

## Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V4, Financial Year 2016



AN-SNAP class	Specialist Spinal Units				Non Specialist Spinal Units				All AROC Facilities			
	No.	Length of stay	FIM change	FIM gain per week	No.	Length of stay	FIM change	FIM gain per week	No.	Length of stay	FIM change	FIM gain per week
		Mean (95%CI)	Mean (95%CI)			Mean (95%CI)	Mean (95%CI)			Mean (95%CI)	Mean (95%CI)	
<b>Traumatic episodes</b>												
4AZ1	66	120.0 (102.3 - 137.8)	30.2 (23.6 - 36.7)	1.8	9	65.1 (28.9 - 101.4)	13.9 (0.4 - 27.4)	1.5	75	113.5 (97.0 - 129.9)	28.2 (22.2 - 34.3)	1.7
4AZ2	67	133.1 (112.5 - 153.6)	22.8 (17.2 - 28.4)	1.2	4	n.a	n.a	n.a	71	127.2 (106.9 - 147.5)	22.5 (17.0 - 28.0)	1.2
4AD1	26	36.2 (21.9 - 50.6)	19.7 (14.8 - 24.5)	3.8	41	18.1 (13.7 - 22.6)	17.0 (13.2 - 20.8)	6.6	67	25.1 (18.7 - 31.6)	18.0 (15.1 - 21.0)	5.0
4AD2	64	93.7 (79.1 - 108.3)	33.5 (28.7 - 38.4)	2.5	26	57.2 (39.9 - 74.4)	28.3 (22.0 - 34.7)	3.5	90	83.2 (71.2 - 95.1)	32.0 (28.1 - 35.9)	2.7
4AD3	39	31.8 (22.5 - 41.1)	22.0 (17.5 - 26.6)	4.8	20	21.2 (12.2 - 30.1)	15.0 (9.9 - 20.1)	5.0	59	28.2 (21.3 - 35.1)	19.6 (16.1 - 23.2)	4.9
4AD4	58	88.6 (74.8 - 102.5)	46.1 (41.9 - 50.3)	3.6	4	n.a	n.a	n.a	62	85.0 (71.6 - 98.4)	45.2 (40.8 - 49.7)	3.7
4AP1	16	77.1 (50.8 - 103.5)	33.8 (25.8 - 41.7)	3.1	35	37.0 (27.3 - 46.7)	24.5 (18.0 - 30.9)	4.6	51	49.6 (37.9 - 61.3)	27.4 (22.2 - 32.5)	3.9
<b>Total episodes</b>	<b>336</b>				<b>139</b>				<b>475</b>			
<b>Non-Traumatic episodes</b>												
4AZ1	18	93.5 (63.2 - 123.8)	28.4 (17.0 - 39.9)	2.1	14	59.0 (22.7 - 95.3)	24.9 (11.4 - 38.3)	2.9	32	78.4 (55.1 - 101.7)	26.9 (18.5 - 35.3)	2.4
4AZ2	7	101.1 (36.4 - 165.9)	6.7 (1.2 - 12.2)	0.5	3	n.a	n.a	n.a	10	81.4 (33.8 - 129.0)	11.3 (-1.1 - 23.7)	1.0
4AD1	63	36.2 (29.9 - 42.5)	17.8 (14.1 - 21.5)	3.4	134	19.7 (17.3 - 22.2)	16.7 (15.1 - 18.4)	5.9	197	25.0 (22.2 - 27.8)	17.1 (15.4 - 18.7)	4.8
4AD2	78	82.4 (68.6 - 96.2)	30.5 (26.6 - 34.4)	2.6	101	48.3 (41.2 - 55.5)	25.3 (21.6 - 28.9)	3.7	179	63.2 (55.6 - 70.8)	27.5 (24.9 - 30.2)	3.1
4AD3	56	34.9 (28.1 - 41.7)	15.2 (11.4 - 19.0)	3.0	50	25.0 (18.8 - 31.3)	18.5 (14.8 - 22.1)	5.2	106	30.3 (25.5 - 35.0)	16.7 (14.1 - 19.4)	3.9
4AD4	22	99.0 (77.7 - 120.3)	32.7 (23.5 - 41.9)	2.3	17	55.2 (27.8 - 82.6)	28.5 (19.2 - 37.9)	3.6	39	79.9 (61.7 - 98.1)	30.9 (24.3 - 37.4)	2.7
<b>Total episodes</b>	<b>244</b>				<b>319</b>				<b>563</b>			

NOTE 1: Where the number of episodes < 5 details are not given for reasons of privacy and accuracy.

