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The AROC annual report: the state of rehabilitation in Australia and New Zealand in 2010

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AROC

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The AROC annual report: the state of rehabilitation in Australia and New Zealand in 2010

Abstract

Powerpoint presentation presented at the ANZCOS / AFRM Conference, Brisbane.

Keywords

annual, aroc, australian, 2010, rehabilitation, zealand, state, report

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The AROC Annual Report – the state of rehabilitation in Australia and New Zealand in 2010

Presentation to the ANZCOS/AFRM Conference
15 September 2011

Frances Simmonds, Director AROC
Tara Stevermuer, AROC Data Manager
A/Prof Ben Marosszky Clinical Director, AROC

What is AROC ?

- AROC began as a joint initiative of the whole Australian rehabilitation sector (providers, payers, regulators and consumers) with support from key New Zealand providers
- Established 1 July 2002 as a not-for-profit Centre
- The Australasian Faculty of Rehabilitation Medicine (AFRM) is the auspice body and data custodian
- The Centre for Health Service Development (CHSD) at the University of Wollongong is the data manager and responsible for AROC's day to day operations

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Aims of AROC

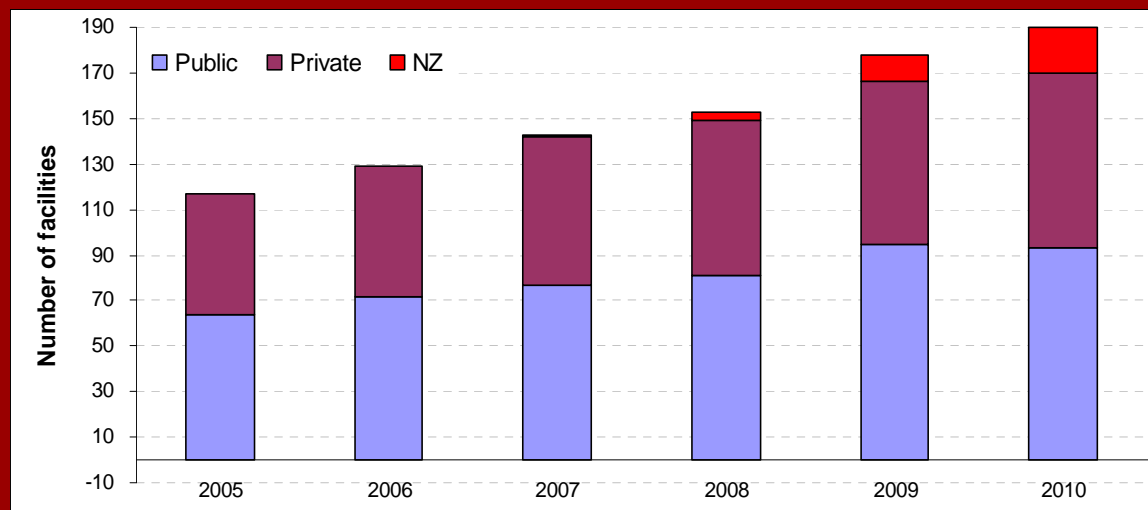
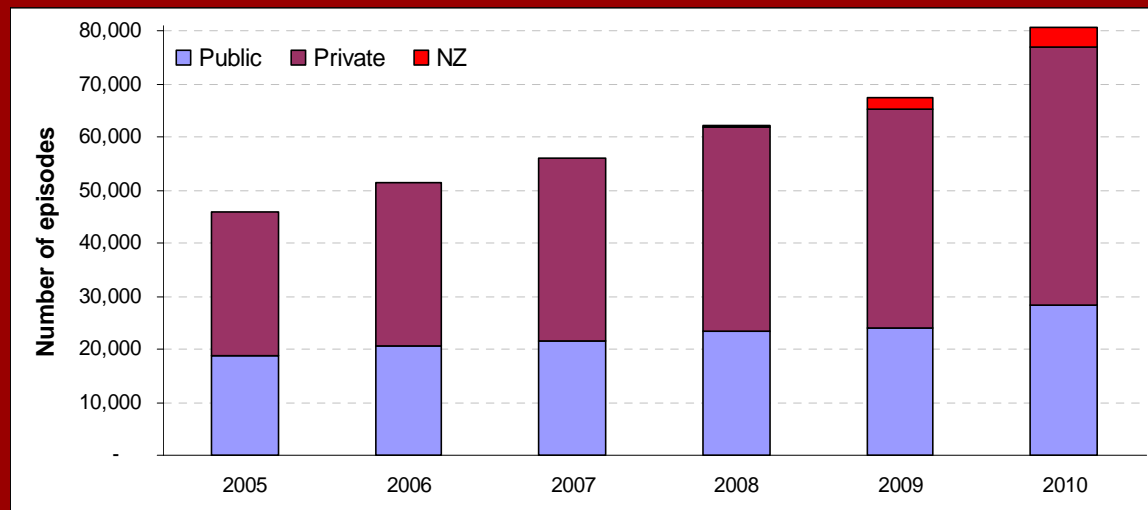
- To provide a national benchmarking system to facilitate the improvement of clinical rehabilitation outcomes for patients
- To produce information on the efficacy of interventions through the systematic collection of outcomes information in both the inpatient and ambulatory settings
- To report on functional outcomes
 - Six monthly benchmarking reports for each member facility
 - Annual in-patient report summarising the Australian data
 - Inaugural ambulatory report

AROC Coverage

- There are approximately 180 rehabilitation units in Australia
- 172 submitted data to AROC in the 2010 calendar year
- In 2010 data describing 70,449 episodes was submitted to AROC
- There are approximately 30-35 rehabilitation units in New Zealand
- Currently 23 units are members of AROC
- Since Jan 2009 data describing more than 2,250 NZ episodes has been submitted to AROC

