

Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V4, Financial Year 2017



AN-SNAP class	Specialist Spinal Units				Non Specialist Spinal Units				All AROC Facilities			
	Length of stay		FIM change	FIM gain per week	Length of stay		FIM change	FIM gain per week	Length of stay		FIM change	FIM gain per week
	No.	Mean (95%CI)	Mean (95%CI)		No.	Mean (95%CI)	Mean (95%CI)		No.	Mean (95%CI)	Mean (95%CI)	
Traumatic episodes												
4AZ1	52	110.5 (93.0 - 128.0)	28.0 (21.2 - 34.8)	1.8	9	68.7 (35.7 - 101.7)	23.3 (5.9 - 40.8)	2.4	61	104.3 (88.3 - 120.4)	27.3 (21.0 - 33.6)	1.8
4AZ2	38	104.3 (90.5 - 118.0)	38.3 (29.4 - 47.2)	2.6	7	79.0 (8.3 - 149.7)	38.0 (7.1 - 68.9)	3.4	45	100.4 (84.7 - 116.0)	38.3 (29.5 - 47.0)	2.7
4AD1	27	32.7 (25.1 - 40.4)	26.9 (22.3 - 31.5)	5.8	24	24.4 (14.3 - 34.4)	19.7 (14.7 - 24.7)	5.7	51	28.8 (22.5 - 35.1)	23.5 (20.0 - 27.0)	5.7
4AD2	51	82.1 (63.5 - 100.7)	37.6 (32.5 - 42.7)	3.2	12	35.3 (18.0 - 52.5)	27.1 (18.0 - 36.2)	5.4	63	73.1 (57.1 - 89.2)	35.6 (31.0 - 40.2)	3.4
4AD3	42	46.2 (31.8 - 60.5)	19.9 (16.0 - 23.7)	3.0	22	20.4 (13.3 - 27.5)	17.9 (13.5 - 22.2)	6.1	64	37.3 (27.1 - 47.5)	19.2 (16.2 - 22.1)	3.6
4AD4	44	66.2 (56.5 - 75.8)	52.5 (48.7 - 56.4)	5.6	4	n.a	n.a	n.a	48	68.1 (58.7 - 77.5)	52.1 (48.4 - 55.8)	5.4
4AP1	9	52.7 (31.0 - 74.4)	45.1 (29.8 - 60.5)	6.0	30	31.7 (20.3 - 43.2)	32.3 (25.7 - 38.9)	7.1	39	36.6 (26.1 - 47.1)	35.3 (28.9 - 41.6)	6.7
Total episodes	263				108				371			
Non-Traumatic episodes												
4AZ1	19	88.5 (66.2 - 110.7)	26.3 (17.9 - 34.7)	2.1	15	55.9 (40.6 - 71.1)	22.0 (10.1 - 33.9)	2.8	34	74.1 (58.9 - 89.3)	24.4 (17.3 - 31.5)	2.3
4AZ2	13	115.3 (75.6 - 155.1)	32.9 (16.4 - 49.5)	2.0	4	n.a	n.a	n.a	17	99.8 (64.6 - 135.1)	29.4 (15.2 - 43.7)	2.1
4AD1	67	35.3 (28.1 - 42.6)	20.0 (16.8 - 23.2)	4.0	115	20.3 (17.5 - 23.1)	19.0 (17.2 - 20.9)	6.6	182	25.8 (22.5 - 29.2)	19.4 (17.7 - 21.1)	5.3
4AD2	75	80.5 (70.0 - 90.9)	32.7 (27.6 - 37.8)	2.8	88	48.2 (42.2 - 54.2)	28.5 (24.6 - 32.5)	4.1	163	63.1 (56.8 - 69.3)	30.4 (27.3 - 33.6)	3.4
4AD3	42	28.0 (22.2 - 33.7)	20.0 (16.1 - 23.9)	5.0	41	29.5 (19.0 - 40.0)	19.9 (15.8 - 24.0)	4.7	83	28.7 (22.8 - 34.6)	20.0 (17.2 - 22.8)	4.9
4AD4	18	85.9 (63.2 - 108.7)	41.6 (34.2 - 49.0)	3.4	9	54.0 (38.5 - 69.5)	33.6 (22.9 - 44.2)	4.3	27	75.3 (58.6 - 92.0)	38.9 (32.9 - 45.0)	3.6
Total episodes	234				272				506			

