

Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V5, Financial Year 2024



AN-SNAP class	Specialist Spinal Units				Non Specialist Spinal Units				All AROC Facilities			
	No.	Length of stay	FIM change	FIM gain	No.	Length of stay	FIM change	FIM gain	No.	Length of stay	FIM change	FIM gain
		Mean (95%CI)	Mean (95%CI)	per week		Mean (95%CI)	Mean (95%CI)	per week		Mean (95%CI)	Mean (95%CI)	per week
Traumatic episodes												
5AZ1	41	112.1 (94.3 - 129.9)	23.8 (16.9 - 30.6)	1.5	10	55.7 (36.0 - 75.4)	29.1 (14.0 - 44.2)	3.7	51	101.0 (85.0 - 117.1)	24.8 (18.5 - 31.1)	1.7
5AZ2	59	144.0 (120.2 - 167.8)	21.7 (15.7 - 27.8)	1.1	8	140.9 (91.5 - 190.3)	54.5 (35.2 - 73.8)	2.7	67	143.7 (122.0 - 165.3)	25.6 (19.4 - 31.9)	1.2
5AD1	34	30.5 (21.9 - 39.1)	12.6 (9.4 - 15.9)	2.9	17	16.5 (10.7 - 22.3)	13.9 (10.2 - 17.6)	5.9	51	25.8 (19.5 - 32.1)	13.1 (10.6 - 15.5)	3.5
5AD2	33	69.1 (49.4 - 88.8)	28.8 (25.3 - 32.4)	2.9	21	32.8 (21.9 - 43.6)	31.8 (26.3 - 37.3)	6.8	54	55.0 (41.4 - 68.5)	30.0 (26.9 - 33.0)	3.8
5AD3	56	98.8 (81.6 - 115.9)	38.5 (33.4 - 43.7)	2.7	29	52.9 (33.2 - 72.5)	28.2 (20.7 - 35.7)	3.7	85	83.1 (69.1 - 97.0)	35.0 (30.6 - 39.4)	2.9
5API	5	81.4 (46.5 - 116.3)	11.8 (3.0 - 20.6)	1.0	44	45.2 (34.8 - 55.6)	25.9 (22.3 - 29.5)	4.0	49	48.9 (38.6 - 59.2)	24.4 (20.9 - 28.0)	3.5
5AP2	18	111.7 (89.7 - 133.7)	31.7 (22.3 - 41.0)	2.0	20	54.2 (32.4 - 76.0)	36.5 (28.4 - 44.5)	4.7	38	81.4 (63.7 - 99.2)	34.2 (28.1 - 40.2)	2.9
Total episodes	246				149				395			
Non-Traumatic episodes												
5AZ1	17	147.5 (101.9 - 193.0)	35.1 (24.3 - 45.8)	1.7	15	70.4 (51.4 - 89.4)	26.1 (15.7 - 36.5)	2.6	32	111.3 (82.9 - 139.8)	30.8 (23.3 - 38.3)	1.9
5AZ2	11	109.9 (67.7 - 152.1)	27.1 (12.2 - 42.0)	1.7	2	n.a	n.a	n.a	13	95.2 (54.7 - 135.6)	23.6 (10.3 - 36.9)	1.7
5AD1	41	37.3 (28.7 - 46.0)	16.5 (13.7 - 19.3)	3.1	134	18.5 (15.6 - 21.3)	15.3 (13.8 - 16.7)	5.8	175	22.9 (19.7 - 26.1)	15.6 (14.3 - 16.9)	4.8
5AD2	37	68.1 (54.5 - 81.7)	31.1 (27.2 - 35.1)	3.2	81	32.8 (27.6 - 38.0)	31.1 (28.6 - 33.6)	6.6	118	43.9 (37.6 - 50.1)	31.1 (29.0 - 33.2)	5.0
5AD3	88	97.3 (83.1 - 111.6)	30.7 (26.7 - 34.8)	2.2	103	57.4 (49.6 - 65.3)	31.6 (27.8 - 35.4)	3.9	191	75.8 (67.5 - 84.1)	31.2 (28.4 - 34.0)	2.9
Total episodes	194				335				529			

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 V5 classes for Spinal Cord Dysfunction