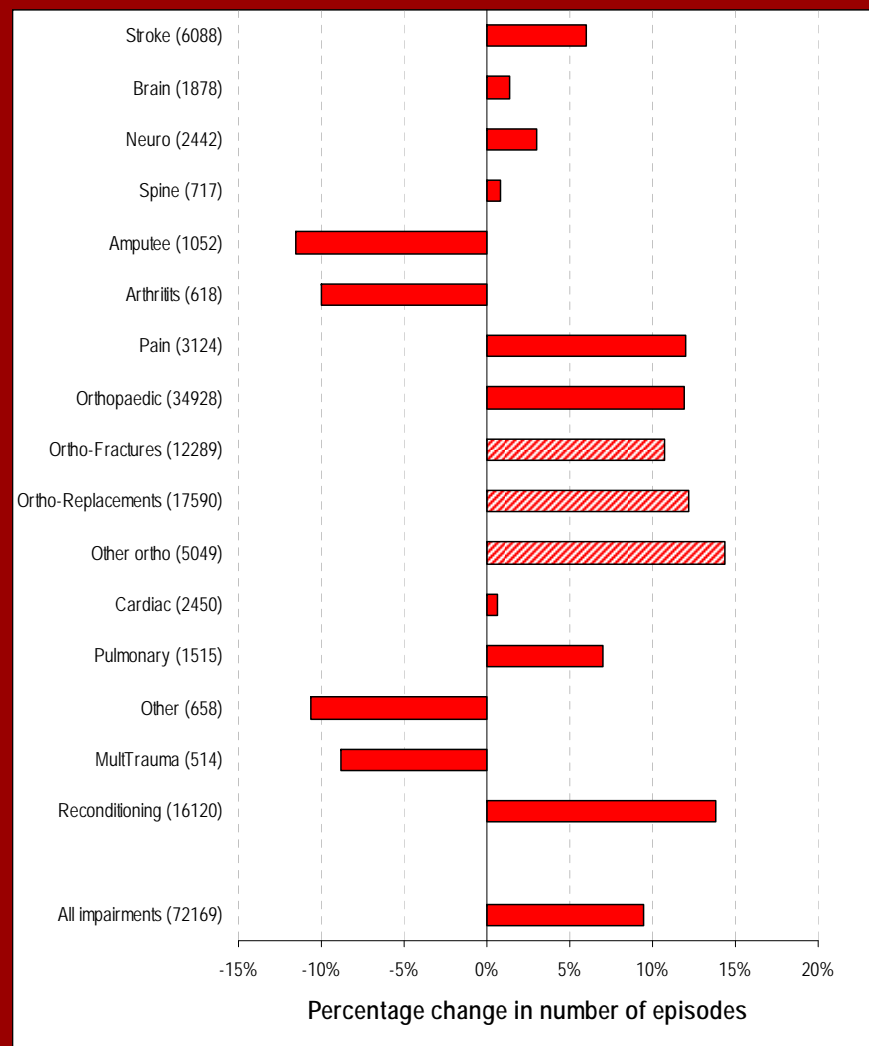
Change in number of episodes over time, 2005 to 2010

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Change in number of episodes 2009 to 2010

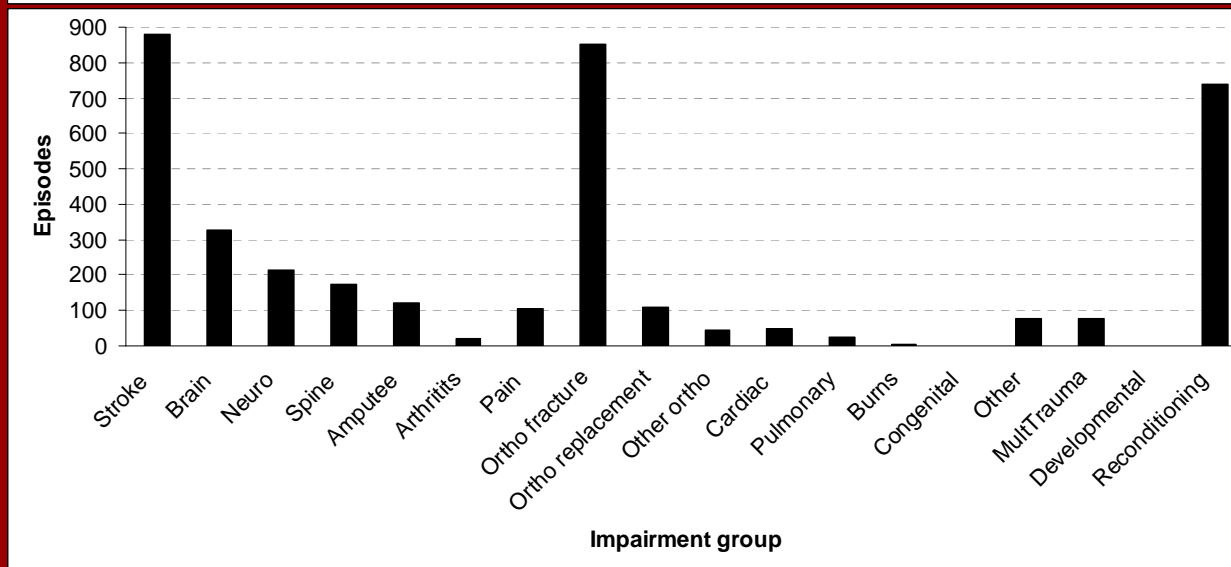
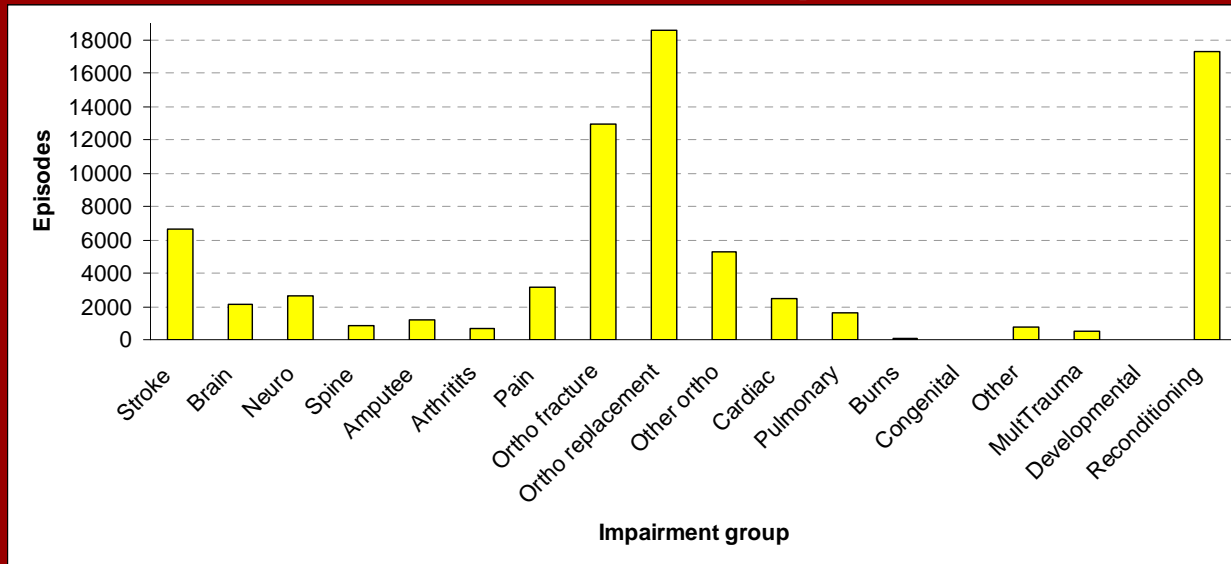
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Episodes by impairment

