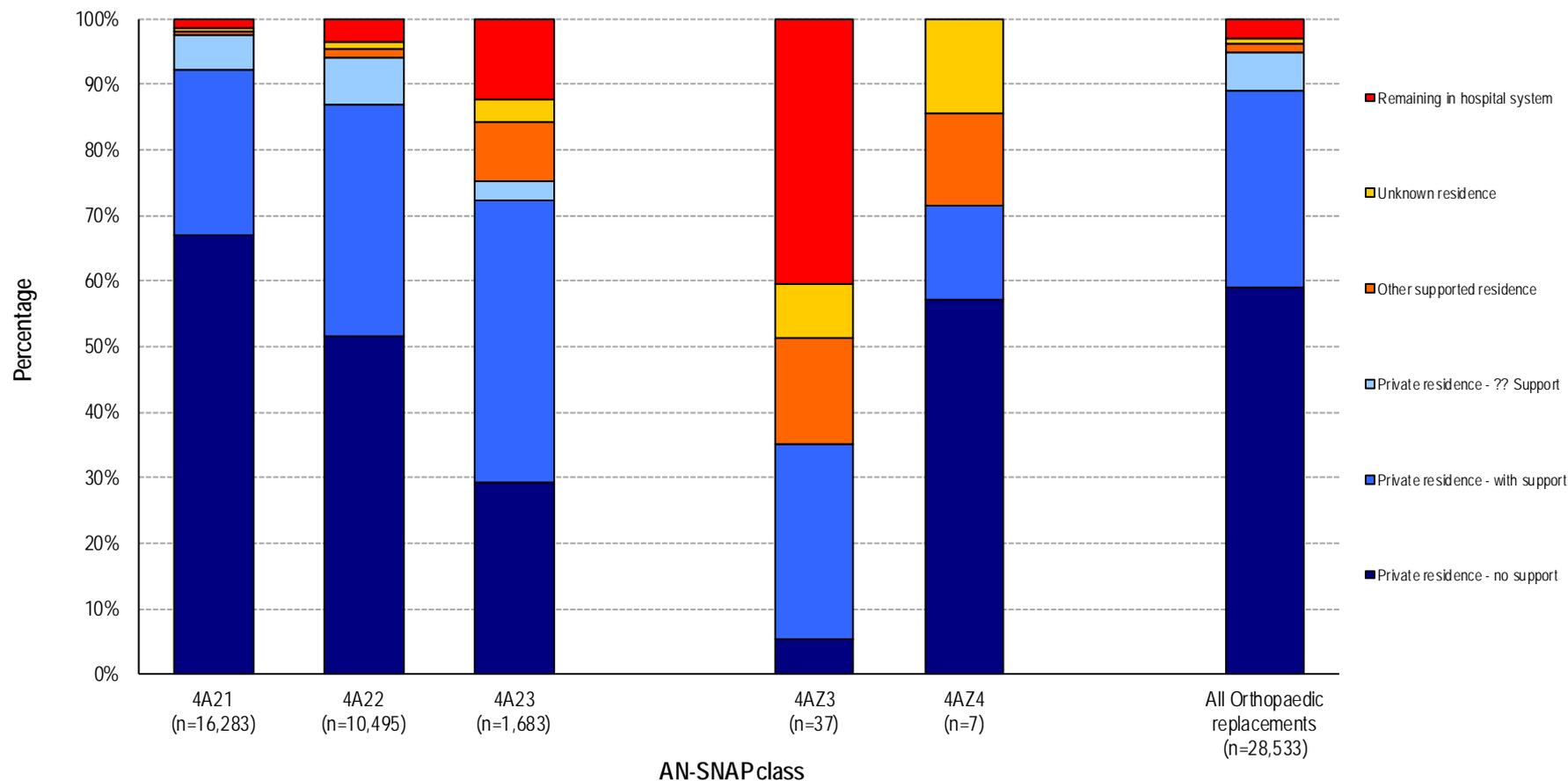
Orthopaedic replacement episodes in 2015



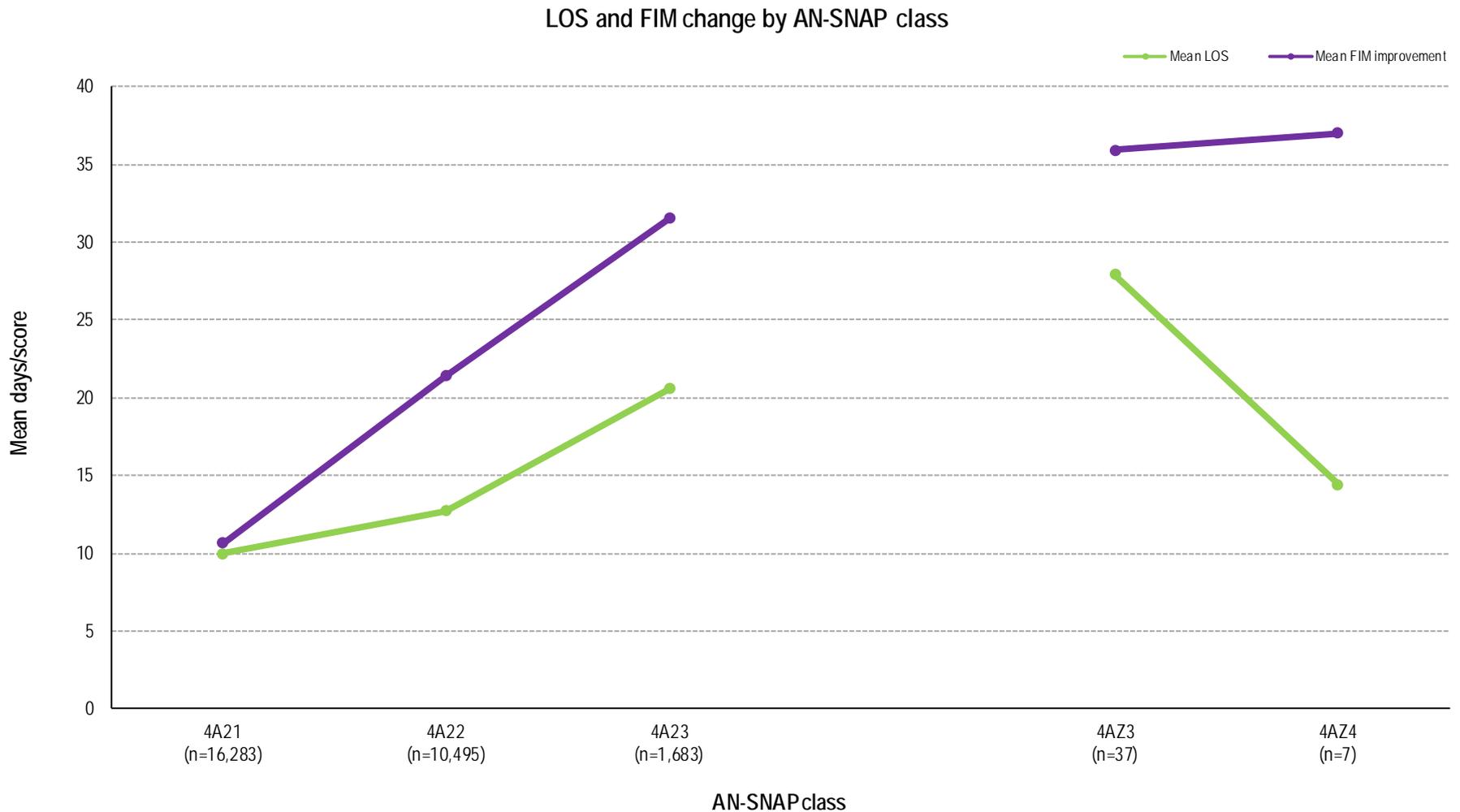
AN-SNAP class:	4A21	4A22	4A23	4AZ3	4AZ4	All Orthopaedic replacements
Number of episodes	16,283	10,495	1,683	37	7	28,533
Proportion of episodes	57.1%	36.8%	5.9%	0.1%	0.0%	100.0%
Sector (%)						
<i>Private</i>	92.6%	80.2%	53.1%	37.8%	42.9%	85.6%
<i>Public</i>	7.4%	19.8%	46.9%	62.2%	57.1%	14.4%
Gender (%)						
<i>Female</i>	59.7%	69.2%	67.6%	73.0%	14.3%	63.7%
<i>Male</i>	40.3%	30.8%	32.3%	27.0%	85.7%	36.3%
Age (Mean+95%CI)	68.9 (68.8-69.1)	74.1 (73.9-74.3)	77.4 (76.9-77.9)	81.7 (78.9-84.5)	52.7 (45.2-60.2)	71.4 (71.2-71.5)
Admission FIM (Mean+95%CI)	107.3 (107.3-107.4)	91.8 (91.6-91.9)	67.9 (67.4-68.5)	30.5 (26.2-34.7)	29.6 (18.5-40.7)	99.5 (99.3-99.6)
LOS (Mean+95%CI)	10.0 (9.9-10.1)	12.7 (12.6-12.9)	20.6 (19.9-21.2)	27.9 (22.2-33.6)	14.4 (8.2-20.6)	11.6 (11.5-11.7)
Discharge destination (%)						
<i>Discharged to community</i>	98.6%	96.4%	87.6%	59.5%	100.0%	97.1%
<i>Remaining in hospital system</i>	1.4%	3.6%	12.4%	40.5%	0.0%	2.9%
FIM change (Mean+95%CI)	10.7 (10.6-10.8)	21.4 (21.3-21.5)	31.5 (30.8-32.2)	35.9 (21.9-50.0)	37.0 (2.3-71.7)	15.7 (15.6-15.8)
FIM efficiency (FIM change/LOS)	1.1	1.7	1.5	1.3	2.6	1.4

Orthopaedic replacement discharge destination by AN-SNAP class

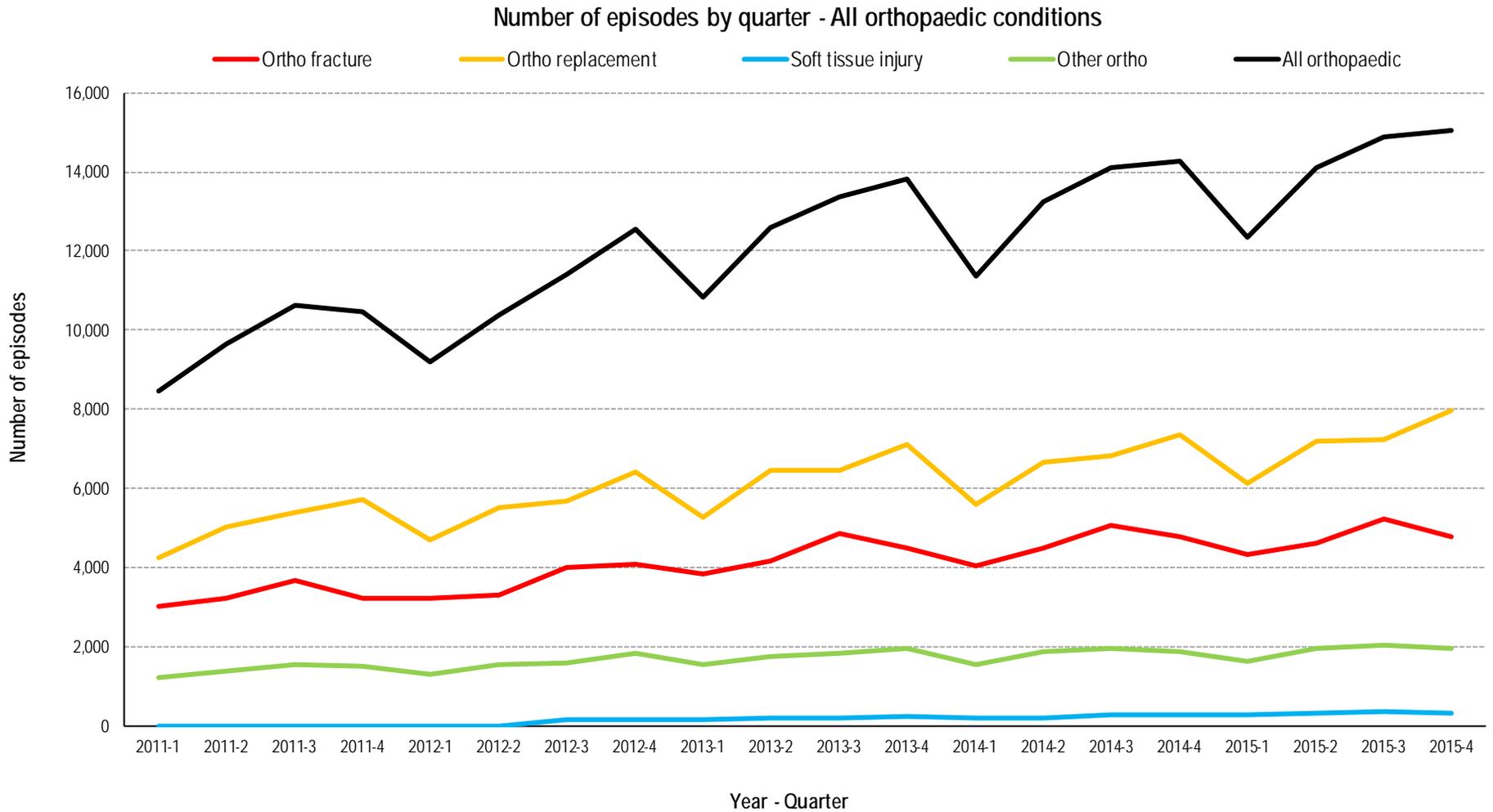
Discharge destination - Orthopaedic replacements