Class	Description of AN-SNAP class
5AZ1	Weighted FIM Motor score 13-18, Brain, Spine, MMT, Burns, Age >= 59
5AZ2	Weighted FIM Motor score 13-18, Brain, Spine, MMT, Burns, Age 18 - 58
5AD1	Spinal cord dysfunction, Weighted FIM Motor 55 - 91
5AD2	Spinal cord dysfunction, Weighted FIM Motor 37 - 54
5AD3	Spinal cord dysfunction, Weighted FIM Motor 19 - 36
5API	Major Multiple Trauma, Weighted FIM Motor 51 - 91
5AP2	Major Multiple Trauma, Weighted FIM Motor 19 - 50

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 V4, Financial Year 2024



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)	
Traumatic episodes												
4AZ1	58	124.8 (105.4 - 144.3)	22.8 (16.8 - 28.8)	1.3	11	69.3 (37.0 - 101.6)	31.5 (16.8 - 46.1)	3.2	69	116.0 (98.3 - 133.7)	24.2 (18.6 - 29.7)	1.5
4AZ2	44	140.0 (113.7 - 166.4)	24.4 (17.0 - 31.8)	1.2	7	131.7 (78.3 - 185.2)	54.4 (32.0 - 76.9)	2.9	51	138.9 (115.1 - 162.6)	28.5 (21.0 - 36.0)	1.4
4AD1	26	45.7 (32.0 - 59.4)	17.2 (12.4 - 22.0)	2.6	20	24.1 (14.4 - 33.8)	25.4 (19.6 - 31.2)	7.4	46	36.3 (27.1 - 45.6)	20.8 (16.9 - 24.6)	4.0
4AD2	38	94.4 (71.0 - 117.9)	30.4 (24.1 - 36.8)	2.3	33	48.2 (30.7 - 65.8)	27.3 (20.6 - 34.0)	4.0	71	73.0 (57.0 - 88.9)	29.0 (24.4 - 33.6)	2.8
4AD3	31	39.5 (27.8 - 51.3)	22.0 (17.4 - 26.6)	3.9	12	29.8 (12.8 - 46.9)	20.3 (11.6 - 28.9)	4.8	43	36.8 (27.2 - 46.5)	21.5 (17.5 - 25.6)	4.1
4AD4	26	108.7 (86.8 - 130.6)	44.9 (39.1 - 50.6)	2.9	2	n.a	n.a	n.a	28	103.4 (81.8 - 125.0)	44.1 (38.3 - 50.0)	3.0
4API	21	100.5 (81.2 - 119.9)	23.4 (16.7 - 30.1)	1.6	64	48.0 (38.2 - 57.8)	29.2 (25.5 - 32.9)	4.3	85	61.0 (51.0 - 71.0)	27.8 (24.5 - 31.0)	3.2
Total episodes	244				149				393			
Non-Traumatic episodes												
4AZ1	25	139.8 (106.2 - 173.3)	37.0 (27.6 - 46.5)	1.9	16	70.7 (52.8 - 88.6)	25.9 (16.1 - 35.7)	2.6	41	112.8 (88.9 - 136.7)	32.7 (25.6 - 39.7)	2.0
4AZ2	5	81.2 (19.4 - 143.0)	21.2 (-0.9 - 43.3)	1.8	2	n.a	n.a	n.a	7	62.0 (12.5 - 111.5)	16.4 (-0.1 - 32.9)	1.9
4AD1	32	50.3 (39.2 - 61.3)	23.2 (19.2 - 27.2)	3.2	151	22.1 (18.9 - 25.3)	19.8 (18.0 - 21.6)	6.3	183	27.0 (23.4 - 30.6)	20.4 (18.8 - 22.1)	5.3
4AD2	79	98.7 (82.5 - 114.9)	28.0 (24.1 - 31.8)	2.0	115	53.5 (46.9 - 60.2)	31.6 (28.2 - 35.0)	4.1	194	71.9 (63.6 - 80.2)	30.1 (27.6 - 32.7)	2.9
4AD3	32	39.4 (30.6 - 48.1)	21.7 (17.1 - 26.2)	3.9	45	22.7 (16.3 - 29.1)	20.5 (16.6 - 24.5)	6.3	77	29.6 (24.1 - 35.2)	21.0 (18.0 - 24.0)	5.0
4AD4	19	86.3 (70.1 - 102.5)	35.5 (26.7 - 44.3)	2.9	6	75.7 (20.9 - 130.4)	40.8 (20.7 - 61.0)	3.8	25	83.8 (66.5 - 101.0)	36.8 (28.7 - 44.9)	3.1
Total episodes	192				335				527			

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
4API	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 2024