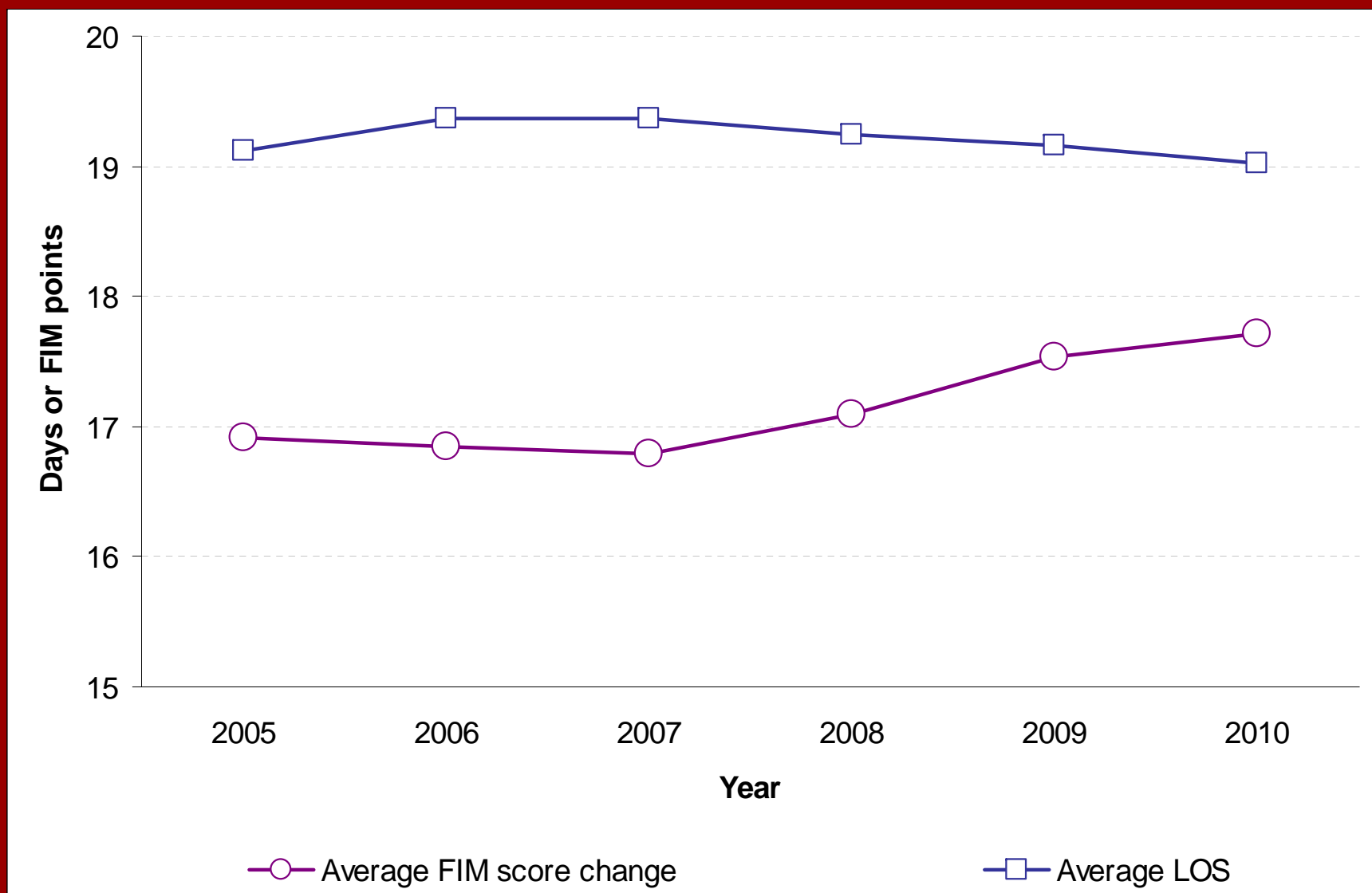
Australia & New Zealand, 2010/11

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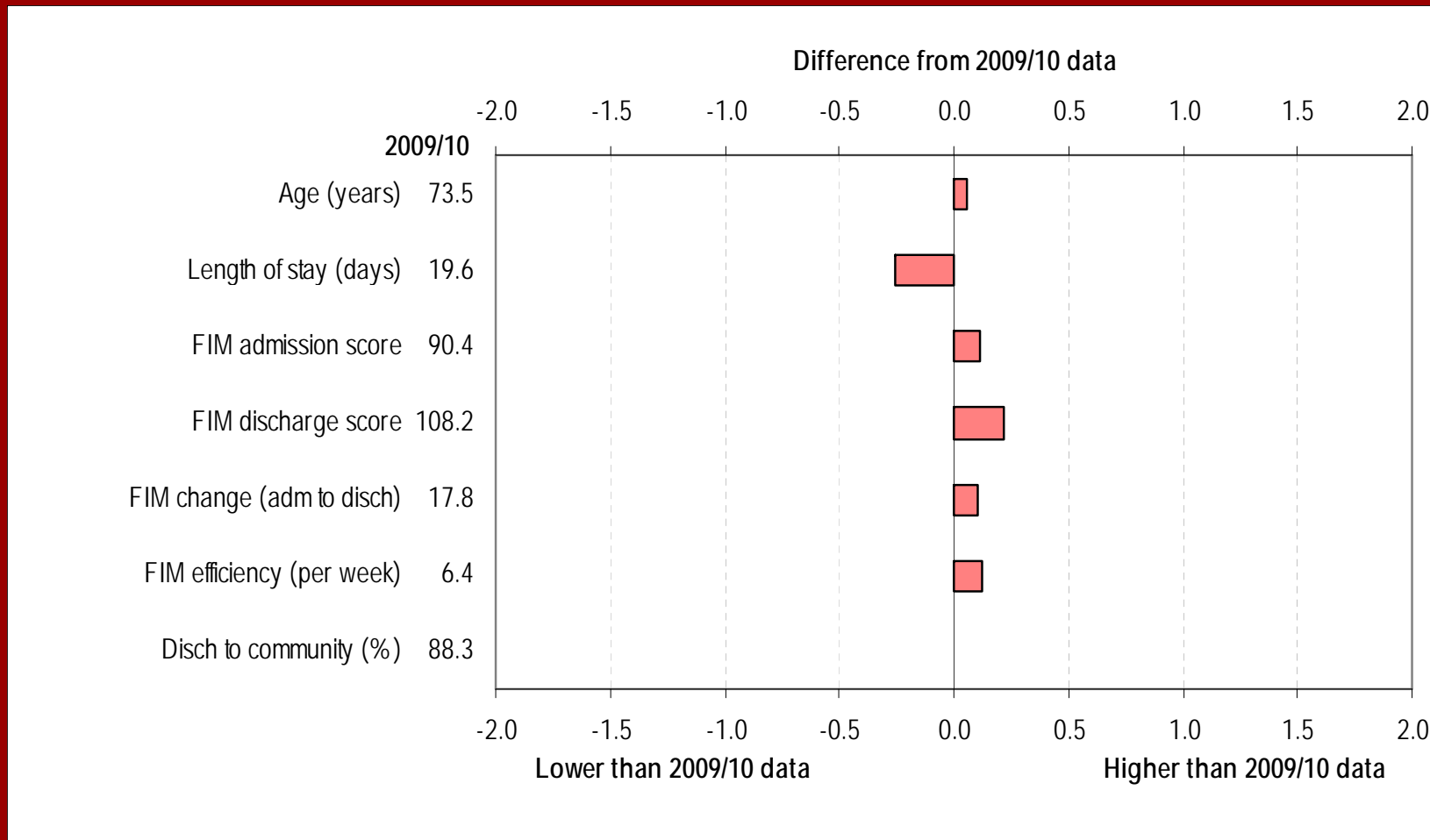