Orthopaedic replacement LOS and FIM change by AN-SNAP class



All orthopaedic episodes over time



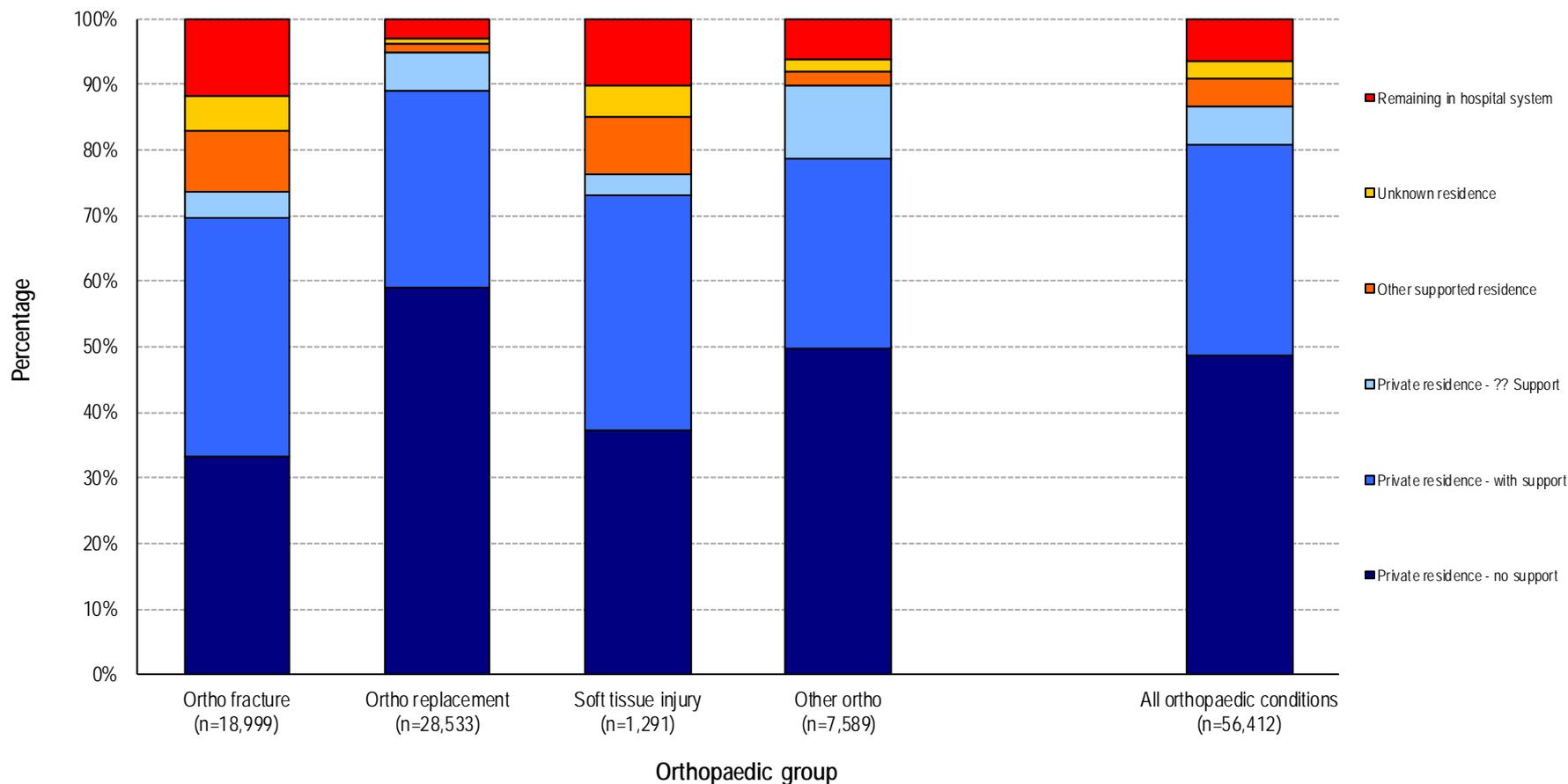
All orthopaedic episodes in 2015



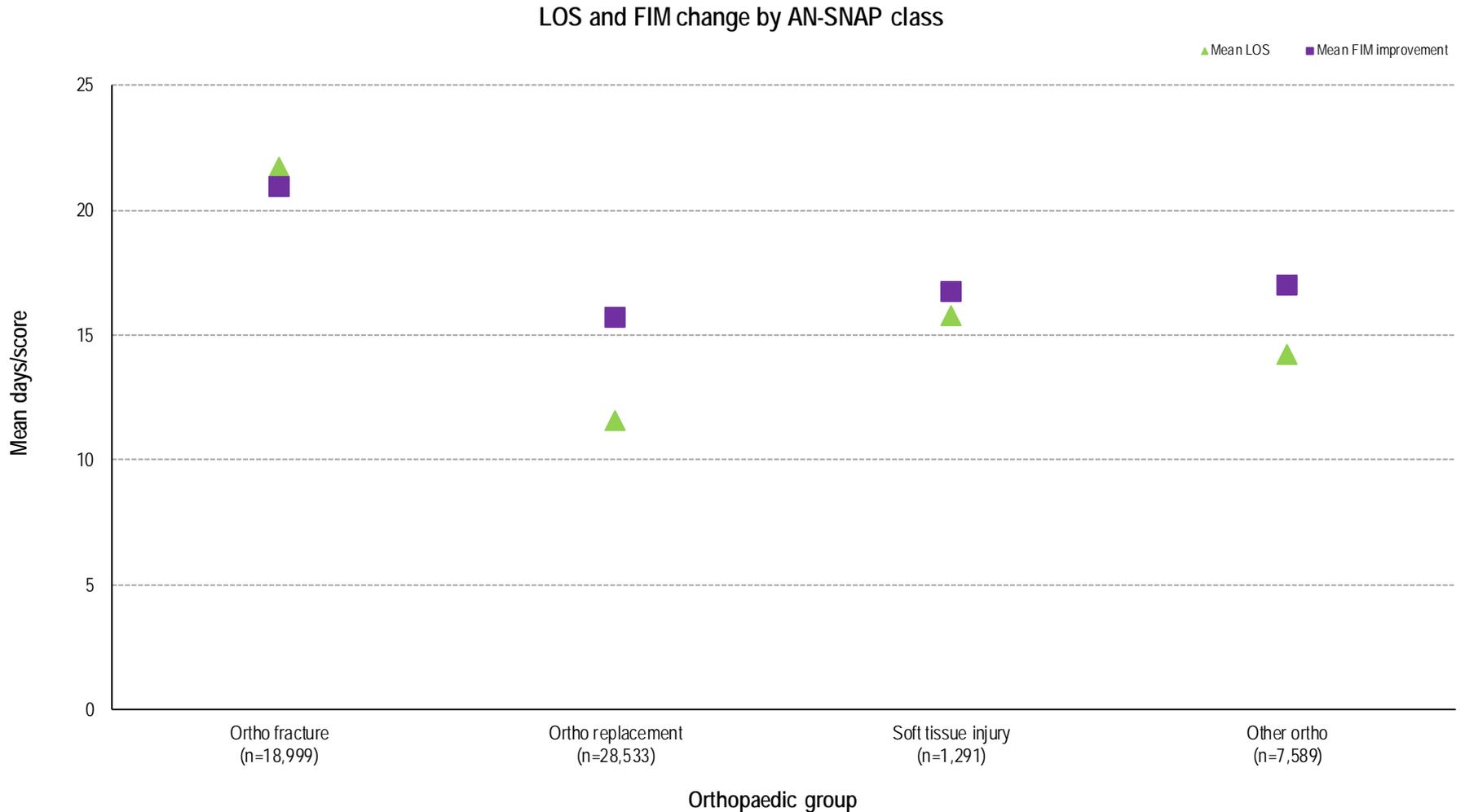
AN-SNAP class:	Ortho fracture	Ortho replacement	Soft tissue injury	Other ortho	All orthopaedic conditions
Number of episodes	18,999	28,533	1,291	7,589	56,412
Proportion of episodes	33.7%	50.6%	2.3%	13.5%	100.0%
Sector (%)					
<i>Private</i>	48.2%	85.6%	55.0%	84.4%	72.1%
<i>Public</i>	51.8%	14.4%	45.0%	15.6%	27.9%
Gender (%)					
<i>Female</i>	71.7%	63.7%	63.2%	63.1%	66.3%
<i>Male</i>	28.3%	36.3%	36.8%	36.9%	33.7%
Age (Mean+95%CI)	78.3 (78.1-78.5)	71.4 (71.2-71.5)	80.7 (80.0-81.4)	69.3 (69.0-69.6)	73.6 (73.5-73.7)
Admission FIM (Mean+95%CI)	80.9 (80.6-81.2)	99.5 (99.3-99.6)	85.6 (84.6-86.6)	97.2 (96.9-97.5)	92.9 (92.8-93.1)
LOS (Mean+95%CI)	21.7 (21.5-21.9)	11.6 (11.5-11.7)	15.8 (15.1-16.5)	14.2 (13.9-14.5)	15.3 (15.2-15.4)
Discharge destination (%)					
<i>Discharged to community</i>	88.3%	97.1%	89.8%	93.9%	93.6%
<i>Remaining in hospital system</i>	11.7%	2.9%	10.2%	6.1%	6.4%
FIM change (Mean+95%CI)	21.0 (20.8-21.2)	15.7 (15.6-15.8)	16.8 (16.1-17.4)	17.0 (16.8-17.3)	17.6 (17.5-17.7)
FIM efficiency (FIM change/LOS)	1.0	1.4	1.1	1.2	1.2

