

Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V4, Financial Year 2020



AN-SNAP class	Specialist Spinal Units			Non Specialist Spinal Units			All AROC Facilities					
	Length of stay		FIM change	FIM gain	Length of stay		FIM change	FIM gain	Length of stay		FIM change	FIM gain
	No.	Mean (95%CI)	Mean (95%CI)	per week	No.	Mean (95%CI)	Mean (95%CI)	per week	No.	Mean (95%CI)	Mean (95%CI)	per week
Traumatic episodes												
4AZ1	47	133.6 (109.9 - 157.3)	24.4 (17.1 - 31.6)	1.3	12	54.2 (37.1 - 71.2)	30.2 (13.3 - 47.1)	3.9	59	117.5 (96.6 - 138.4)	25.5 (18.8 - 32.2)	1.5
4AZ2	34	155.1 (122.4 - 187.7)	20.8 (13.2 - 28.4)	0.9	5	87.6 (16.3 - 158.9)	23.0 (0.5 - 45.5)	1.8	39	146.4 (115.9 - 176.9)	21.1 (14.0 - 28.2)	1.0
4AD1	17	23.7 (15.8 - 31.6)	15.8 (10.4 - 21.1)	4.7	32	22.2 (12.9 - 31.5)	18.5 (15.4 - 21.6)	5.8	49	22.7 (16.1 - 29.4)	17.6 (14.8 - 20.3)	5.4
4AD2	42	99.9 (73.9 - 126.0)	29.0 (23.1 - 35.0)	2.0	18	49.5 (36.9 - 62.1)	27.4 (18.0 - 36.9)	3.9	60	84.8 (65.2 - 104.4)	28.6 (23.5 - 33.6)	2.4
4AD3	41	55.0 (39.3 - 70.8)	23.2 (19.0 - 27.4)	3.0	16	30.1 (15.4 - 44.7)	23.5 (15.5 - 31.5)	5.5	57	48.0 (35.6 - 60.5)	23.3 (19.6 - 27.1)	3.4
4AD4	25	76.6 (62.1 - 91.1)	42.5 (36.1 - 48.9)	3.9	2	n.a	n.a	n.a	27	72.7 (58.2 - 87.1)	41.1 (34.6 - 47.7)	4.0
4AP1	15	141.4 (110.6 - 172.2)	31.6 (21.8 - 41.4)	1.6	21	32.9 (19.4 - 46.4)	24.1 (14.4 - 33.8)	5.1	36	78.1 (55.0 - 101.2)	27.2 (20.2 - 34.2)	2.4
Total episodes	221				106				327			
Non-Traumatic episodes												
4AZ1	20	89.6 (65.2 - 113.9)	29.6 (19.5 - 39.7)	2.3	21	54.5 (38.4 - 70.5)	25.0 (14.6 - 35.4)	3.2	41	71.6 (56.2 - 86.9)	27.2 (20.0 - 34.5)	2.7
4AZ2	11	187.3 (116.6 - 258.0)	22.4 (11.0 - 33.7)	0.8	2	n.a	n.a	n.a	13	162.2 (94.2 - 230.2)	20.5 (10.4 - 30.5)	0.9
4AD1	57	36.4 (28.7 - 44.1)	20.5 (17.7 - 23.4)	3.9	166	22.1 (18.2 - 26.1)	20.9 (19.2 - 22.5)	6.6	223	25.8 (22.2 - 29.4)	20.8 (19.4 - 22.2)	5.6
4AD2	86	92.4 (77.1 - 107.8)	31.2 (27.4 - 34.9)	2.4	105	48.9 (41.2 - 56.6)	32.7 (28.9 - 36.4)	4.7	191	68.5 (59.9 - 77.2)	32.0 (29.3 - 34.6)	3.3
4AD3	36	40.4 (29.2 - 51.6)	22.4 (17.7 - 27.2)	3.9	55	23.8 (17.8 - 29.9)	21.4 (17.6 - 25.2)	6.3	91	30.4 (24.4 - 36.4)	21.8 (18.8 - 24.7)	5.0
4AD4	20	102.2 (73.9 - 130.4)	38.7 (32.0 - 45.4)	2.7	13	33.0 (22.9 - 43.1)	34.8 (18.6 - 50.9)	7.4	33	74.9 (53.7 - 96.1)	37.2 (29.7 - 44.6)	3.5
Total episodes	230				362				592			

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

- 4.211 Paraplegia, incomplete
- 4.212 Paraplegia, complete
- 4.2211 Quadriplegia, incomplete C1-4
- 4.2212 Quadriplegia, incomplete C5-8
- 4.2221 Quadriplegia, complete C1-4
- 4.2222 Quadriplegia, complete C5-8
- 4.23 Other traumatic spinal cord dysfunction