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ALOS & FIM change over time



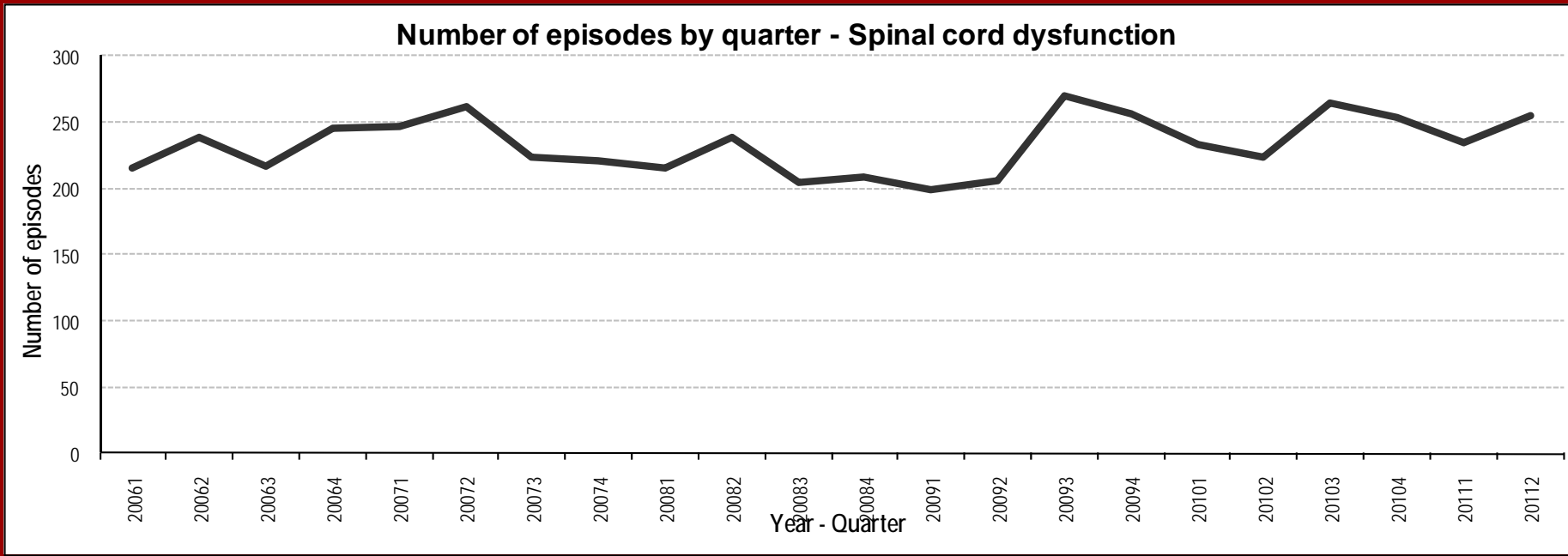
Overall rehabilitation outcomes summary – change in measures 2009/10 to 2010/11 (Australia only)



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SCI Data

SCI episodes - volume over time



Spinal Cord Dysfunction Episodes 2010

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Table 2: Spinal cord dysfunction episodes in 2010/11

AN-SNAP class:	S2-220	S2-221	S2-222	S2-223	All Spinal cord dysfunction
Number of episodes	34	307	309	67	717
Proportion of episodes	4.7%	42.8%	43.1%	9.3%	100.0%
Sector (%)					
<i>Private</i>	35.3	30.6	9.1	1.5	18.8
<i>Public</i>	64.7	69.4	90.9	98.5	81.2
Gender (%)					
<i>Female</i>	38.2	41.4	35.9	20.9	37.0
<i>Male</i>	61.8	58.6	64.1	79.1	63.0
Age (Mean+95%CI)	56.8 (51.0–62.6)	57.8 (55.6–60.0)	62.5 (60.8–64.1)	22.2 (21.1–23.3)	56.5 (55.0–57.9)
Admission FIM (Mean+95%CI)	118.1 (116.7–119.6)	96.2 (94.8–97.5)	62.4 (60.9–63.9)	60.7 (57.6–63.8)	81.6 (79.7–83.4)
LOS (Mean+95%CI)	14.3 (11.0–17.6)	29.8 (26.7–33.0)	70.7 (63.0–78.5)	77.9 (86.9–128.8)	51.1 (46.7–55.4)
Discharge destination (%)					
<i>Discharged to community</i>	94.1	87.0	70.2	67.2	78.2
<i>Remaining in hospital system</i>	5.9	13.0	29.8	32.8	21.8
FIM improvement (Mean+95%CI)	2.7 (1.6–3.9)	17.2 (16.0–18.5)	29.4 (26.8–32.0)	37.7 (31.3–44.0)	22.7 (21.3–24.2)
FIM efficiency (FIM imp./LOS)	0.2	0.6	0.4	0.3	0.4