All Orthopaedic episodes discharge destination by orthopaedic group

Discharge destination - All orthopaedic conditions

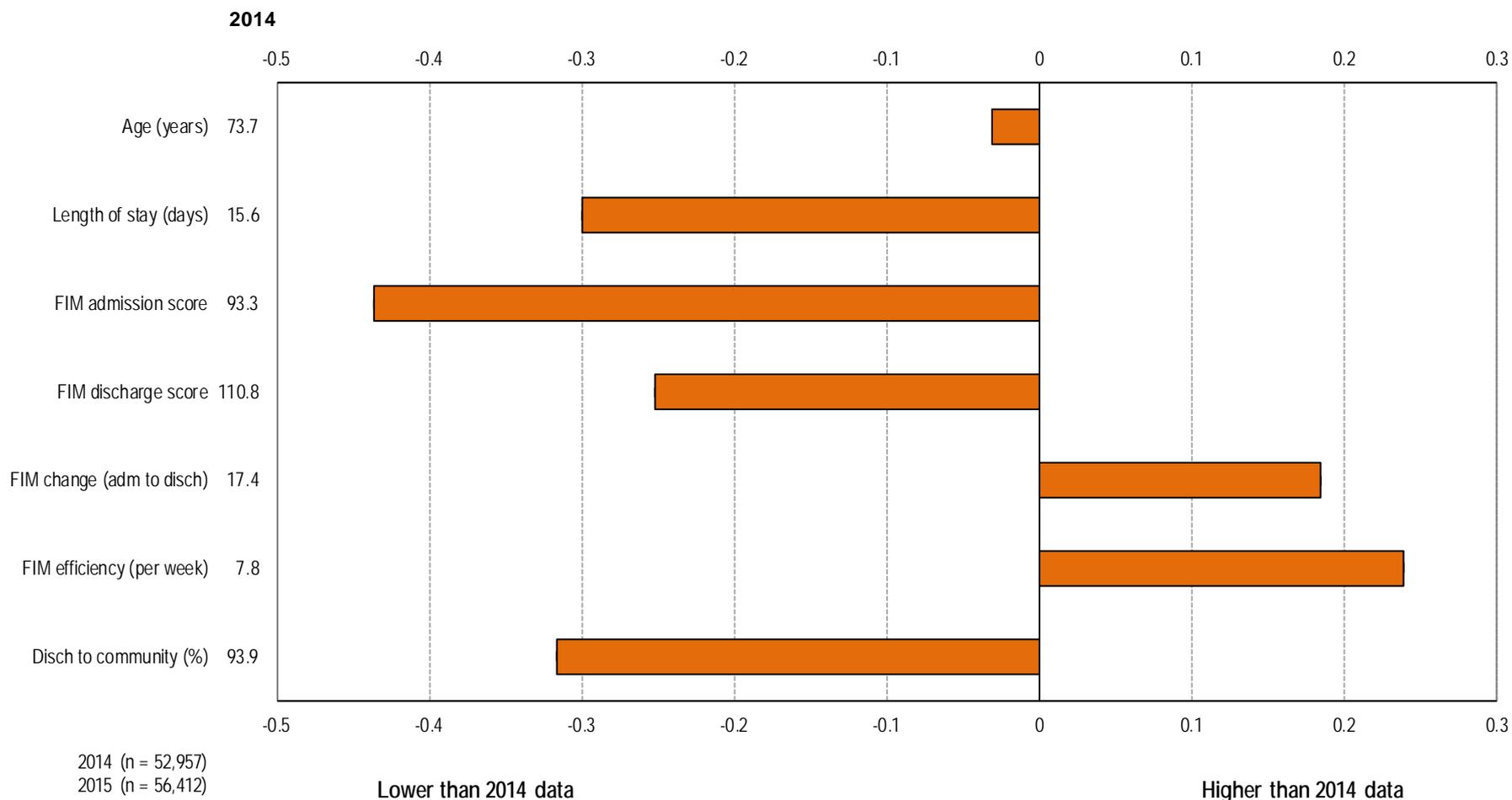


All orthopaedic conditions LOS and FIM change by orthopaedic group



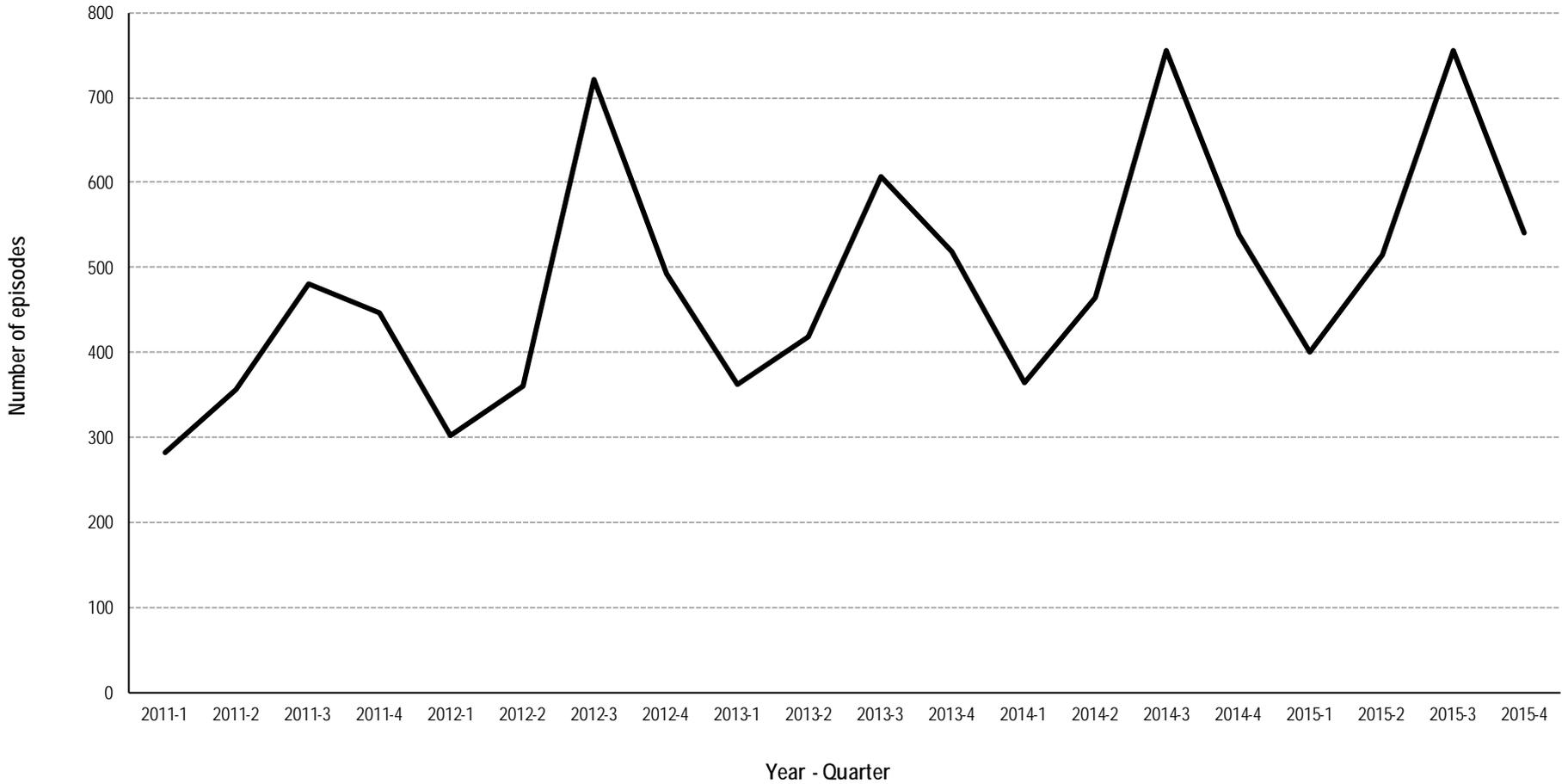
Change in outcome measures in orthopaedic conditions, 2014 to 2015

