

## Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V4, Calendar 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	56	117.0 (98.4 - 135.7)	31.9 (25.0 - 38.8)	1.9	7	70.7 (40.6 - 100.9)	24.3 (1.2 - 47.4)	2.4	63	111.9 (94.5 - 129.2)	31.1 (24.4 - 37.7)	1.9
4AZ2	38	140.2 (111.9 - 168.4)	29.9 (21.7 - 38.1)	1.5	1	n.a	n.a	n.a	39	136.6 (107.9 - 165.4)	29.2 (20.9 - 37.4)	1.5
4AD1	26	32.4 (22.5 - 42.4)	25.0 (20.2 - 29.7)	5.4	30	19.6 (13.8 - 25.4)	19.9 (14.9 - 24.9)	7.1	56	25.5 (19.8 - 31.3)	22.3 (18.8 - 25.7)	6.1
4AD2	61	101.4 (84.0 - 118.8)	33.3 (28.3 - 38.2)	2.3	16	45.9 (24.7 - 67.2)	29.8 (21.5 - 38.0)	4.5	77	89.9 (74.7 - 105.1)	32.5 (28.3 - 36.8)	2.5
4AD3	40	34.8 (24.7 - 44.8)	21.0 (17.0 - 25.0)	4.2	24	20.6 (13.8 - 27.4)	17.3 (12.9 - 21.6)	5.9	64	29.5 (22.5 - 36.4)	19.6 (16.6 - 22.6)	4.7
4AD4	37	78.1 (60.6 - 95.6)	51.5 (48.9 - 54.1)	4.6	6	58.7 (20.0 - 97.3)	34.7 (12.7 - 56.6)	4.1	43	75.4 (59.5 - 91.3)	49.2 (45.2 - 53.1)	4.6
4AP1	11	70.7 (47.1 - 94.4)	36.5 (24.0 - 49.1)	3.6	30	24.9 (18.7 - 31.2)	26.8 (20.7 - 32.9)	7.5	41	37.2 (27.4 - 47.1)	29.4 (23.7 - 35.1)	5.5
<b>Total episodes</b>	<b>269</b>				<b>114</b>				<b>383</b>			
<b>Non-Traumatic episodes</b>												
4AZ1	20	100.4 (72.2 - 128.5)	24.5 (14.5 - 34.4)	1.7	17	64.6 (35.4 - 93.8)	27.5 (15.0 - 40.1)	3.0	37	83.9 (63.1 - 104.7)	25.9 (18.1 - 33.6)	2.2
4AZ2	15	111.4 (70.5 - 152.3)	17.7 (4.3 - 31.0)	1.1	3	n.a	n.a	n.a	18	96.5 (58.4 - 134.6)	18.4 (5.9 - 30.9)	1.3
4AD1	57	29.8 (24.1 - 35.5)	19.7 (16.7 - 22.7)	4.6	105	18.7 (16.2 - 21.2)	17.6 (15.8 - 19.5)	6.6	162	22.6 (19.9 - 25.3)	18.4 (16.8 - 20.0)	5.7
4AD2	69	78.6 (66.7 - 90.5)	31.3 (26.1 - 36.6)	2.8	89	49.9 (43.7 - 56.2)	27.3 (23.5 - 31.2)	3.8	158	62.4 (55.8 - 69.1)	29.1 (25.9 - 32.2)	3.3
4AD3	57	33.4 (26.9 - 39.9)	18.2 (14.3 - 22.2)	3.8	41	27.2 (19.7 - 34.6)	21.3 (17.3 - 25.4)	5.5	98	30.8 (25.9 - 35.7)	19.5 (16.7 - 22.4)	4.4
4AD4	20	90.7 (69.5 - 111.9)	36.7 (29.2 - 44.1)	2.8	9	41.2 (23.1 - 59.4)	20.7 (8.8 - 32.6)	3.5	29	75.3 (57.7 - 93.0)	31.7 (24.9 - 38.5)	2.9
<b>Total episodes</b>	<b>238</b>				<b>264</b>				<b>502</b>			