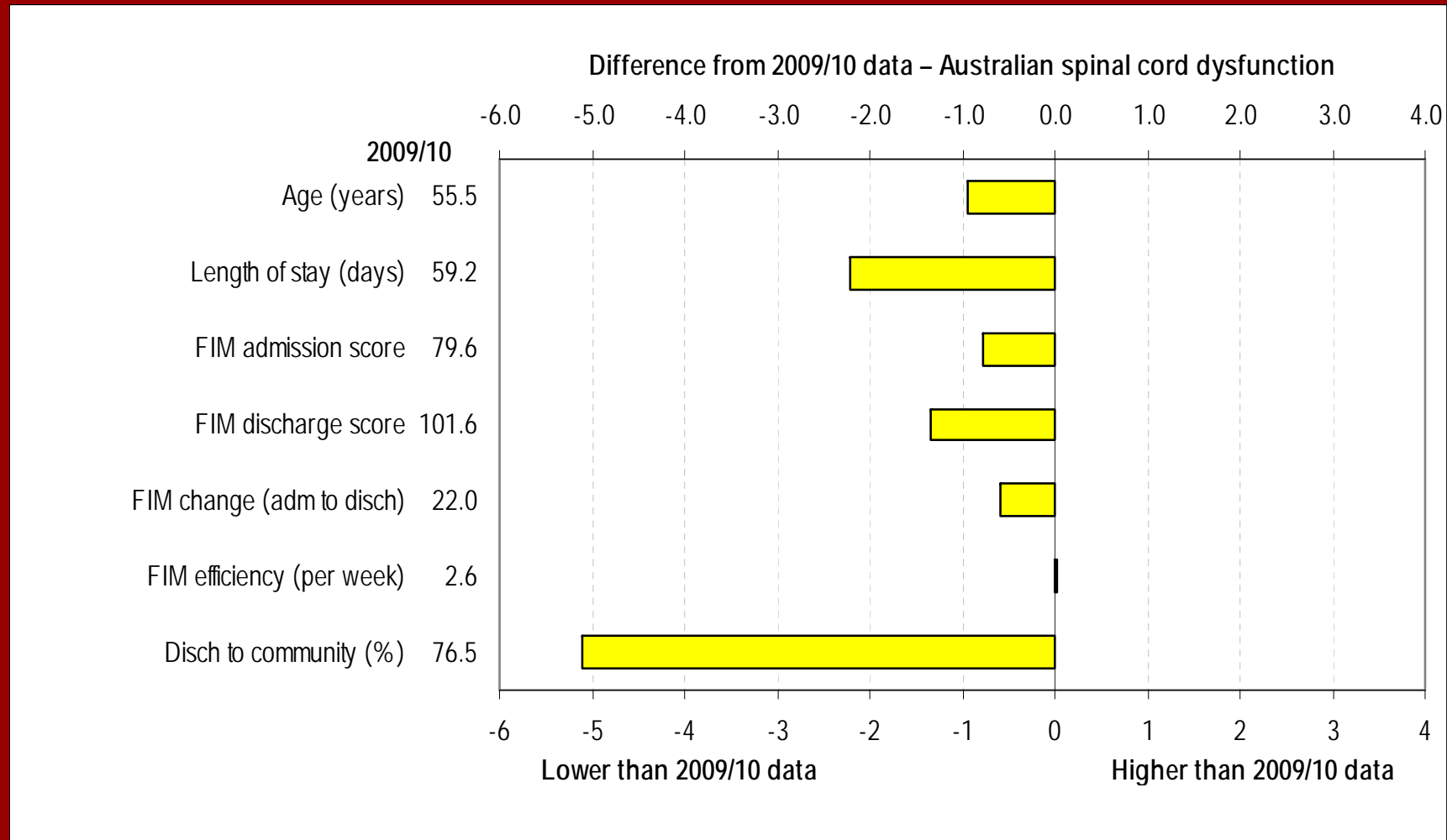
Spinal episodes by impairment

- 2010/11 data
- 62% Para vs 38% Tetra
- Para - 30% complete vs 70% incomplete
- Tetra - 20% complete vs 80% incomplete

Spinal cord dysfunction

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change in measures 2009/10 to 2010/11