Difference from 2014 data - All orthopaedic conditions

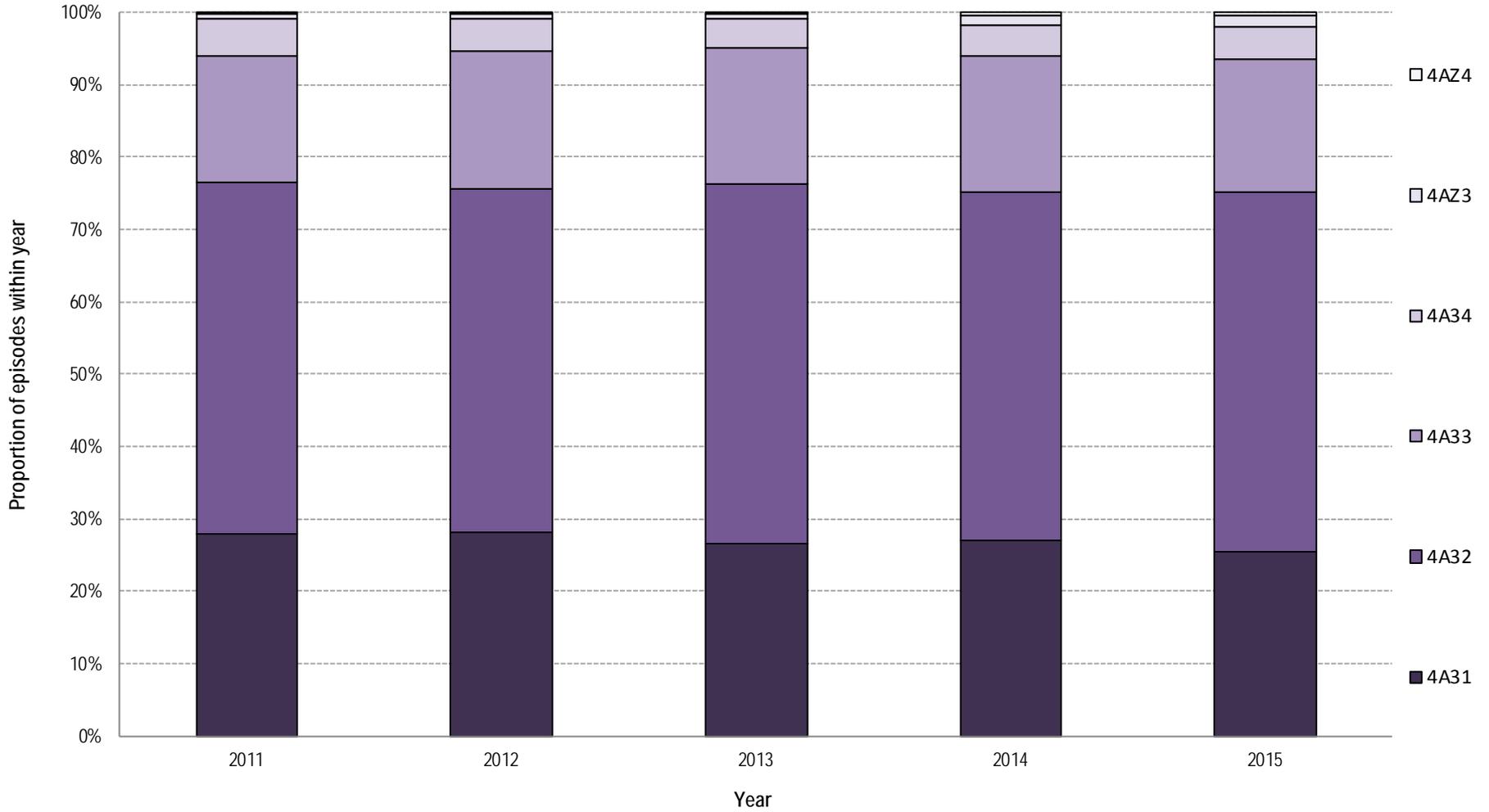


Pulmonary episodes over time

Number of episodes by quarter - Pulmonary



Pulmonary casemix over time



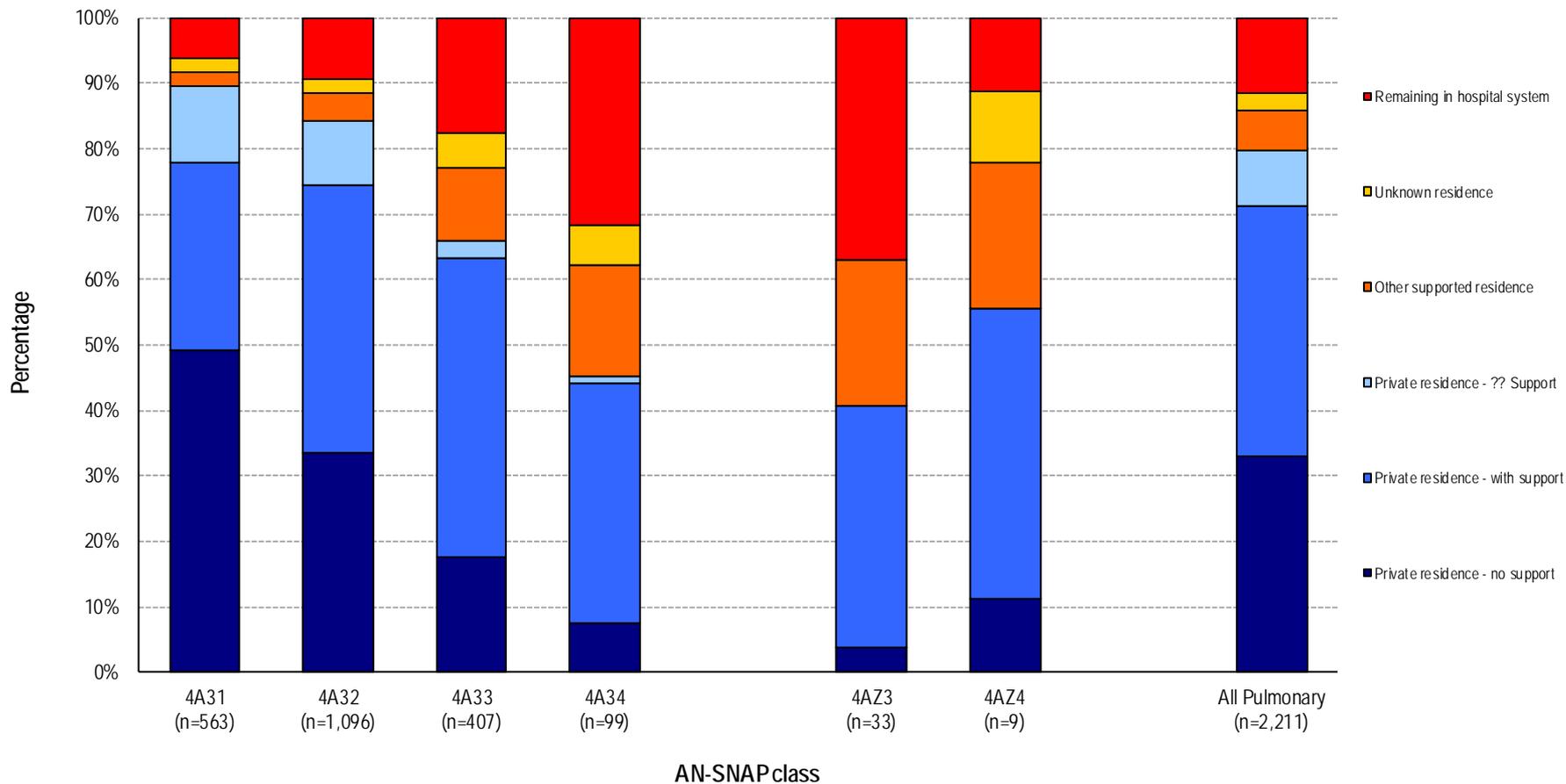
Pulmonary episodes in 2015



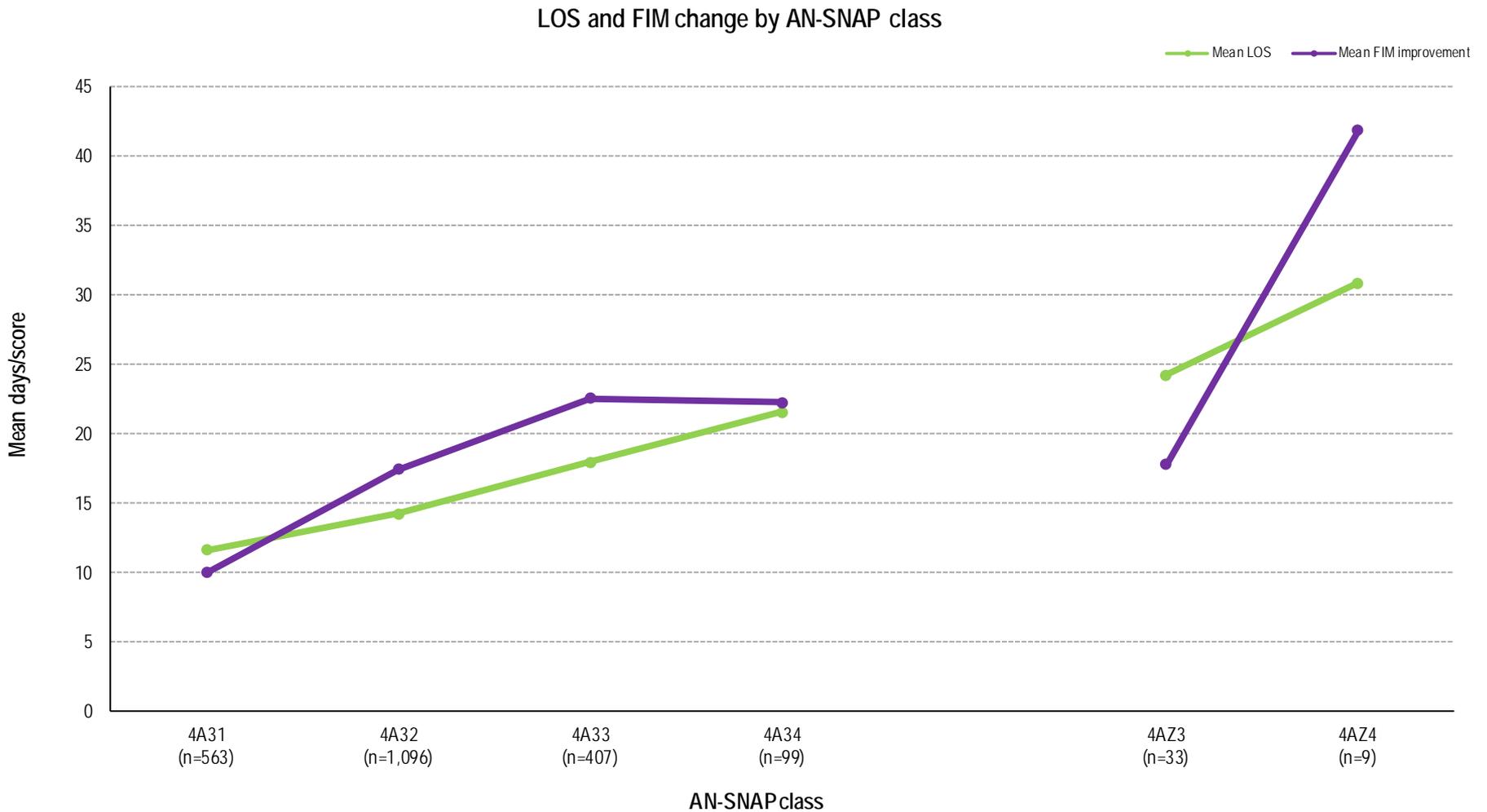
AN-SNAP class:	4A31	4A32	4A33	4A34	4AZ3	4AZ4	All Pulmonary
Number of episodes	563	1,096	407	99	33	9	2,211
Proportion of episodes	25.5%	49.6%	18.4%	4.5%	1.5%	0.4%	100.0%
Sector (%)							
<i>Private</i>	69.3%	64.1%	46.2%	27.3%	21.2%	11.1%	59.6%
<i>Public</i>	30.7%	35.9%	53.8%	72.7%	78.8%	88.9%	40.4%
Gender (%)							
<i>Female</i>	58.3%	58.9%	54.1%	44.4%	48.5%	44.4%	56.9%
<i>Male</i>	41.7%	41.1%	45.9%	55.6%	51.5%	55.6%	43.1%
Age (Mean+95%CI)	76.8 (75.9-77.7)	80.5 (79.9-81.1)	81.1 (80.0-82.3)	79.2 (77.2-81.3)	82.6 (79.6-85.7)	52.4 (41.6-63.1)	79.6 (79.1-80.0)
Admission FIM (Mean+95%CI)	108.3 (107.7-108.8)	91.8 (91.3-92.2)	71.6 (70.5-72.6)	49.4 (47.1-51.6)	30.5 (26.3-34.7)	35.4 (29.3-41.5)	90.5 (89.7-91.3)
LOS (Mean+95%CI)	11.6 (11.1-12.1)	14.2 (13.8-14.7)	18.0 (16.8-19.1)	21.6 (18.6-24.6)	24.3 (19.1-29.4)	30.9 (8.4-53.4)	14.6 (14.2-15.0)
Discharge destination (%)							
<i>Discharged to community</i>	93.8%	90.6%	82.5%	68.4%	63.0%	88.9%	88.6%
<i>Remaining in hospital system</i>	6.2%	9.4%	17.5%	31.6%	37.0%	11.1%	11.4%
FIM change (Mean+95%CI)	10.0 (9.4-10.6)	17.4 (16.9-17.9)	22.5 (21.0-24.0)	22.3 (17.8-26.7)	17.8 (7.0-28.6)	41.9 (23.0-60.8)	16.6 (16.1-17.1)
FIM efficiency (FIM change/LOS)	0.9	1.2	1.3	1.0	0.7	1.4	1.1

Pulmonary discharge destination by AN-SNAP class

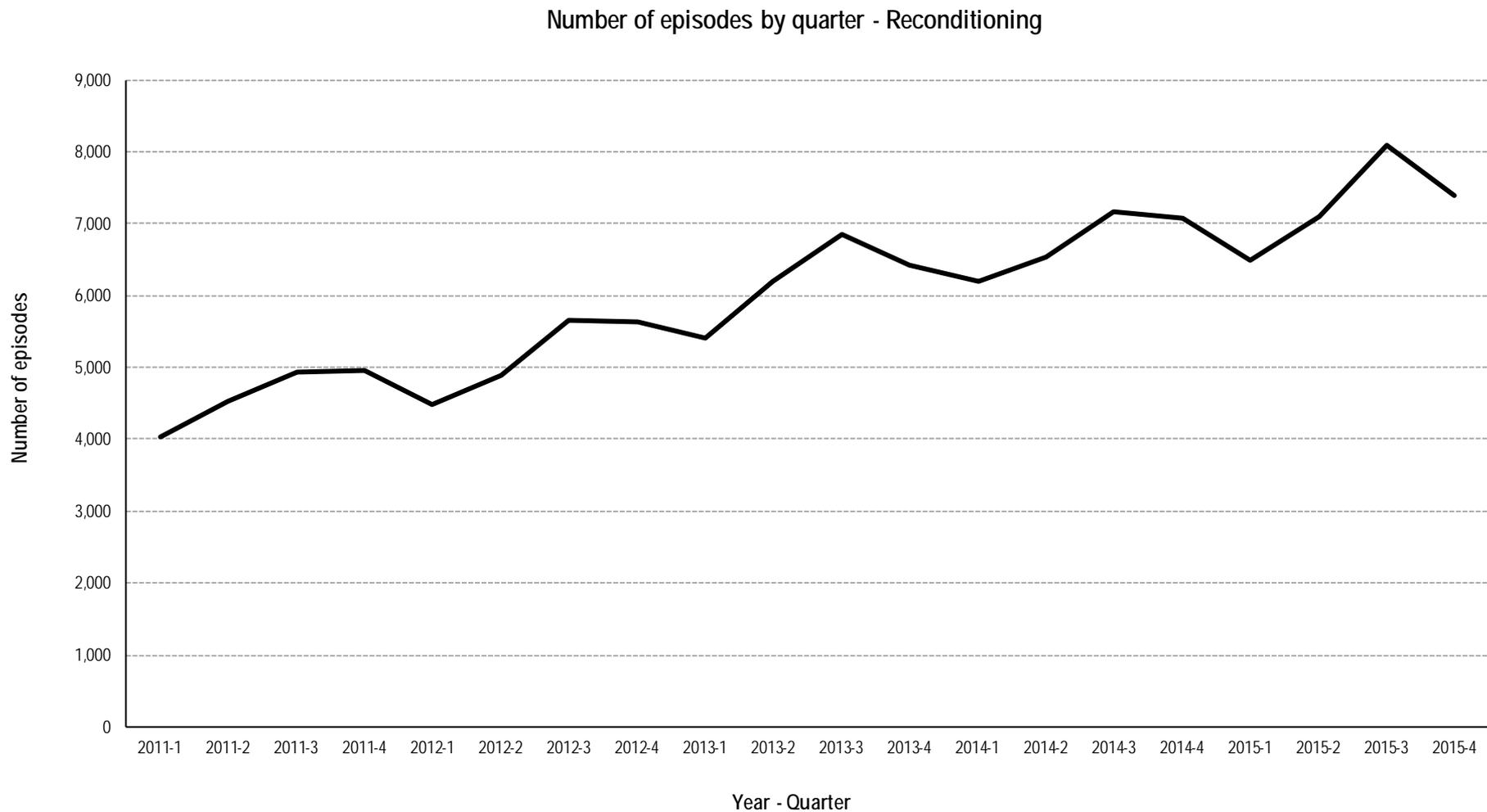
Discharge destination - Pulmonary



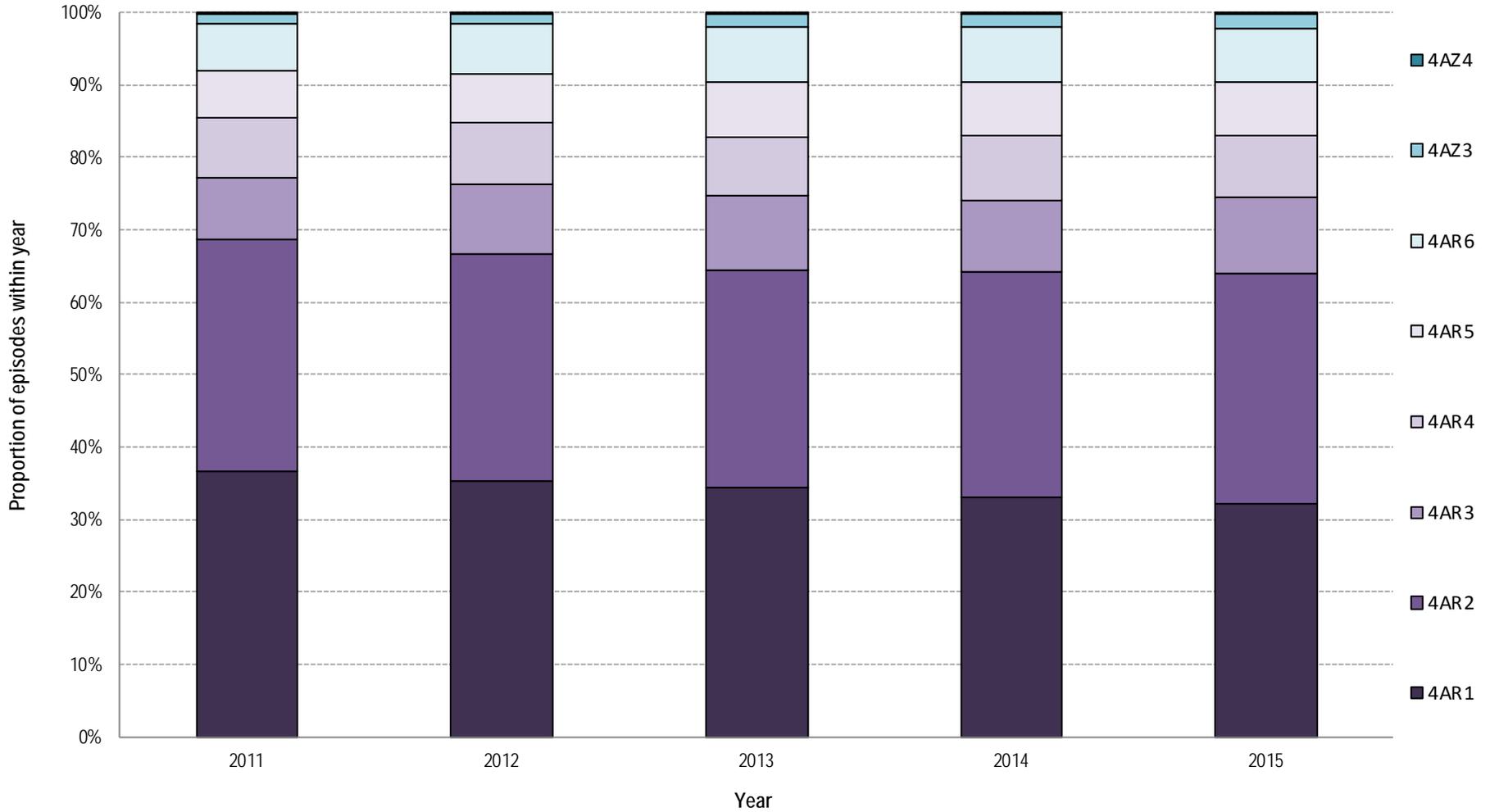
Pulmonary LOS and FIM change by AN-SNAP class