AN-SNAP class	Specialist Spinal Units				Non Specialist Spinal Units				All AROC Facilities			
	No.	Length of stay	FIM change	FIM gain	No.	Length of stay	FIM change	FIM gain	No.	Length of stay	FIM change	FIM gain
		Mean (95%CI)	Mean (95%CI)	per week		Mean (95%CI)	Mean (95%CI)	per week		Mean (95%CI)	Mean (95%CI)	per week
Traumatic episodes												
3-202	66	133.2 (110.6 - 155.7)	20.8 (15.2 - 26.4)	1.1	7	116.1 (43.0 - 189.3)	40.7 (21.1 - 60.3)	2.5	73	131.5 (110.1 - 153.0)	22.7 (17.2 - 28.2)	1.2
3-220	6	20.5 (0.5 - 40.5)	2.7 (1.1 - 4.2)	0.9	1	n.a	n.a	n.a	7	19.3 (2.2 - 36.3)	2.9 (1.5 - 4.2)	1.0
3-221	41	43.0 (32.2 - 53.9)	18.9 (15.4 - 22.3)	3.1	24	22.3 (13.4 - 31.3)	18.6 (13.7 - 23.6)	5.8	65	35.4 (27.5 - 43.3)	18.8 (16.0 - 21.6)	3.7
3-222	83	100.7 (86.6 - 114.7)	31.9 (27.5 - 36.3)	2.2	48	49.9 (37.0 - 62.9)	29.8 (24.4 - 35.3)	4.2	131	82.1 (71.2 - 93.0)	31.1 (27.7 - 34.5)	2.7
3-223	23	115.7 (89.7 - 141.8)	37.8 (29.5 - 46.0)	2.3	3	n.a	n.a	n.a	26	108.6 (84.0 - 133.2)	37.7 (30.0 - 45.3)	2.4
3-238	1	n.a	n.a	n.a	8	22.8 (15.0 - 30.5)	9.3 (5.1 - 13.4)	2.8	9	31.1 (13.3 - 48.9)	8.2 (4.1 - 12.3)	1.9
3-239	9	92.0 (69.8 - 114.2)	23.1 (16.4 - 29.8)	1.8	36	45.5 (33.8 - 57.2)	28.7 (26.1 - 31.2)	4.4	45	54.8 (43.2 - 66.4)	27.6 (25.0 - 30.1)	3.5
3-240	13	114.3 (84.8 - 143.8)	30.1 (16.4 - 43.8)	1.8	19	61.8 (39.3 - 84.3)	37.1 (28.4 - 45.8)	4.2	32	83.2 (63.4 - 102.9)	34.3 (26.7 - 41.8)	2.9
3-241	2	n.a	n.a	n.a	3	n.a	n.a	n.a	5	115.4 (87.5 - 143.3)	58.2 (34.3 - 82.1)	3.5
Total episodes	244				149				393			
Non-Traumatic episodes												
3-202	10	131.6 (74.5 - 188.7)	37.3 (24.6 - 50.0)	2.0	3	n.a	n.a	n.a	13	119.7 (72.2 - 167.2)	34.8 (23.9 - 45.6)	2.0
3-220	4	n.a	n.a	n.a	11	11.6 (5.0 - 18.2)	5.1 (2.7 - 7.5)	3.1	15	11.2 (6.0 - 16.4)	4.9 (3.1 - 6.8)	3.1
3-221	50	44.9 (37.0 - 52.7)	20.6 (17.9 - 23.3)	3.2	156	21.2 (18.0 - 24.4)	18.5 (16.9 - 20.1)	6.1	206	27.0 (23.6 - 30.3)	19.0 (17.6 - 20.4)	4.9
3-222	118	100.6 (87.8 - 113.5)	30.4 (27.1 - 33.8)	2.1	160	51.9 (46.1 - 57.6)	31.2 (28.4 - 34.0)	4.2	278	72.6 (65.6 - 79.5)	30.9 (28.7 - 33.1)	3.0
3-223	11	70.4 (44.2 - 96.5)	33.0 (19.4 - 46.6)	3.3	5	31.2 (18.7 - 43.7)	42.0 (32.5 - 51.5)	9.4	16	58.1 (38.0 - 78.3)	35.8 (26.0 - 45.6)	4.3
Total episodes	193				335				528			

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

- 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

Major Multiple Trauma

- 14.1 Brain + spinal cord injury
- 14.3 Spinal cord + multi fracture/amputation

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