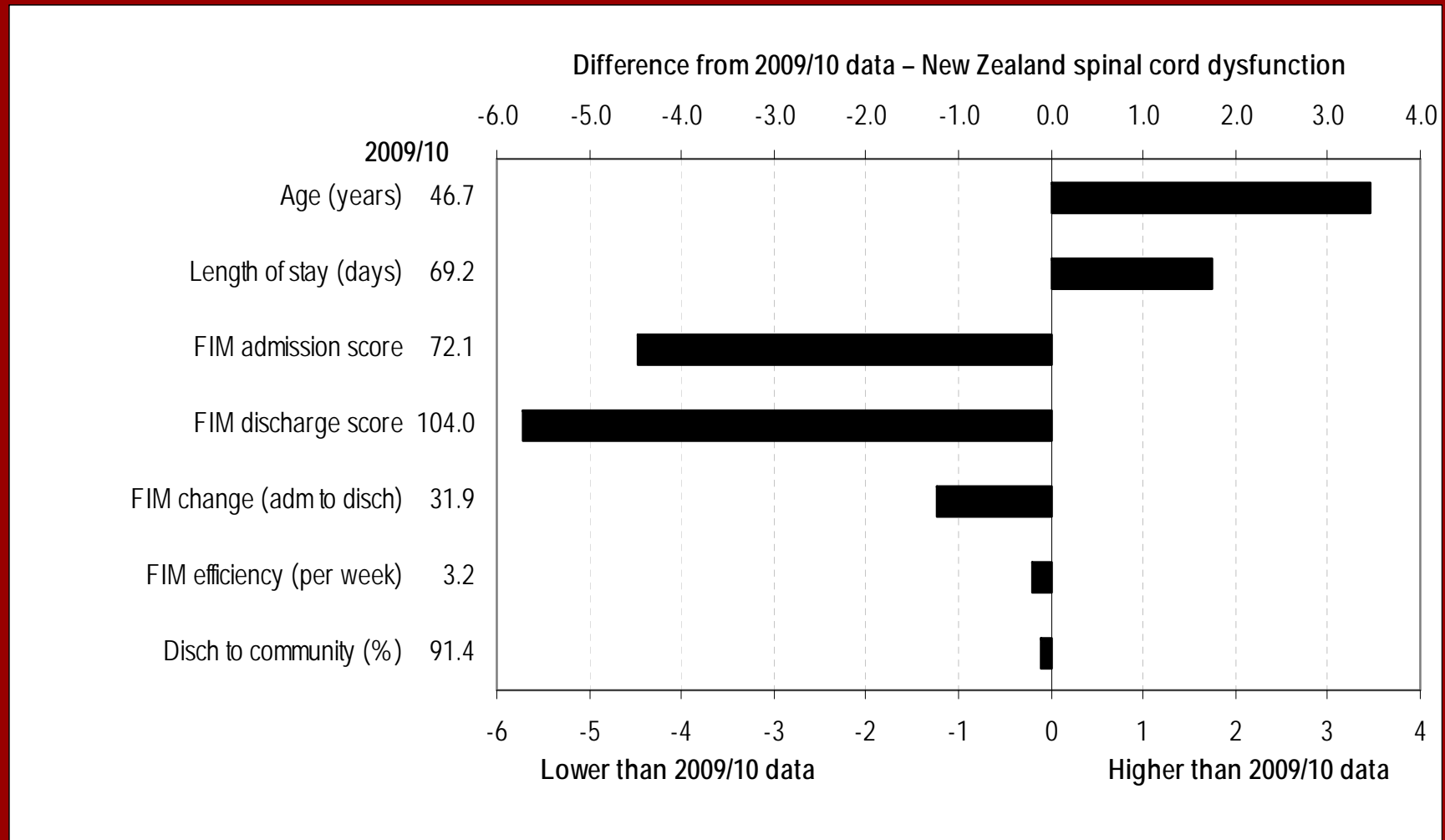


NOTE: 820 episodes in 2009/10 and 837 episodes in 2010/11

Spinal cord dysfunction

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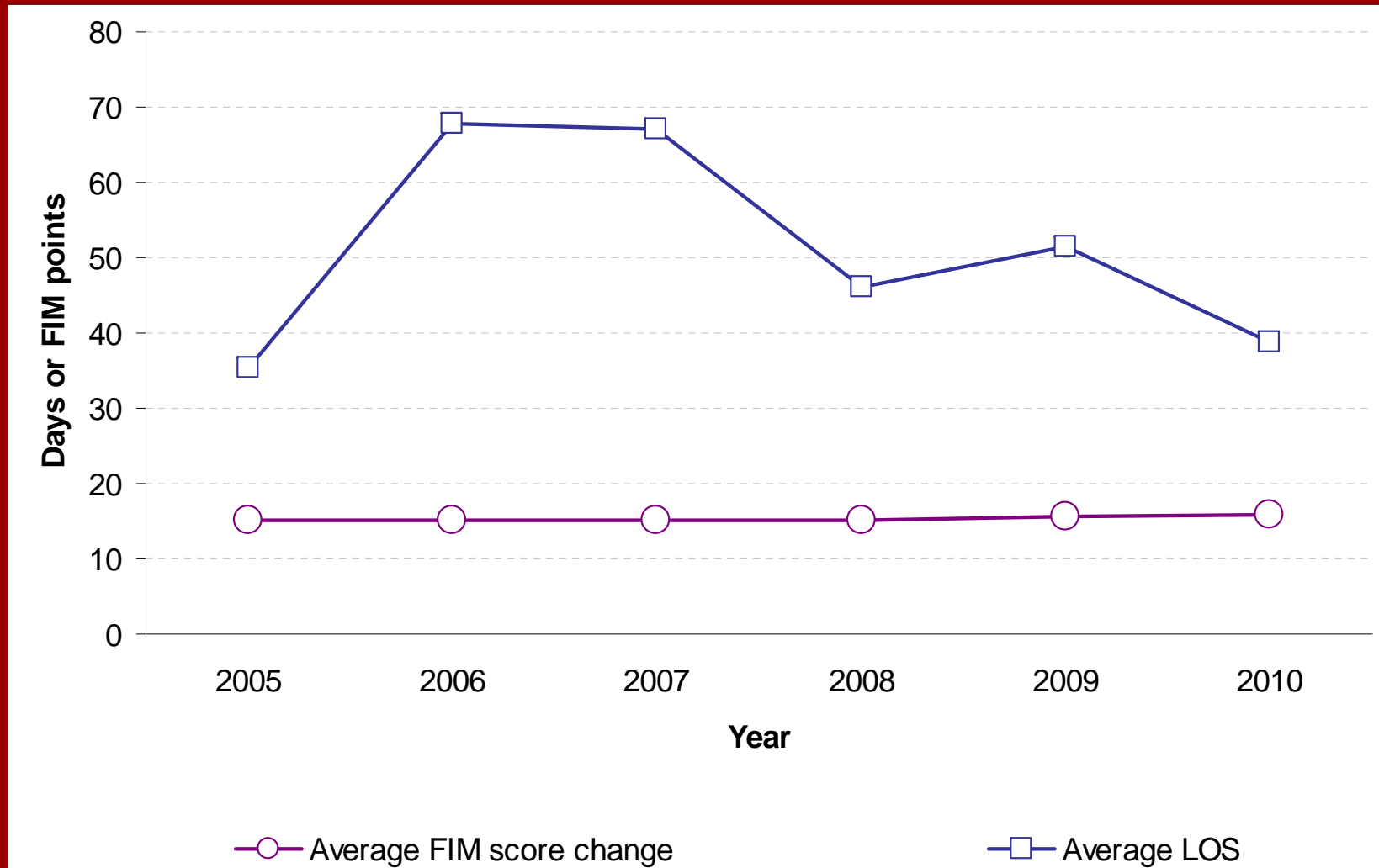
change in measures 2009/10 to 2010/11



NOTE: 163 episodes in 2009/10 and 172 episodes in 2010/11

ALOS & FIM change over time *aroc*

- Spinal cord dysfunction



Spinal Adjunct Dataset

- SCI benchmarking workshop 2009
- No outcome targets agreed ... instead agreement to collect additional data items (ASIA scale, level of injury)
- Agreed clinically relevant groups for outcome benchmarking
- Adjunct data collected over last 2 years ... volume still quite small
- Initial analysis

Spinal cord dysfunction

Adjunct data – clinical groups



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Clinical group	Episodes	Percent
Group 1 - Traumatic ASIA AB Tetra	19	8.9%
Group 2 - Traumatic ASIA AB Para	19	8.9%
Group 3 - Traumatic ASIA CD Tetra	35	16.4%
Group 4 - Traumatic ASIA CD Para	24	11.2%
Group 5 - N-Traumatic ASIA AB Tetra	4	1.9%
Group 6 - N-Traumatic ASIA AB Para	17	7.9%
Group 7 - N-Traumatic ASIA CD Tetra	19	8.9%
Group 8 - N-Traumatic ASIA CD Para	42	19.6%
Group 9 - All other spinal cord dysfunction	35	16.4%
All matched spinal data	214	100.0%

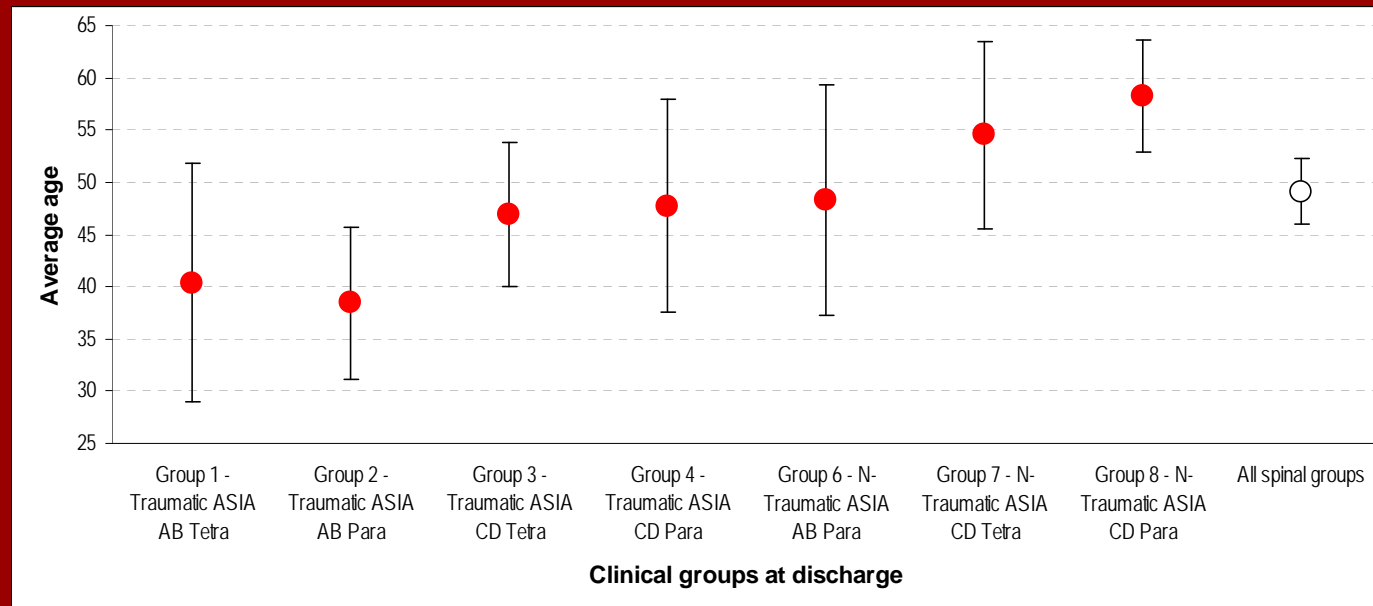
NOTE: Group 5 excluded from further analysis due to small numbers. Group 9 presented on this slide only as not part of clinically relevant target groups. These episodes include those with invalid ages, LOS, FIM scores and incomplete episodes