Reconditioning episodes over time



Reconditioning casemix over time



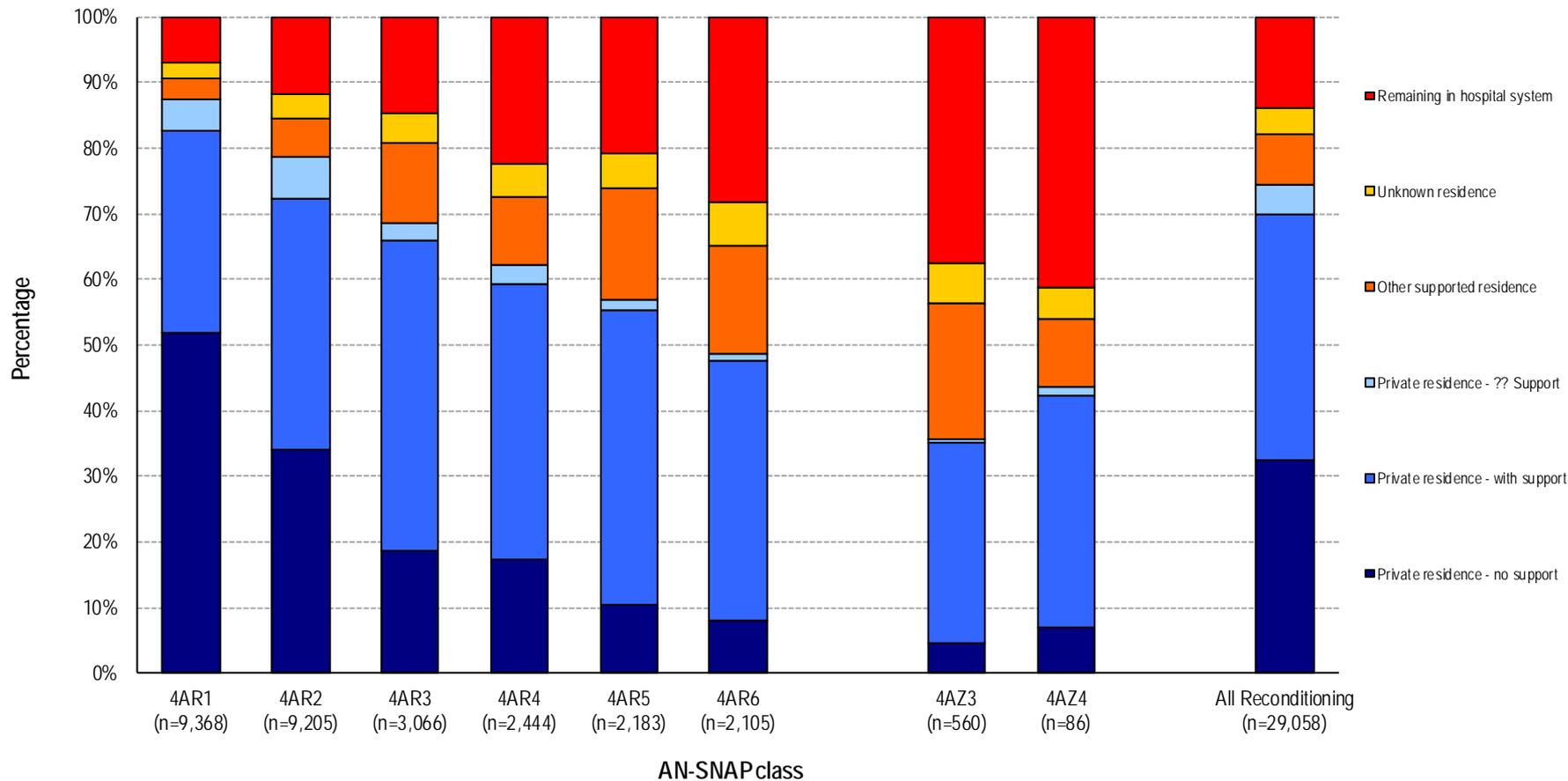
Reconditioning episodes in 2015



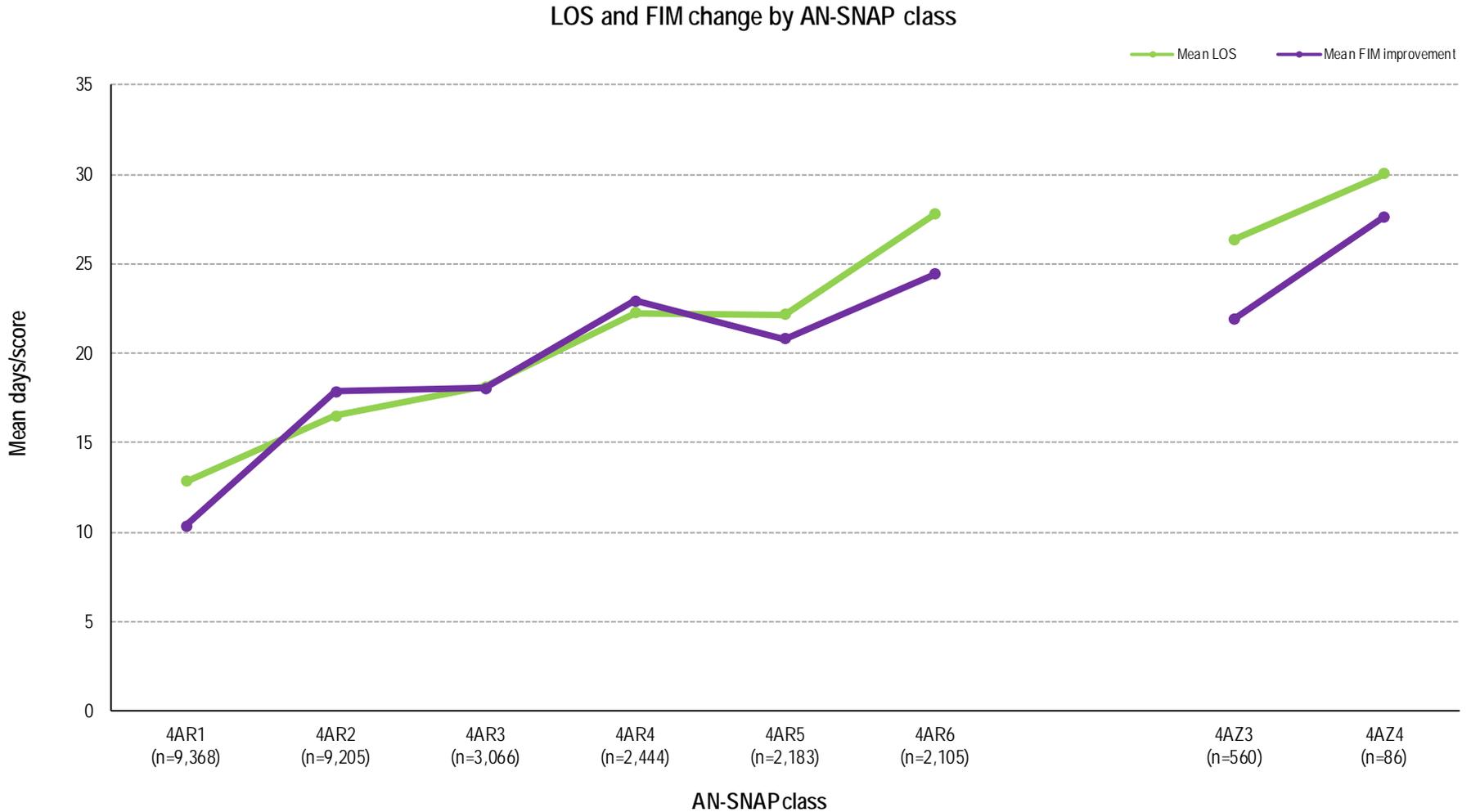
AN-SNAP class:	4AR1	4AR2	4AR3	4AR4	4AR5	4AR6	4AZ3	4AZ4	All Reconditioning
Number of episodes	9,368	9,205	3,066	2,444	2,183	2,105	560	86	29,058
Proportion of episodes	32.2%	31.7%	10.6%	8.4%	7.5%	7.2%	1.9%	0.3%	100.0%
Sector (%)									
<i>Private</i>	70.6%	65.2%	49.0%	46.7%	39.7%	30.8%	28.8%	15.1%	58.4%
<i>Public</i>	29.4%	34.8%	51.0%	53.3%	60.3%	69.2%	71.3%	84.9%	41.6%
Gender (%)									
<i>Female</i>	56.3%	60.3%	52.8%	55.0%	52.3%	51.4%	48.8%	51.2%	56.3%
<i>Male</i>	43.7%	39.7%	47.2%	45.0%	47.7%	48.6%	51.3%	48.8%	43.7%
Age (Mean+95%CI)	77.1 (76.9-77.4)	81.1 (80.8-81.3)	82.4 (82.1-82.8)	79.5 (79.0-80.0)	82.5 (82.1-83.0)	78.9 (78.3-79.4)	81.4 (80.7-82.1)	53.0 (50.7-55.3)	79.7 (79.5-79.8)
Admission FIM (Mean+95%CI)	104.5 (104.3-104.7)	89.4 (89.3-89.5)	77.3 (77.0-77.5)	72.7 (72.5-73.0)	61.0 (60.6-61.3)	49.9 (49.4-50.4)	31.4 (30.3-32.4)	36.1 (33.0-39.2)	86.8 (86.6-87.0)
LOS (Mean+95%CI)	12.9 (12.7-13.1)	16.5 (16.3-16.7)	18.1 (17.7-18.6)	22.3 (21.6-22.9)	22.1 (21.3-23.0)	27.8 (26.6-28.9)	26.4 (24.1-28.7)	30.0 (24.1-36.0)	17.1 (16.9-17.3)
Discharge destination (%)									
<i>Discharged to community</i>	93.0%	88.3%	85.5%	77.7%	79.3%	71.7%	62.5%	58.8%	86.2%
<i>Remaining in hospital system</i>	7.0%	11.7%	14.5%	22.3%	20.7%	28.3%	37.5%	41.2%	13.8%
FIM change (Mean+95%CI)	10.4 (10.2-10.5)	17.9 (17.7-18.1)	18.1 (17.6-18.5)	22.9 (22.3-23.5)	20.8 (20.1-21.5)	24.4 (23.5-25.4)	21.9 (19.3-24.6)	27.6 (20.8-34.5)	16.4 (16.2-16.5)
FIM efficiency (FIM change/LOS)	0.8	1.1	1.0	1.0	0.9	0.9	0.8	0.9	1.0