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

NOTE 2: Analysis includes first admission, complete episodes only

### 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, Calendar 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	72	130.1 (111.1 - 149.0)	28.3 (22.4 - 34.2)	1.5	4	n.a	n.a	n.a	76	127.3 (109.0 - 145.6)	27.3 (21.6 - 33.0)	1.5
3-220	5	11.8 (6.6 - 17.0)	3.6 (-0.5 - 7.7)	2.1	1	n.a	n.a	n.a	6	10.8 (6.2 - 15.5)	3.0 (-0.6 - 6.6)	1.9
3-221	54	34.7 (27.2 - 42.3)	22.2 (19.4 - 25.0)	4.5	45	17.1 (13.1 - 21.1)	17.1 (13.8 - 20.5)	7.0	99	26.7 (21.9 - 31.5)	19.9 (17.7 - 22.1)	5.2
3-222	103	95.6 (81.9 - 109.2)	38.4 (34.5 - 42.3)	2.8	30	46.1 (32.1 - 60.2)	30.7 (23.5 - 37.9)	4.7	133	84.4 (72.9 - 96.0)	36.7 (33.2 - 40.1)	3.0
3-223	24	82.6 (64.4 - 100.8)	47.7 (41.7 - 53.7)	4.0	4	n.a	n.a	n.a	28	77.9 (61.4 - 94.3)	45.7 (39.5 - 51.9)	4.1
3-238	0	n.a	n.a	n.a	6	8.0 (4.2 - 11.8)	9.7 (2.0 - 17.3)	8.5	6	8.0 (4.2 - 11.8)	9.7 (2.0 - 17.3)	8.5
3-239	2	n.a	n.a	n.a	14	24.1 (16.7 - 31.5)	23.2 (16.8 - 29.6)	6.8	16	24.8 (17.9 - 31.6)	24.3 (18.4 - 30.1)	6.9
3-240	8	76.3 (49.2 - 103.3)	34.9 (18.7 - 51.0)	3.2	9	31.1 (24.7 - 37.5)	44.6 (36.1 - 53.0)	10.0	17	52.4 (35.5 - 69.2)	40.0 (31.2 - 48.8)	5.3
3-241	2	n.a	n.a	n.a	1	n.a	n.a	n.a	3	n.a	n.a	n.a
<b>Total episodes</b>	<b>270</b>				<b>114</b>				<b>384</b>			
<b>Non-Traumatic episodes</b>												
3-202	16	113.2 (77.6 - 148.8)	22.6 (10.9 - 34.3)	1.4	3	n.a	n.a	n.a	19	114.1 (78.0 - 150.1)	22.3 (11.2 - 33.4)	1.4
3-220	6	25.3 (15.9 - 34.8)	3.7 (1.3 - 6.0)	1.0	4	n.a	n.a	n.a	10	18.0 (10.0 - 26.0)	3.7 (1.7 - 5.7)	1.4
3-221	96	30.4 (25.6 - 35.1)	17.7 (15.3 - 20.1)	4.1	127	20.8 (17.7 - 23.8)	17.9 (16.3 - 19.5)	6.0	223	24.9 (22.1 - 27.7)	17.8 (16.4 - 19.2)	5.0
3-222	107	83.0 (73.0 - 93.0)	31.8 (27.7 - 35.9)	2.7	124	47.1 (41.9 - 52.3)	27.2 (23.8 - 30.6)	4.0	231	63.7 (57.9 - 69.6)	29.3 (26.7 - 32.0)	3.2
3-223	13	58.5 (28.2 - 88.7)	25.3 (14.7 - 35.9)	3.0	6	31.8 (20.6 - 43.1)	26.5 (8.9 - 44.1)	5.8	19	50.1 (28.8 - 71.3)	25.7 (17.0 - 34.4)	3.6
<b>Total episodes</b>	<b>238</b>				<b>264</b>				<b>502</b>			

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

NOTE 2: Analysis includes first admission, complete episodes only

### 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

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