Spinal cord dysfunction

Adjunct data – Average age

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Clinical group	Average age		
	Episodes	Average (95%CI)	Range
Group 1 - Traumatic ASIA AB Tetra	16	40.4 (29.0–51.8)	19 to 85
Group 2 - Traumatic ASIA AB Para	17	38.4 (31.1–45.7)	17 to 63
Group 3 - Traumatic ASIA CD Tetra	29	46.9 (40.0–53.8)	18 to 77
Group 4 - Traumatic ASIA CD Para	22	47.7 (37.6–57.9)	12 to 82
Group 6 - N-Traumatic ASIA AB Para	15	48.3 (37.3–59.3)	19 to 75
Group 7 - N-Traumatic ASIA CD Tetra	17	54.5 (45.5–63.5)	19 to 79
Group 8 - N-Traumatic ASIA CD Para	37	58.3 (52.9–63.6)	21 to 84
All spinal groups	153	49.1 (46.0–52.2)	12 to 85

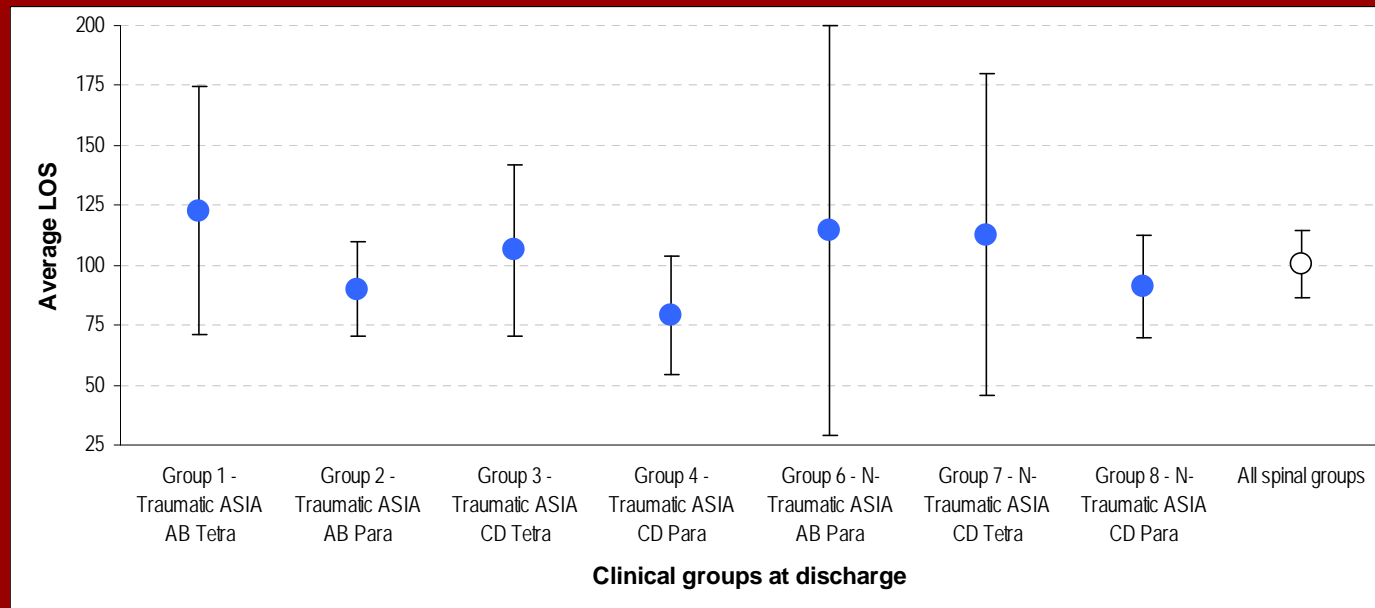


Spinal cord dysfunction

Adjunct data – Average LOS

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Clinical group	Average LOS		
	Episodes	Average (95%CI)	Range
Group 1 - Traumatic ASIA AB Tetra	16	122.7 (70.8–174.5)	9 to 361
Group 2 - Traumatic ASIA AB Para	11	90.1 (70.1–110.1)	33 to 131
Group 3 - Traumatic ASIA CD Tetra	25	106.2 (70.4–142.0)	4 to 375
Group 4 - Traumatic ASIA CD Para	17	79.3 (54.6–104.0)	9 to 167
Group 6 - N-Traumatic ASIA AB Para	8	114.3 (28.8–199.7)	9 to 352
Group 7 - N-Traumatic ASIA CD Tetra	13	112.7 (45.7–179.7)	15 to 385
Group 8 - N-Traumatic ASIA CD Para	32	91.0 (69.6–112.5)	7 to 285
All spinal groups	122	100.4 (86.5–114.2)	4 to 385