Reconditioning discharge destination by AN-SNAP class

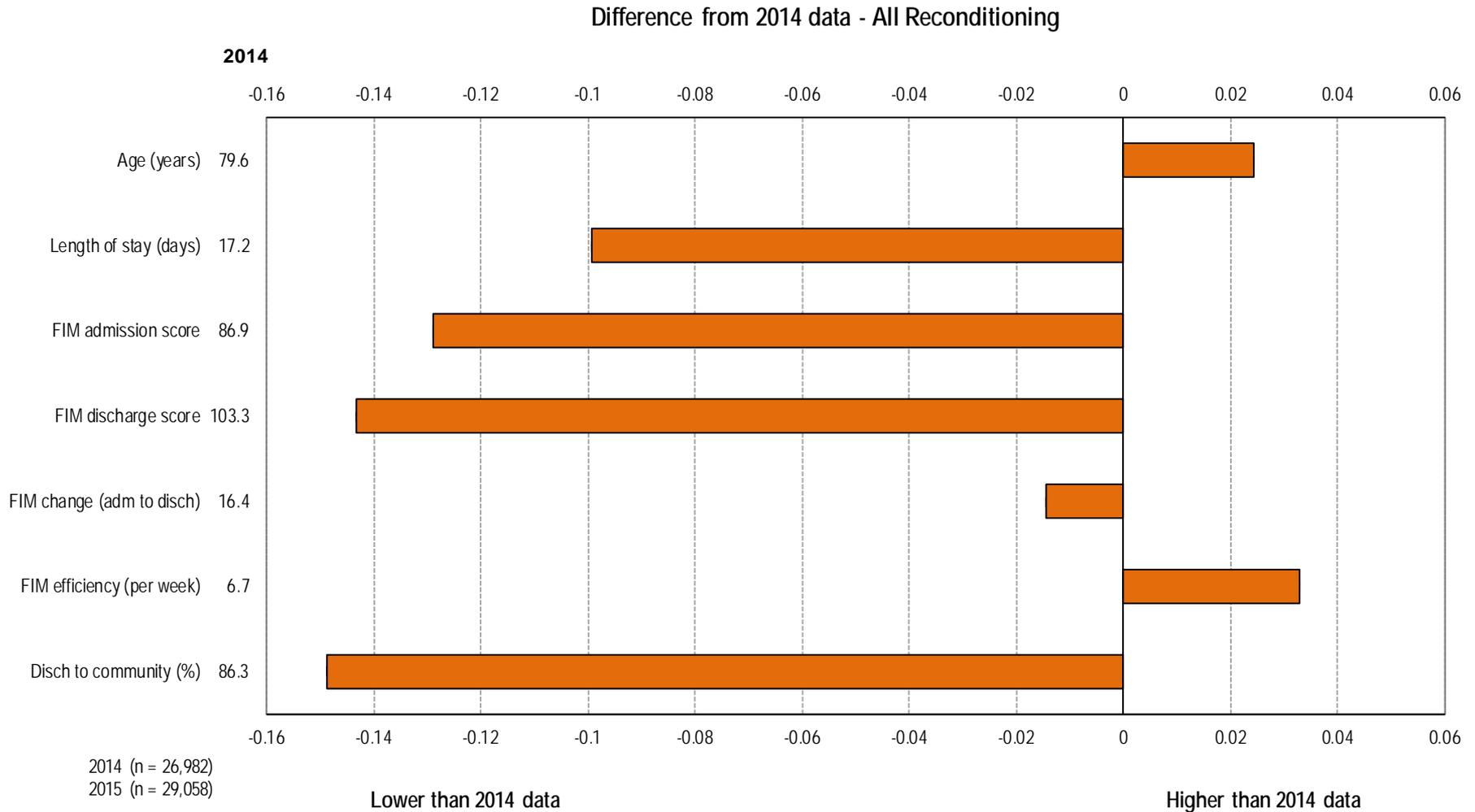
Discharge destination - Reconditioning



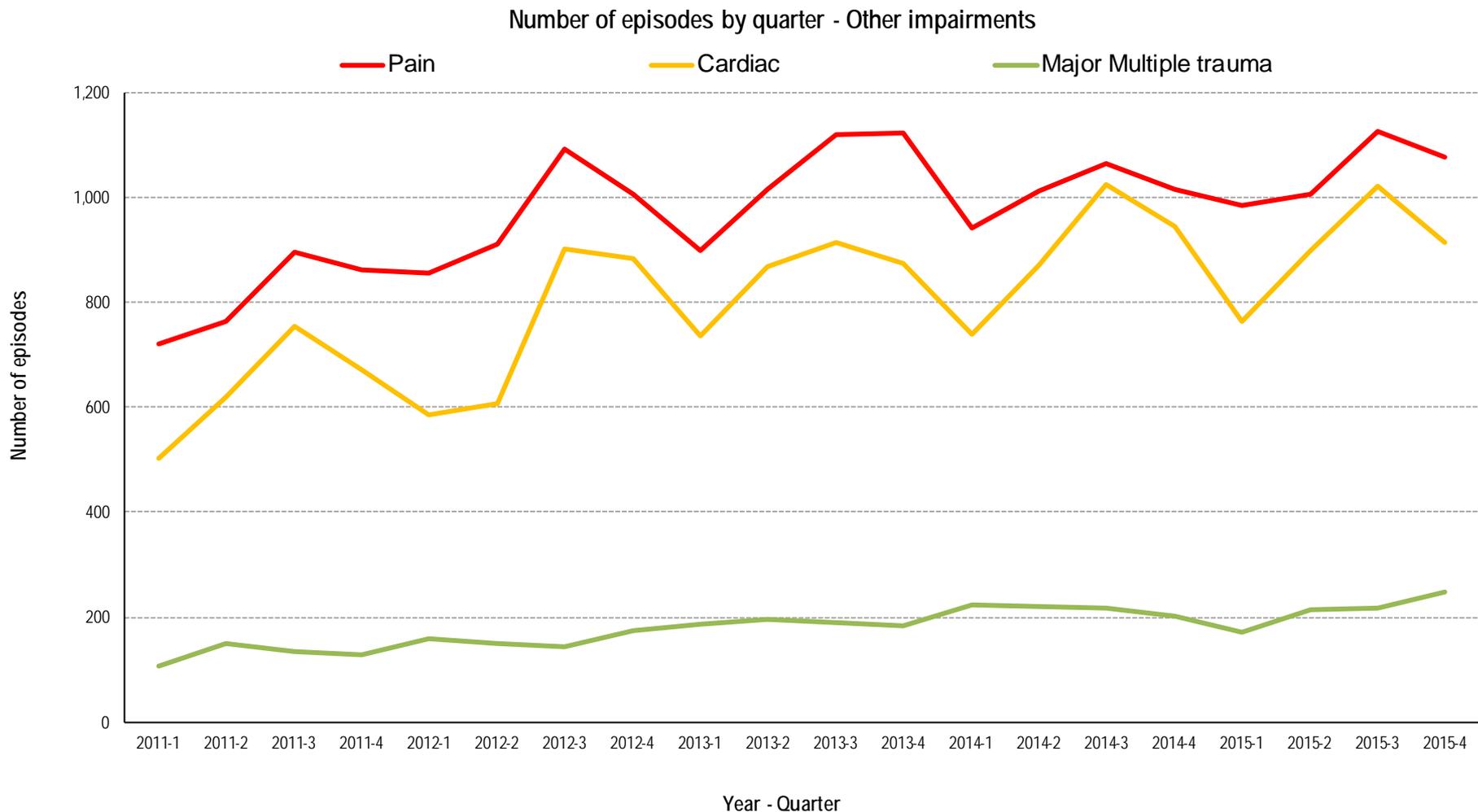
Reconditioning LOS and FIM change by AN-SNAP class



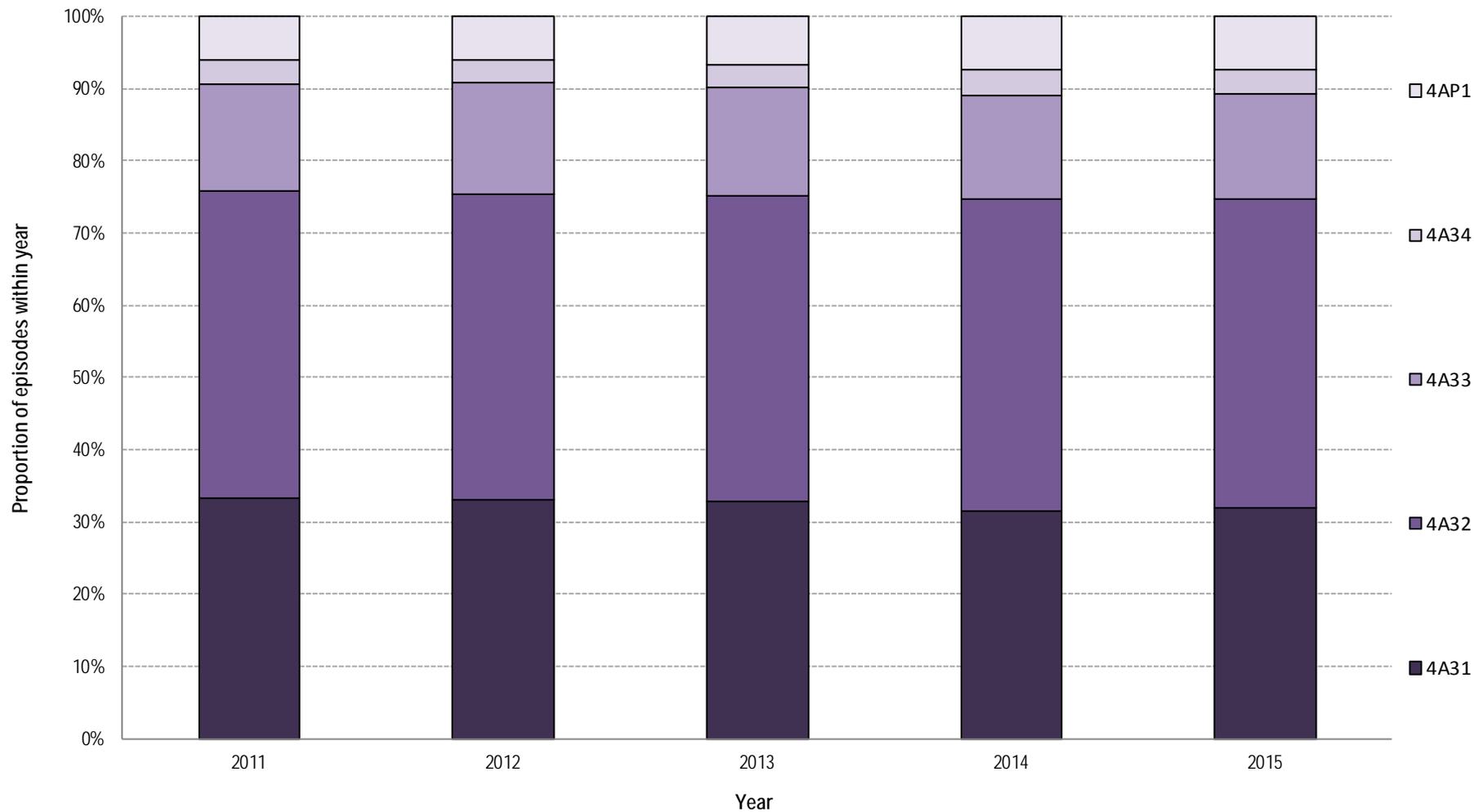
Change in outcome measures in reconditioning, 2014 to 2015



