

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



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	57	143.4 (124.1 - 162.7)	24.1 (17.5 - 30.7)	1.2	10	62.2 (42.6 - 81.8)	25.1 (10.2 - 40.0)	2.8	67	131.3 (113.4 - 149.2)	24.3 (18.3 - 30.2)	1.3
4AZ2	31	154.1 (121.4 - 186.7)	20.5 (13.4 - 27.6)	0.9	5	90.4 (24.6 - 156.2)	22.0 (-1.5 - 45.5)	1.7	36	145.2 (115.0 - 175.5)	20.7 (14.0 - 27.5)	1.0
4AD1	22	29.6 (18.6 - 40.6)	23.7 (19.1 - 28.4)	5.6	27	16.7 (12.9 - 20.4)	19.9 (16.4 - 23.3)	8.3	49	22.5 (16.9 - 28.1)	21.6 (18.8 - 24.4)	6.7
4AD2	42	85.0 (72.2 - 97.8)	31.4 (25.9 - 37.0)	2.6	22	52.5 (34.3 - 70.8)	27.0 (19.7 - 34.3)	3.6	64	73.8 (62.7 - 84.9)	29.9 (25.5 - 34.3)	2.8
4AD3	35	50.4 (35.2 - 65.6)	23.1 (18.5 - 27.8)	3.2	10	25.8 (16.1 - 35.5)	23.0 (15.3 - 30.7)	6.2	45	44.9 (32.6 - 57.2)	23.1 (19.2 - 27.1)	3.6
4AD4	35	76.4 (63.9 - 88.9)	42.7 (37.2 - 48.2)	3.9	8	70.3 (21.0 - 119.5)	38.9 (21.8 - 56.0)	3.9	43	75.3 (62.0 - 88.5)	42.0 (36.7 - 47.3)	3.9
4AP1	12	150.1 (110.8 - 189.3)	39.5 (24.7 - 54.3)	1.8	20	27.0 (16.0 - 38.0)	28.2 (19.2 - 37.1)	7.3	32	73.2 (47.0 - 99.3)	32.4 (24.4 - 40.4)	3.1
Total episodes	234				102				336			
Non-Traumatic episodes												
4AZ1	12	82.7 (58.8 - 106.5)	24.0 (11.0 - 37.0)	2.0	26	50.0 (35.9 - 64.1)	21.7 (13.3 - 30.0)	3.0	38	60.3 (47.3 - 73.3)	22.4 (15.5 - 29.3)	2.6
4AZ2	10	109.2 (65.5 - 152.9)	28.0 (10.7 - 45.3)	1.8	3	n.a	n.a	n.a	13	111.6 (77.2 - 146.0)	24.1 (10.0 - 38.2)	1.5
4AD1	57	34.7 (28.2 - 41.3)	21.8 (19.2 - 24.4)	4.4	163	22.3 (18.3 - 26.3)	19.2 (17.5 - 21.0)	6.0	220	25.5 (22.0 - 29.0)	19.9 (18.4 - 21.4)	5.5
4AD2	86	85.7 (72.8 - 98.6)	32.7 (28.9 - 36.4)	2.7	97	46.4 (39.1 - 53.8)	32.5 (29.0 - 36.0)	4.9	183	64.9 (57.1 - 72.6)	32.6 (30.0 - 35.1)	3.5
4AD3	43	40.3 (31.4 - 49.2)	24.0 (20.3 - 27.7)	4.2	52	21.2 (16.9 - 25.4)	23.3 (19.1 - 27.5)	7.7	95	29.8 (24.8 - 34.9)	23.6 (20.8 - 26.4)	5.5
4AD4	23	112.5 (92.6 - 132.4)	40.5 (33.6 - 47.4)	2.5	19	49.2 (22.4 - 75.9)	35.7 (23.8 - 47.6)	5.1	42	83.9 (65.1 - 102.6)	38.3 (31.8 - 44.9)	3.2
Total episodes	231				360				591			

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, Calendar Year 2020



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	70	144.8 (127.4 - 162.3)	22.6 (17.3 - 27.9)	1.1	4	n.a	n.a	n.a	74	141.7 (124.6 - 158.8)	21.9 (16.8 - 27.0)	1.1
3-220	2	n.a	n.a	n.a	2	n.a	n.a	n.a	4	n.a	n.a	n.a
3-221	45	40.4 (30.5 - 50.4)	21.5 (18.5 - 24.5)	3.7	29	18.2 (13.8 - 22.6)	19.2 (16.6 - 21.9)	7.4	74	31.7 (25.0 - 38.5)	20.6 (18.5 - 22.7)	4.5
3-222	79	90.6 (75.6 - 105.6)	32.9 (28.4 - 37.4)	2.5	43	54.0 (39.9 - 68.2)	29.1 (23.0 - 35.1)	3.8	122	77.7 (66.3 - 89.1)	31.5 (27.9 - 35.2)	2.8
3-223	25	87.2 (66.9 - 107.5)	39.3 (32.0 - 46.6)	3.2	3	n.a	n.a	n.a	28	83.1 (64.0 - 102.2)	39.8 (33.2 - 46.4)	3.4
3-238	0	n.a	n.a	n.a	6	14.2 (5.3 - 23.0)	9.3 (5.6 - 13.1)	4.6	6	14.2 (5.3 - 23.0)	9.3 (5.6 - 13.1)	4.6
3-239	1	n.a	n.a	n.a	8	25.8 (12.4 - 39.1)	31.9 (24.1 - 39.6)	8.7	9	32.1 (15.1 - 49.2)	31.6 (24.8 - 38.4)	6.9
3-240	12	168.1 (137.5 - 198.7)	34.7 (19.8 - 49.5)	1.4	5	45.4 (2.6 - 88.2)	33.4 (14.1 - 52.7)	5.1	17	132.0 (95.1 - 168.9)	34.3 (22.6 - 46.0)	1.8
3-241	1	n.a	n.a	n.a	2	n.a	n.a	n.a	3	n.a	n.a	n.a
Total episodes	235				102				337			
Non-Traumatic episodes												
3-202	13	99.2 (60.9 - 137.4)	26.9 (13.2 - 40.6)	1.9	7	88.1 (50.7 - 125.6)	22.9 (6.0 - 39.7)	1.8	20	95.3 (68.0 - 122.6)	25.5 (15.2 - 35.8)	1.9
3-220	1	n.a	n.a	n.a	9	7.8 (4.0 - 11.6)	1.3 (0.2 - 2.4)	1.2	10	8.7 (4.9 - 12.5)	1.9 (0.4 - 3.4)	1.5
3-221	80	34.4 (28.9 - 39.8)	20.6 (18.3 - 22.8)	4.2	174	22.1 (18.3 - 25.9)	19.1 (17.6 - 20.6)	6.0	254	26.0 (22.8 - 29.1)	19.6 (18.3 - 20.8)	5.3
3-222	123	83.6 (73.2 - 93.9)	33.1 (30.0 - 36.2)	2.8	155	42.5 (37.1 - 47.8)	30.3 (27.4 - 33.3)	5.0	278	60.7 (54.7 - 66.6)	31.6 (29.4 - 33.7)	3.6
3-223	14	101.5 (81.7 - 121.3)	36.4 (25.9 - 46.8)	2.5	15	47.5 (13.4 - 81.7)	38.3 (25.7 - 50.8)	5.6	29	73.6 (51.5 - 95.7)	37.3 (29.3 - 45.4)	3.6
Total episodes	231				360				591			

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
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	