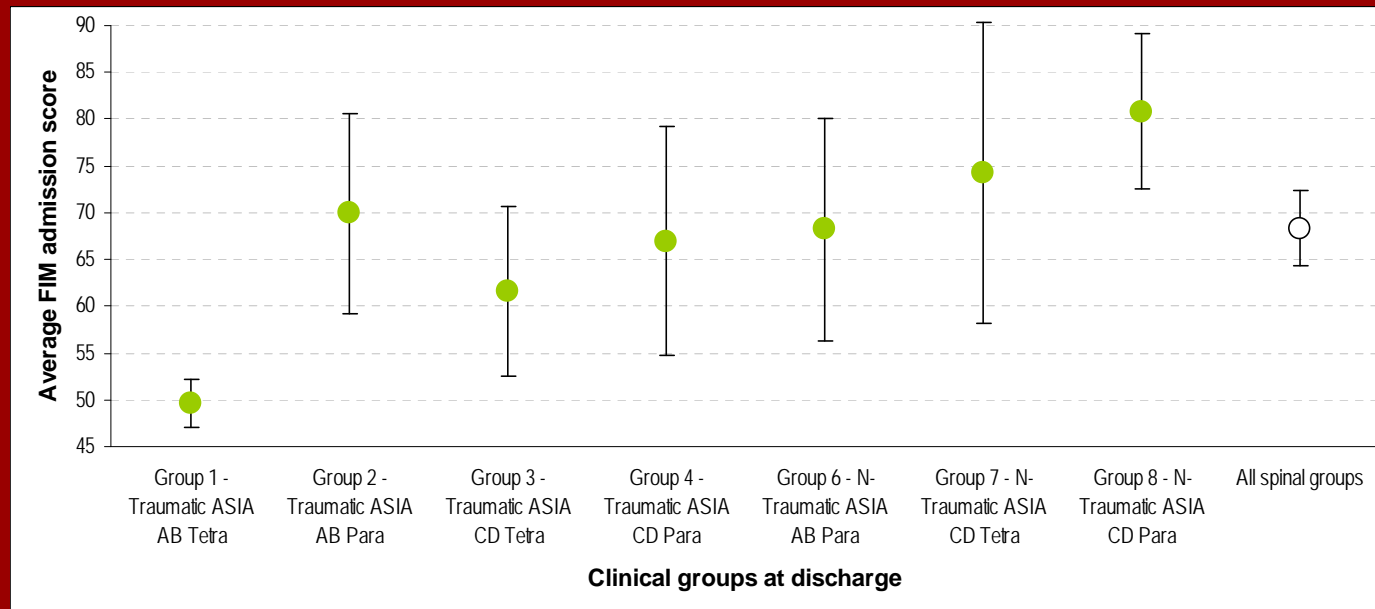


Spinal cord dysfunction

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Adjunct data – Average FIM admission score

Clinical group	FIM admission total		
	Episodes	Average (95%CI)	Range
Group 1 - Traumatic ASIA AB Tetra	16	49.6 (47.0–52.3)	40 to 61
Group 2 - Traumatic ASIA AB Para	11	69.9 (59.3–80.6)	55 to 99
Group 3 - Traumatic ASIA CD Tetra	25	61.6 (52.6–70.6)	24 to 107
Group 4 - Traumatic ASIA CD Para	17	66.9 (54.7–79.1)	31 to 121
Group 6 - N-Traumatic ASIA AB Para	8	68.3 (56.4–80.1)	51 to 90
Group 7 - N-Traumatic ASIA CD Tetra	13	74.3 (58.2–90.4)	44 to 116
Group 8 - N-Traumatic ASIA CD Para	32	80.8 (72.6–89.1)	29 to 120
All spinal groups	122	68.4 (64.3–72.4)	24 to 121

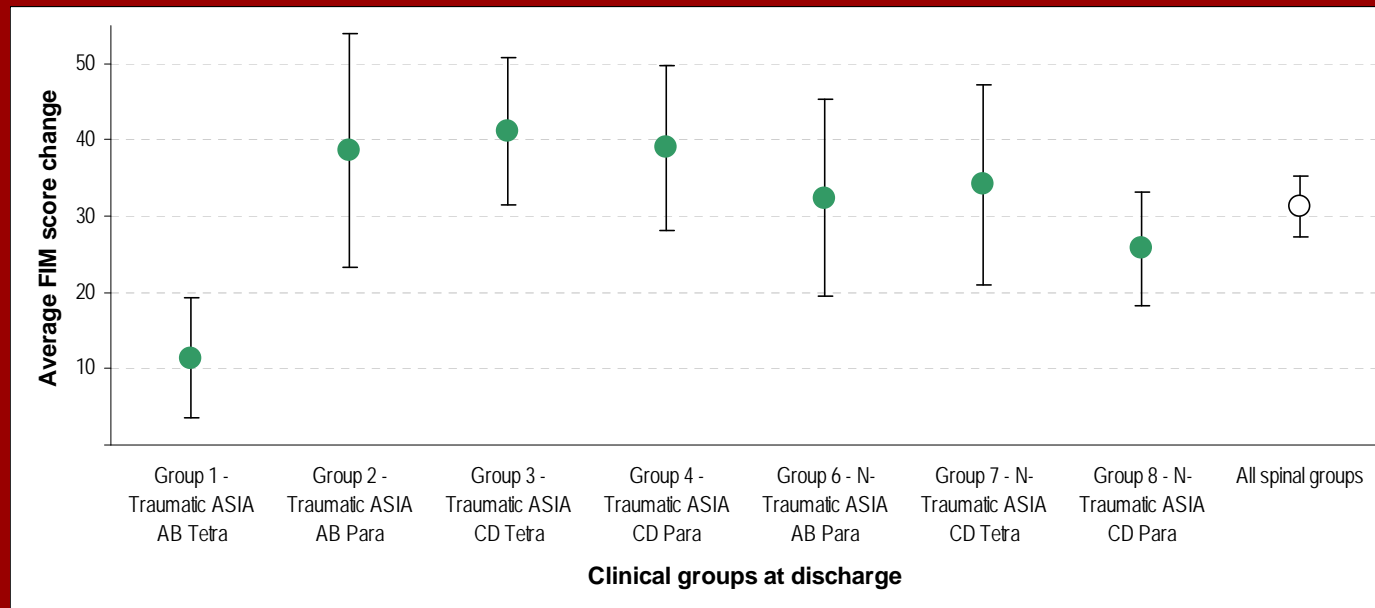


Spinal cord dysfunction

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Adjunct data – Average FIM change

Clinical group	FIM change		
	Episodes	Average (95%CI)	Range
Group 1 - Traumatic ASIA AB Tetra	16	11.4 (3.6–19.2)	0 to 48
Group 2 - Traumatic ASIA AB Para	11	38.6 (23.2–54.0)	2 to 60
Group 3 - Traumatic ASIA CD Tetra	25	41.1 (31.5–50.7)	-2 to 92
Group 4 - Traumatic ASIA CD Para	17	39.0 (28.1–49.9)	5 to 70
Group 6 - N-Traumatic ASIA AB Para	8	32.4 (19.4–45.3)	4 to 48
Group 7 - N-Traumatic ASIA CD Tetra	13	34.2 (21.1–47.2)	7 to 65
Group 8 - N-Traumatic ASIA CD Para	32	25.8 (18.4–33.2)	-24 to 58
All spinal groups	122	31.4 (27.4–35.4)	-24 to 92



The logo for AROC, consisting of the lowercase letters 'aroc' in a black, italicized serif font, enclosed within a white oval shape with a dark red border.

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