Other impairment episodes over time



Other impairments casemix over time

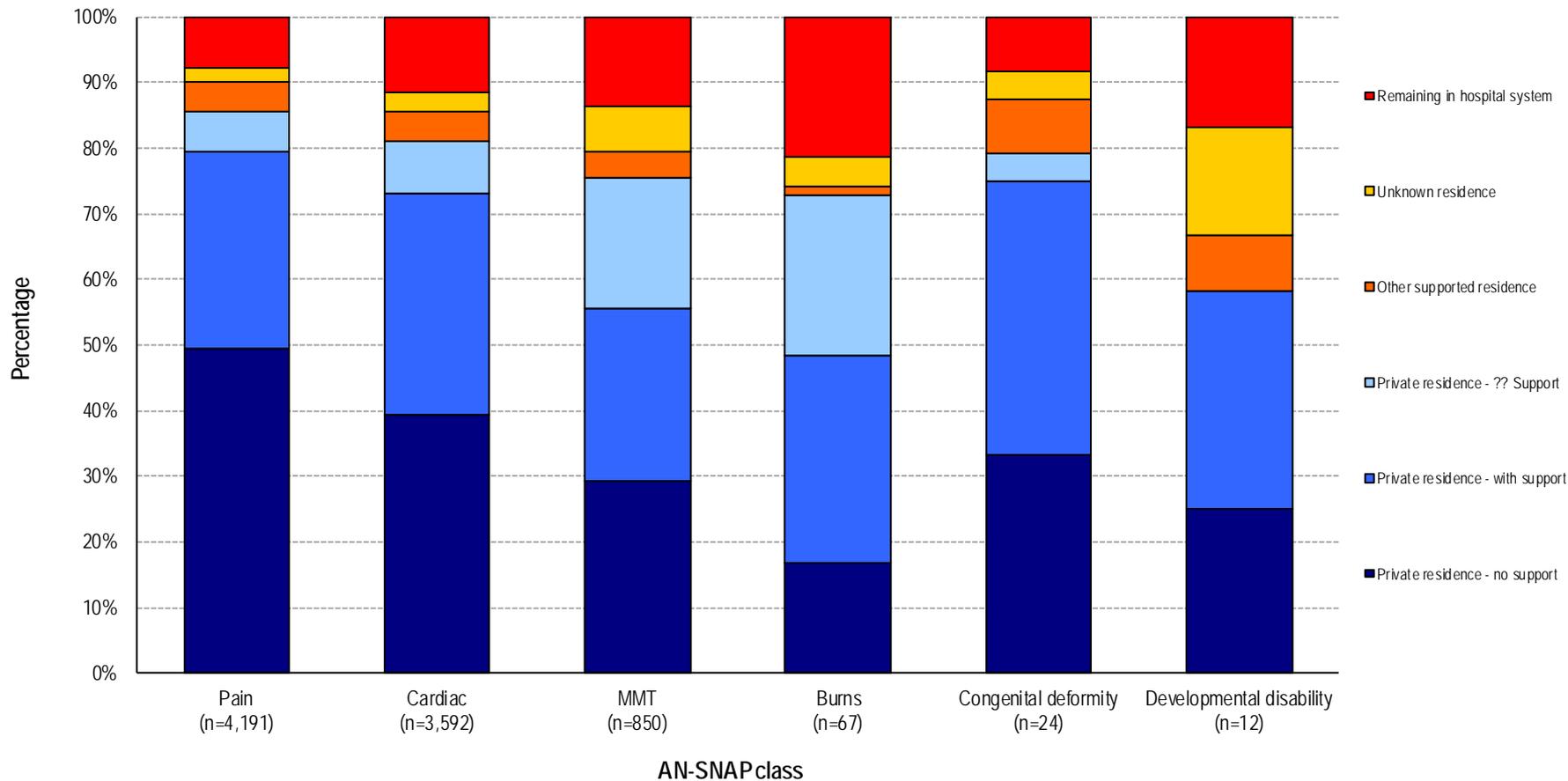


Other impairment episodes in 2015

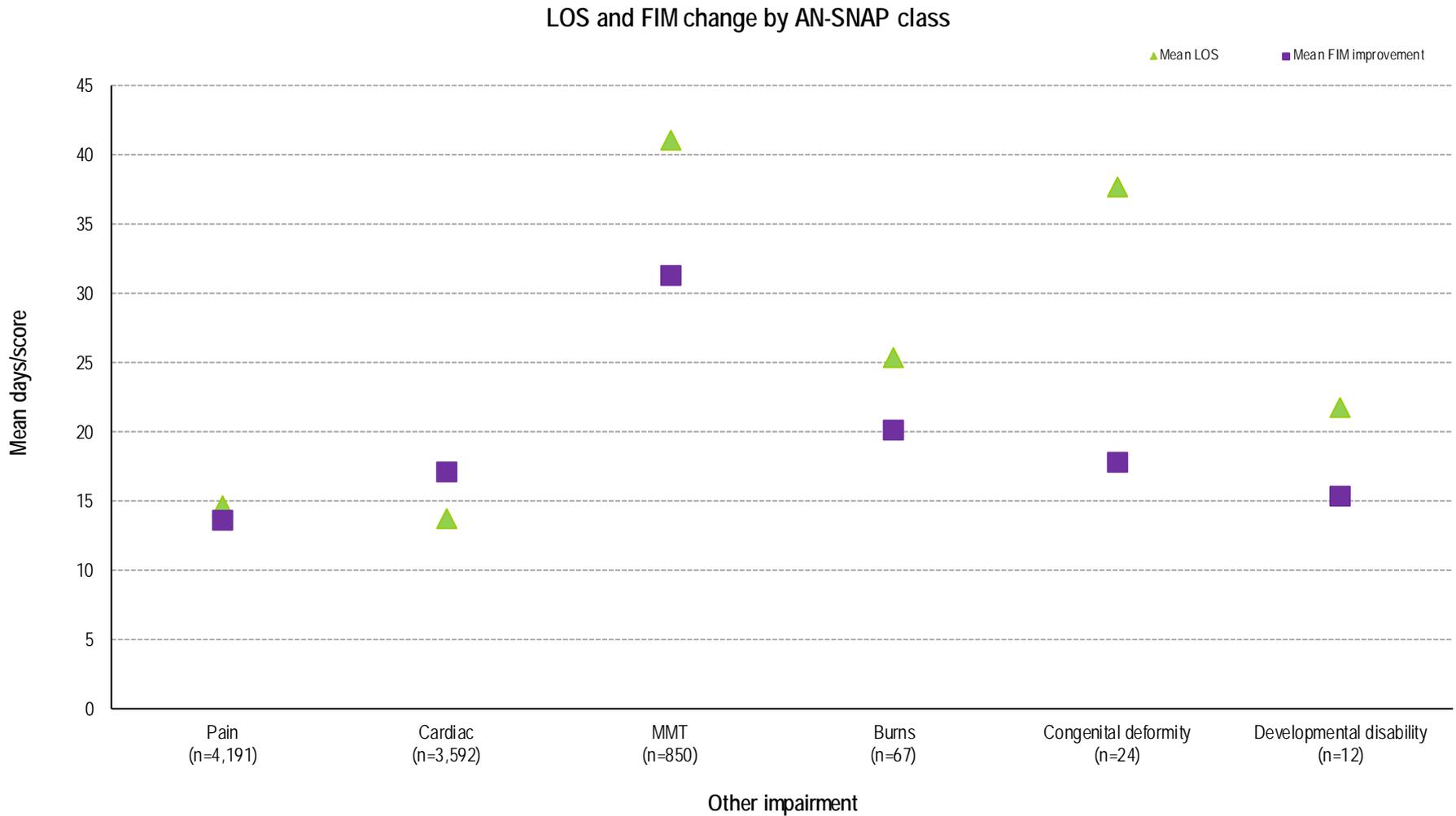
AN-SNAP class:	Pain	Cardiac	MMT	Burns	Congenital deformity	Developmental disability
Number of episodes	4,191	3,592	850	67	24	12
Proportion of total episodes in 2015	3.6%	3.1%	0.7%	0.1%	0.0%	0.0%
Sector (%)						
<i>Private</i>	73.2%	72.4%	47.8%	17.9%	20.8%	16.7%
<i>Public</i>	26.8%	27.6%	52.2%	82.1%	79.2%	83.3%
Gender (%)						
<i>Female</i>	67.9%	45.7%	32.9%	34.3%	70.8%	41.7%
<i>Male</i>	32.1%	54.3%	67.1%	65.7%	29.2%	58.3%
Age (Mean+95%CI)	71.6 (71.0-72.1)	79.2 (78.9-79.6)	50.5 (49.1-51.9)	57.6 (52.1-63.1)	56.8 (47.8-65.8)	58.8 (44.9-72.6)
Admission FIM (Mean+95%CI)	97.4 (96.9-98.0)	94.2 (93.7-94.8)	78.9 (77.1-80.6)	85.1 (78.9-91.2)	72.9 (63.3-82.4)	62.8 (39.3-86.2)
LOS (Mean+95%CI)	14.7 (14.4-14.9)	13.7 (13.4-14.1)	41.1 (37.5-44.6)	25.4 (19.9-30.9)	37.7 (18.0-57.3)	21.8 (11.2-32.3)
Discharge destination (%)						
<i>Discharged to community</i>	92.2%	88.6%	86.5%	78.8%	91.7%	83.3%
<i>Remaining in hospital system</i>	7.8%	11.4%	13.5%	21.2%	8.3%	16.7%
FIM change (Mean+95%CI)	13.7 (13.3-14.0)	17.1 (16.7-17.4)	31.3 (29.7-32.8)	20.2 (15.8-24.5)	17.9 (12.1-23.7)	15.3 (3.4-27.3)
FIM efficiency (FIM change/LOS)	0.9	1.2	0.8	0.8	0.5	0.7

Other impairment discharge destination by impairment group

Discharge destination - Other impairments



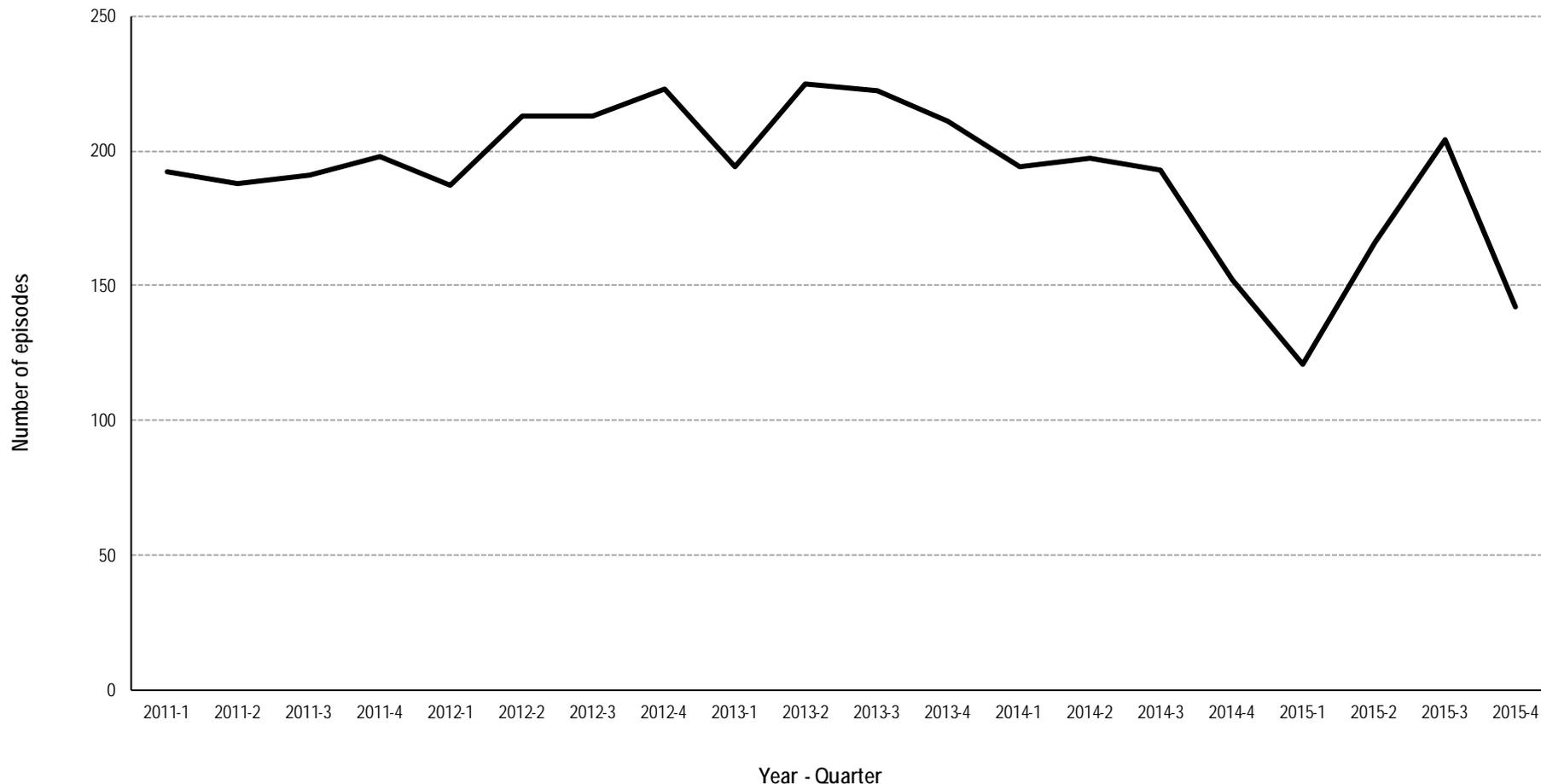
Other impairment LOS and FIM change by impairment group