Non traumatic spinal cord dysfunction

- 4.111 Paraplegia, incomplete
- 4.112 Paraplegia, complete
- 4.1211 Quadriplegia, incomplete C1-4
- 4.1212 Quadriplegia, incomplete C5-8
- 4.1221 Quadriplegia, complete C1-4
- 4.1222 Quadriplegia, complete C5-8
- 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 2020



AN-SNAP class	Specialist Spinal Units			Non Specialist Spinal Units			All AROC Facilities					
	Length of stay		FIM change	FIM gain	Length of stay		FIM change	FIM gain	Length of stay		FIM change	FIM gain
	No.	Mean (95%CI)	Mean (95%CI)	per week	No.	Mean (95%CI)	Mean (95%CI)	per week	No.	Mean (95%CI)	Mean (95%CI)	per week
Traumatic episodes												
3-202	61	143.3 (122.4 - 164.2)	21.6 (15.6 - 27.5)	1.1	5	92.2 (32.2 - 152.2)	33.0 (0.7 - 65.3)	2.5	66	139.4 (119.4 - 159.5)	22.4 (16.5 - 28.4)	1.1
3-220	3	n.a	n.a	n.a	1	n.a	n.a	n.a	4	n.a	n.a	n.a
3-221	38	31.7 (25.3 - 38.1)	16.9 (14.1 - 19.8)	3.7	39	23.0 (14.8 - 31.3)	17.4 (14.5 - 20.2)	5.3	77	27.3 (22.0 - 32.6)	17.2 (15.2 - 19.2)	4.4
3-222	82	99.9 (80.8 - 119.0)	30.5 (26.1 - 34.9)	2.1	36	46.3 (35.4 - 57.1)	29.7 (23.0 - 36.4)	4.5	118	83.5 (69.1 - 97.9)	30.3 (26.6 - 33.9)	2.5
3-223	22	97.6 (77.9 - 117.3)	40.1 (32.8 - 47.4)	2.9	3	n.a	n.a	n.a	25	90.8 (71.7 - 109.9)	38.3 (31.1 - 45.5)	3.0
3-238	0	n.a	n.a	n.a	6	12.0 (2.3 - 21.7)	7.7 (3.7 - 11.6)	4.5	6	12.0 (2.3 - 21.7)	7.7 (3.7 - 11.6)	4.5
3-239	4	n.a	n.a	n.a	5	26.6 (5.9 - 47.3)	22.0 (5.9 - 38.1)	5.8	9	44.2 (24.9 - 63.6)	26.2 (16.4 - 36.0)	4.2
3-240	11	168.7 (142.0 - 195.5)	31.6 (18.3 - 44.9)	1.3	8	57.3 (31.4 - 83.1)	25.6 (10.6 - 40.6)	3.1	19	121.8 (90.7 - 152.8)	29.1 (19.5 - 38.7)	1.7
3-241	0	n.a	n.a	n.a	3	n.a	n.a	n.a	3	n.a	n.a	n.a
Total episodes	221				106				327			
Non-Traumatic episodes												
3-202	18	146.7 (93.6 - 199.8)	28.9 (18.5 - 39.4)	1.4	5	77.6 (20.5 - 134.7)	25.6 (1.9 - 49.3)	2.3	23	131.7 (87.7 - 175.7)	28.2 (18.9 - 37.5)	1.5
3-220	1	n.a	n.a	n.a	7	9.3 (4.7 - 13.9)	2.1 (0.4 - 3.9)	1.6	8	9.9 (5.7 - 14.0)	2.5 (0.8 - 4.2)	1.8
3-221	72	36.7 (29.5 - 43.8)	18.4 (15.9 - 21.0)	3.5	185	22.2 (18.3 - 26.0)	20.0 (18.6 - 21.4)	6.3	257	26.2 (22.7 - 29.7)	19.5 (18.3 - 20.8)	5.2
3-222	128	88.5 (76.6 - 100.4)	31.6 (28.5 - 34.6)	2.5	153	44.6 (38.9 - 50.2)	31.2 (28.1 - 34.4)	4.9	281	64.6 (57.9 - 71.3)	31.4 (29.2 - 33.6)	3.4
3-223	11	68.6 (42.7 - 94.5)	34.3 (25.3 - 43.2)	3.5	12	30.5 (20.1 - 40.9)	37.7 (23.6 - 51.7)	8.6	23	48.7 (33.4 - 64.1)	36.0 (27.7 - 44.4)	5.2
Total episodes	230				362				592			

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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
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	