NOTE 2: Incomplete episodes are excluded from analysis

### AN-SNAP V4 classes for Spinal Cord Dysfunction

Class	Description of AN-SNAP class
4AZ1	Weighted FIM motor score 13-18, Brain, Spine, MMT, Age ≥ 49
4AZ2	Weighted FIM motor score 13-18, Brain, Spine, MMT, Age ≤ 48
4AD1	Spinal cord dysfunction, Age ≥ 50, weighted FIM motor 42-91
4AD2	Spinal cord dysfunction, Age ≥ 50, weighted FIM motor 19-41
4AD3	Spinal cord dysfunction, Age ≤ 49, weighted FIM motor 34-91
4AD4	Spinal cord dysfunction, Age ≤ 49, weighted FIM motor 19-33
4AP1	Major Multiple Trauma, weighted FIM motor 19-91

### All Spinal Cord Dysfunction impairment codes

Traumatic spinal cord dysfunction	Non traumatic spinal cord dysfunction
4.211 Paraplegia, incomplete	4.111 Paraplegia, incomplete
4.212 Paraplegia, complete	4.112 Paraplegia, complete
4.2211 Quadriplegia, incomplete C1-4	4.1211 Quadriplegia, incomplete C1-4
4.2212 Quadriplegia, incomplete C5-8	4.1212 Quadriplegia, incomplete C5-8
4.2221 Quadriplegia, complete C1-4	4.1221 Quadriplegia, complete C1-4
4.2222 Quadriplegia, complete C5-8	4.1222 Quadriplegia, complete C5-8
4.23 Other traumatic spinal cord dysfunction	4.13 Other non-traumatic spinal cord dysfunction
<b>Major Multiple Trauma</b>	
14.1 Brain + spinal cord injury	
14.3 Spinal cord + multi fracture/amputation	

## Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V3, Financial Year 2016



AN-SNAP class	Specialist Spinal Units				Non Specialist Spinal Units				All AROC Facilities			
	No.	Length of stay	FIM change	FIM gain per week	No.	Length of stay	FIM change	FIM gain per week	No.	Length of stay	FIM change	FIM gain per week
		Mean (95%CI)	Mean (95%CI)			Mean (95%CI)	Mean (95%CI)			Mean (95%CI)	Mean (95%CI)	
<b>Traumatic episodes</b>												
3-202	98	131.1 (115.6 - 146.6)	24.7 (19.9 - 29.5)	1.3	7	59.9 (10.3 - 109.5)	5.1 (-3.5 - 13.8)	0.6	105	126.4 (111.1 - 141.6)	23.4 (18.8 - 28.0)	1.3
3-220	6	13.0 (7.9 - 18.1)	3.3 (-0.1 - 6.8)	1.8	2	n.a	n.a	n.a	8	11.3 (6.9 - 15.6)	2.6 (0.0 - 5.3)	1.6
3-221	49	34.9 (25.5 - 44.2)	19.7 (16.6 - 22.7)	4.0	52	17.2 (13.6 - 20.8)	15.5 (12.5 - 18.5)	6.3	101	25.8 (20.6 - 31.0)	17.5 (15.3 - 19.7)	4.8
3-222	128	92.8 (81.2 - 104.3)	37.2 (33.4 - 41.0)	2.8	38	50.4 (37.8 - 63.0)	28.8 (23.1 - 34.5)	4.0	166	83.1 (73.3 - 92.8)	35.3 (32.1 - 38.5)	3.0
3-223	39	93.3 (75.6 - 111.0)	40.2 (34.1 - 46.4)	3.0	4	n.a	n.a	n.a	43	89.5 (73.1 - 105.9)	39.4 (33.5 - 45.3)	3.1
3-238	1	n.a	n.a	n.a	8	13.4 (6.3 - 20.4)	5.3 (0.6 - 9.9)	2.7	9	13.6 (7.4 - 19.7)	5.0 (0.9 - 9.1)	2.6
3-239	3	n.a	n.a	n.a	12	34.0 (18.8 - 49.2)	24.4 (16.9 - 32.0)	5.0	15	32.1 (19.5 - 44.7)	25.2 (18.9 - 31.5)	5.5
3-240	11	85.6 (65.1 - 106.2)	35.3 (26.8 - 43.8)	2.9	11	47.5 (32.8 - 62.3)	37.5 (27.2 - 47.7)	5.5	22	66.6 (51.9 - 81.3)	36.4 (29.9 - 42.8)	3.8
3-241	2	n.a	n.a	n.a	5	57.0 (21.8 - 92.2)	21.6 (-3.3 - 46.5)	2.7	7	82.1 (32.5 - 131.8)	27.3 (6.7 - 47.9)	2.3
<b>Total episodes</b>	<b>337</b>				<b>139</b>				<b>476</b>			
<b>Non-Traumatic episodes</b>												
3-202	12	78.8 (38.7 - 119.0)	25.8 (12.0 - 39.5)	2.3	4	n.a	n.a	n.a	16	86.5 (46.9 - 126.1)	30.4 (17.7 - 43.1)	2.5
3-220	5	22.8 (10.2 - 35.4)	5.8 (3.4 - 8.2)	1.8	6	14.5 (6.1 - 22.9)	5.2 (1.3 - 9.0)	2.5	11	18.3 (11.0 - 25.6)	5.5 (3.2 - 7.7)	2.1
3-221	97	34.1 (29.1 - 39.1)	14.4 (11.7 - 17.2)	3.0	159	20.6 (17.9 - 23.3)	16.8 (15.3 - 18.3)	5.7	256	25.7 (23.0 - 28.3)	15.9 (14.5 - 17.3)	4.3
3-222	120	85.4 (74.5 - 96.2)	29.4 (26.1 - 32.7)	2.4	142	46.5 (40.2 - 52.7)	25.1 (22.0 - 28.3)	3.8	262	64.3 (57.8 - 70.7)	27.1 (24.8 - 29.4)	2.9
3-223	10	62.4 (44.6 - 80.2)	36.1 (24.8 - 47.4)	4.0	8	32.0 (24.1 - 39.9)	22.3 (9.7 - 34.8)	4.9	18	48.9 (36.1 - 61.6)	29.9 (21.1 - 38.8)	4.3
<b>Total episodes</b>	<b>244</b>				<b>319</b>				<b>563</b>			

NOTE 1: Where the number of episodes < 5 details are not given for reasons of privacy and accuracy.

NOTE 2: Incomplete episodes are excluded from analysis

### AN-SNAP V3 classes for Spinal Cord Dysfunction

Class	Description of AN-SNAP class
3-202	Brain, Neurological, Spinal & Major Multiple Trauma, FIM 13
3-220	Spinal Cord Dysfunction, FIM motor 81-91
3-221	Spinal Cord Dysfunction, FIM motor 47-80
3-222	Spinal Cord Dysfunction, FIM motor 14-46, age>=33
3-223	Spinal Cord Dysfunction, FIM motor 14-46, age<=32
3-238	Major Multiple Trauma, FIM total 101-126
3-239	Major Multiple Trauma, FIM total 74-100 or Burns
3-240	Major Multiple Trauma, FIM total 44-73
3-241	Major Multiple Trauma, FIM total 19-43

### All Spinal Cord Dysfunction impairment codes

Traumatic spinal cord dysfunction	Non traumatic spinal cord dysfunction
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4.212 Paraplegia, complete	4.112 Paraplegia, complete
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<b>Major Multiple Trauma</b>	
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