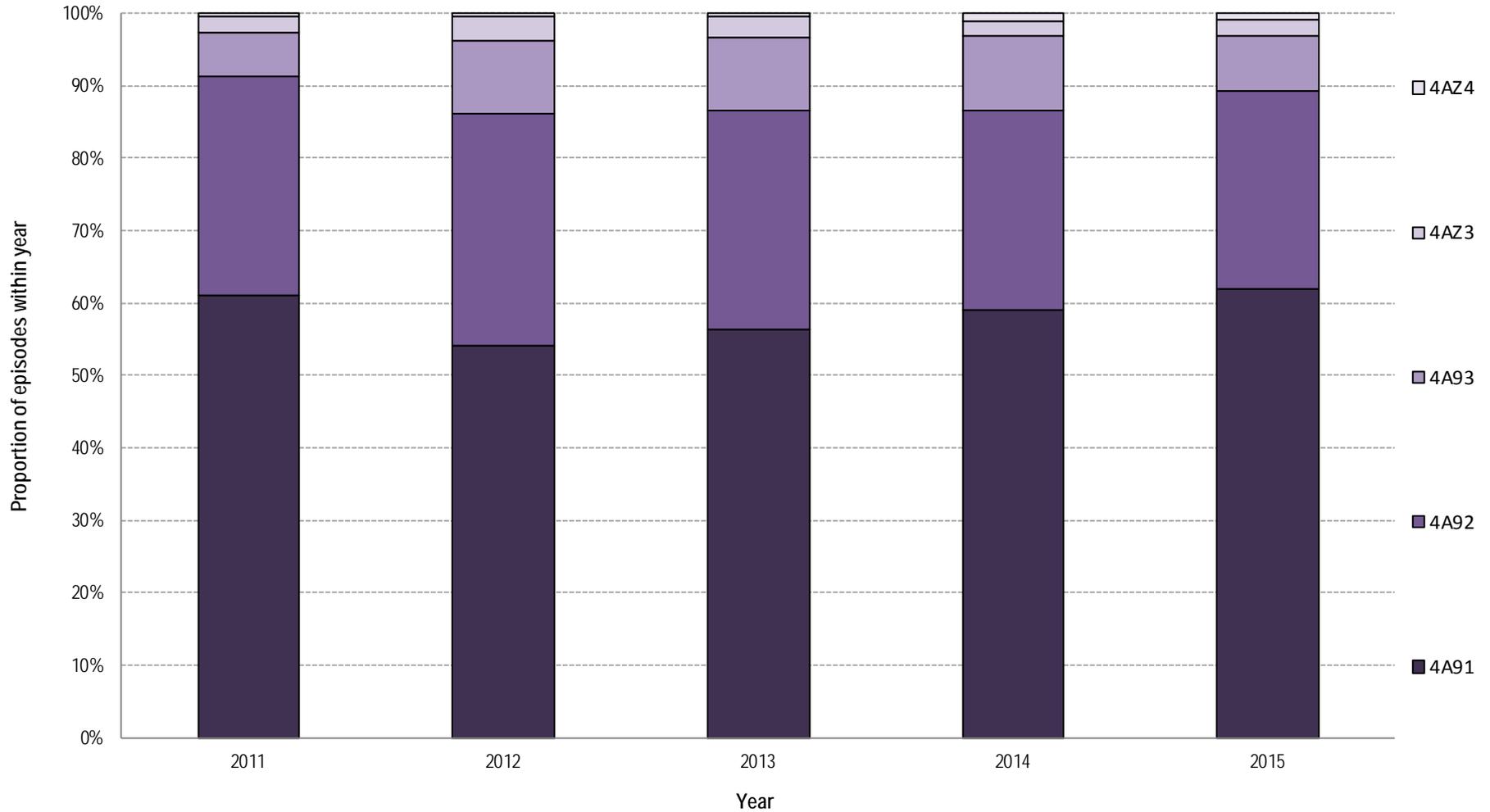
Other disabling impairment episodes over time



Number of episodes by quarter - Other disabling impairments



Other disabling impairments casemix over time



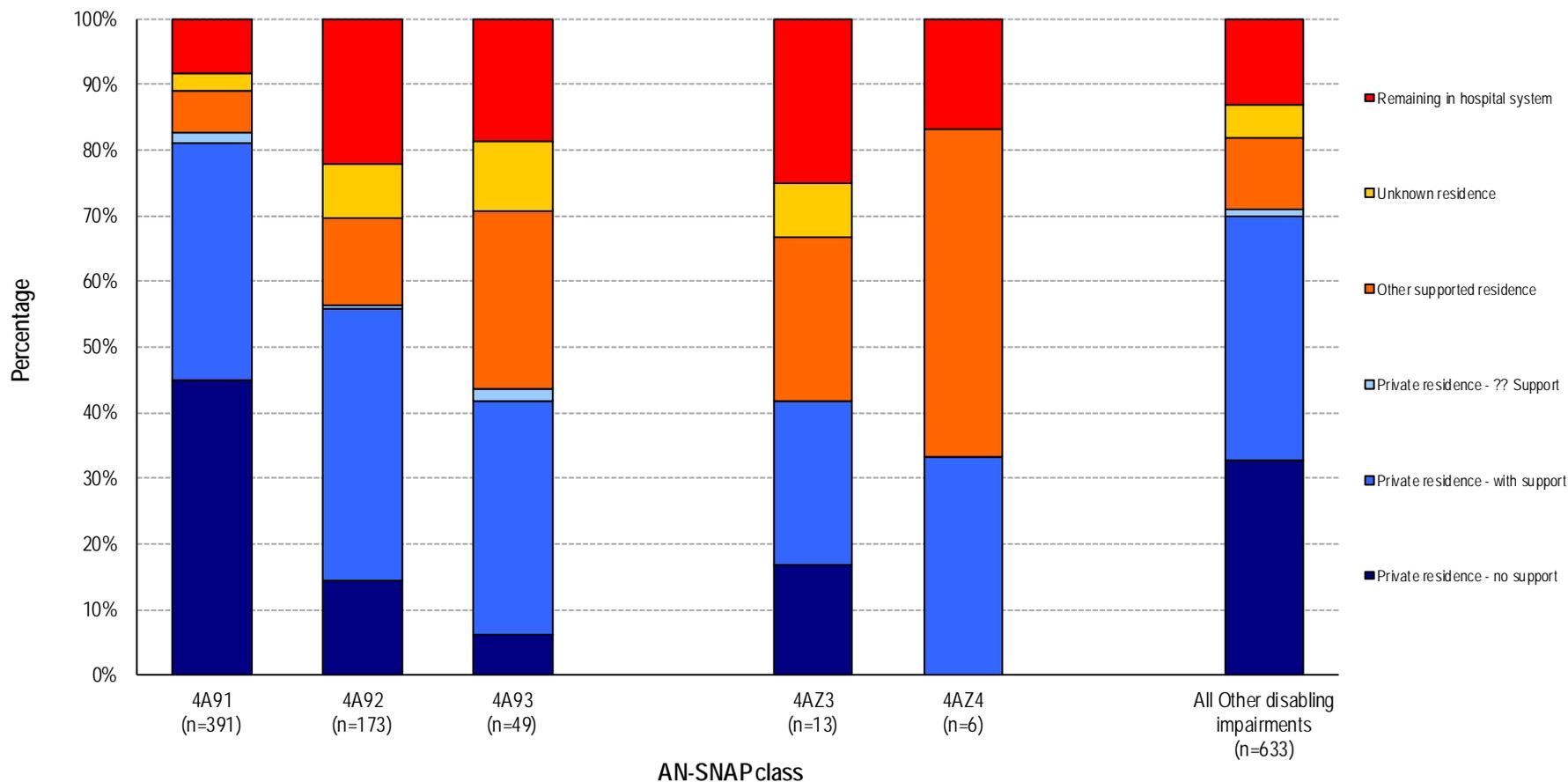
Other disabling impairment episodes in 2015



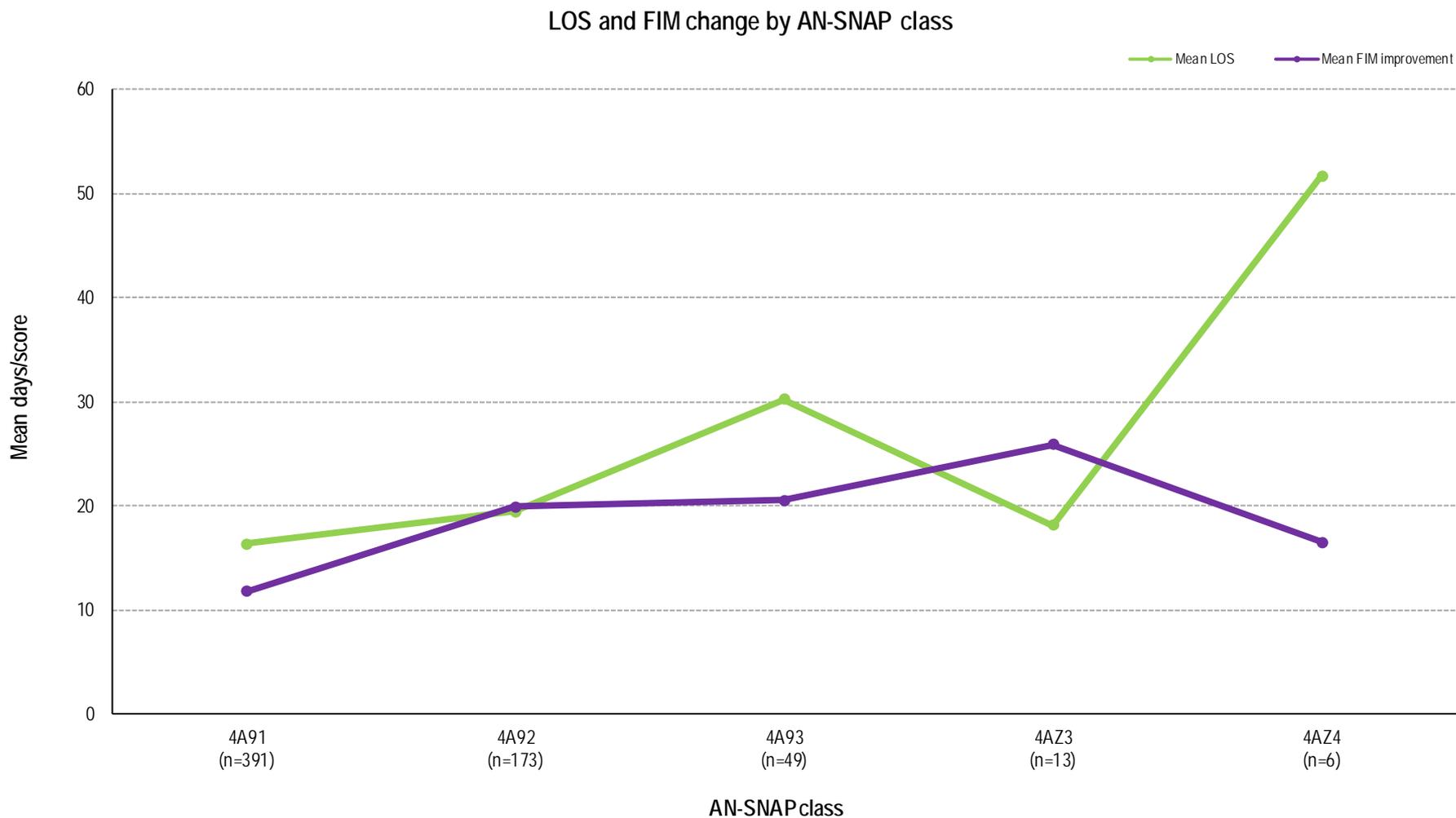
AN-SNAP class:	4A91	4A92	4A93	4AZ3	4AZ4	All Other disabling impairments
Number of episodes	391	173	49	13	6	633
Proportion of episodes	61.8%	27.3%	7.7%	2.1%	0.9%	100.0%
Sector (%)						
<i>Private</i>	33.8%	12.7%	10.2%	0.0%	0.0%	25.1%
<i>Public</i>	66.2%	87.3%	89.8%	100.0%	100.0%	74.9%
Gender (%)						
<i>Female</i>	66.5%	54.3%	51.0%	46.2%	33.3%	61.1%
<i>Male</i>	33.5%	45.7%	49.0%	53.8%	66.7%	38.9%
Age (Mean+95%CI)	72.0 (70.3-73.7)	76.5 (74.1-78.8)	74.7 (71.0-78.3)	78.9 (74.1-83.7)	58.0 (53.1-62.9)	73.4 (72.1-74.7)
Admission FIM (Mean+95%CI)	100.1 (98.7-101.5)	69.8 (67.8-71.8)	49.1 (45.8-52.5)	33.3 (22.3-44.2)	38.7 (34.9-42.4)	87.3 (85.4-89.3)
LOS (Mean+95%CI)	16.4 (15.1-17.6)	19.5 (16.9-22.0)	30.2 (19.9-40.6)	18.1 (10.4-25.9)	51.7 (31.2-72.1)	18.5 (17.2-19.8)
Discharge destination (%)						
<i>Discharged to community</i>	91.8%	77.9%	81.3%	75.0%	83.3%	86.8%
<i>Remaining in hospital system</i>	8.2%	22.1%	18.8%	25.0%	16.7%	13.2%
FIM change (Mean+95%CI)	11.8 (10.8-12.8)	19.9 (17.6-22.3)	20.5 (14.1-27.0)	25.9 (14.6-37.2)	16.5 (4.9-28.1)	14.7 (13.6-15.7)
FIM efficiency (FIM change/LOS)	0.7	1.0	0.7	1.4	0.3	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



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