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

Major Multiple Trauma

- 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 2017



AN-SNAP class	Specialist Spinal Units				Non Specialist Spinal Units				All AROC Facilities			
	Length of stay		FIM change	FIM gain per week	Length of stay		FIM change	FIM gain per week	Length of stay		FIM change	FIM gain per week
	No.	Mean (95%CI)	Mean (95%CI)		No.	Mean (95%CI)	Mean (95%CI)		No.	Mean (95%CI)	Mean (95%CI)	
Traumatic episodes												
3-202	64	113.4 (98.5 - 128.4)	29.0 (22.7 - 35.2)	1.8	9	100.8 (46.6 - 154.9)	11.3 (3.8 - 18.8)	0.8	73	111.9 (97.2 - 126.5)	26.8 (21.1 - 32.5)	1.7
3-220	3	n.a	n.a	n.a	3	n.a	n.a	n.a	6	11.0 (7.7 - 14.3)	2.3 (0.2 - 4.5)	1.5
3-221	52	39.3 (28.5 - 50.1)	22.0 (18.9 - 25.1)	3.9	38	18.4 (14.4 - 22.4)	18.7 (15.3 - 22.2)	7.1	90	30.5 (23.7 - 37.2)	20.6 (18.3 - 23.0)	4.7
3-222	103	77.6 (66.8 - 88.4)	38.7 (34.9 - 42.6)	3.5	24	45.0 (30.4 - 59.7)	32.9 (24.0 - 41.8)	5.1	127	71.4 (62.1 - 80.8)	37.6 (34.1 - 41.2)	3.7
3-223	33	74.2 (60.9 - 87.4)	52.2 (45.7 - 58.7)	4.9	3	n.a	n.a	n.a	36	74.1 (61.9 - 86.2)	51.9 (45.9 - 57.9)	4.9
3-238	0	n.a	n.a	n.a	4	n.a	n.a	n.a	4	n.a	n.a	n.a
3-239	0	n.a	n.a	n.a	11	23.5 (15.4 - 31.5)	21.2 (16.3 - 26.1)	6.3	11	23.5 (15.4 - 31.5)	21.2 (16.3 - 26.1)	6.3
3-240	8	45.6 (26.4 - 64.8)	43.3 (26.2 - 60.3)	6.6	13	32.6 (20.1 - 45.1)	42.8 (34.2 - 51.4)	9.2	21	37.6 (27.0 - 48.2)	43.0 (34.9 - 51.0)	8.0
3-241	1	n.a	n.a	n.a	3	n.a	n.a	n.a	4	n.a	n.a	n.a
Total episodes	264				108				372			
Non-Traumatic episodes												
3-202	13	103.2 (65.9 - 140.4)	26.8 (13.1 - 40.6)	1.8	3	n.a	n.a	n.a	16	96.9 (64.6 - 129.1)	22.2 (10.1 - 34.3)	1.6
3-220	7	15.0 (9.1 - 20.9)	0.3 (-1.8 - 2.4)	0.1	4	n.a	n.a	n.a	11	12.0 (7.5 - 16.5)	1.3 (-0.3 - 2.8)	0.7
3-221	89	29.9 (24.9 - 34.9)	18.5 (16.2 - 20.8)	4.3	134	21.6 (17.9 - 25.4)	18.2 (16.5 - 19.8)	5.9	223	24.9 (21.9 - 28.0)	18.3 (17.0 - 19.6)	5.1
3-222	112	81.1 (72.6 - 89.5)	34.2 (30.4 - 38.1)	3.0	126	47.7 (42.8 - 52.6)	28.6 (25.3 - 31.9)	4.2	238	63.4 (58.2 - 68.6)	31.3 (28.7 - 33.8)	3.5
3-223	13	85.7 (50.6 - 120.8)	36.8 (25.7 - 47.9)	3.0	5	33.2 (20.1 - 46.3)	32.2 (13.2 - 51.2)	6.8	18	71.1 (43.3 - 99.0)	35.5 (26.1 - 44.9)	3.5
Total episodes	234				272				506			

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

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
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4.2222 Quadriplegia, complete C5-8	4.1222 Quadriplegia, complete C5-8
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Major Multiple Trauma	
14.1 Brain + spinal cord injury	
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