

Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V4, Financial Year 2021



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	67	133.7 (117.3 - 150.1)	25.0 (19.3 - 30.6)	1.3	10	86.5 (48.8 - 124.2)	26.7 (9.6 - 43.9)	2.2	77	127.5 (112.1 - 142.9)	25.2 (19.8 - 30.5)	1.4
4AZ2	36	123.9 (106.2 - 141.6)	27.4 (19.1 - 35.7)	1.5	5	49.2 (43.4 - 55.0)	27.8 (-4.7 - 60.3)	4.0	41	114.8 (97.5 - 132.1)	27.5 (19.3 - 35.6)	1.7
4AD1	30	30.6 (22.8 - 38.4)	24.5 (20.9 - 28.1)	5.6	19	15.9 (11.8 - 20.0)	20.1 (15.7 - 24.5)	8.9	49	24.9 (19.5 - 30.3)	22.8 (20.0 - 25.6)	6.4
4AD2	45	77.8 (66.0 - 89.6)	33.2 (27.7 - 38.8)	3.0	25	44.9 (28.7 - 61.1)	25.9 (18.7 - 33.1)	4.0	70	66.0 (55.9 - 76.2)	30.6 (26.2 - 35.0)	3.2
4AD3	34	41.5 (29.4 - 53.6)	25.5 (20.8 - 30.3)	4.3	12	21.7 (17.2 - 26.1)	23.1 (17.5 - 28.7)	7.5	46	36.3 (27.0 - 45.6)	24.9 (21.1 - 28.7)	4.8
4AD4	40	75.9 (62.1 - 89.7)	41.2 (34.9 - 47.5)	3.8	5	85.8 (10.3 - 161.3)	41.2 (17.9 - 64.5)	3.4	45	77.0 (62.7 - 91.3)	41.2 (35.1 - 47.3)	3.7
4AP1	12	120.1 (83.6 - 156.6)	30.3 (14.3 - 46.3)	1.8	17	24.5 (13.1 - 36.0)	30.4 (21.5 - 39.4)	8.7	29	64.1 (40.3 - 87.8)	30.4 (22.1 - 38.7)	3.3
Total episodes	264				93				357			
Non-Traumatic episodes												
4AZ1	18	104.9 (88.0 - 121.7)	28.3 (17.4 - 39.3)	1.9	20	48.6 (36.6 - 60.5)	29.1 (18.9 - 39.2)	4.2	38	75.2 (61.8 - 88.6)	28.7 (21.4 - 36.0)	2.7
4AZ2	6	108.3 (90.0 - 126.7)	33.7 (6.3 - 61.0)	2.2	2	n.a	n.a	n.a	8	113.4 (95.5 - 131.2)	28.8 (7.7 - 49.8)	1.8
4AD1	56	38.8 (31.0 - 46.6)	20.6 (18.1 - 23.0)	3.7	140	22.6 (19.0 - 26.1)	18.5 (16.4 - 20.5)	5.7	196	27.2 (23.7 - 30.7)	19.1 (17.4 - 20.7)	4.9
4AD2	83	81.2 (69.9 - 92.6)	31.1 (27.1 - 35.2)	2.7	98	45.6 (39.5 - 51.8)	29.2 (25.6 - 32.8)	4.5	181	62.0 (55.3 - 68.6)	30.1 (27.4 - 32.8)	3.4
4AD3	36	35.9 (28.3 - 43.6)	20.5 (16.3 - 24.7)	4.0	52	22.0 (17.0 - 27.0)	19.3 (15.5 - 23.1)	6.1	88	27.7 (23.2 - 32.2)	19.8 (17.0 - 22.6)	5.0
4AD4	18	119.7 (90.7 - 148.7)	38.0 (29.7 - 46.3)	2.2	14	70.5 (32.5 - 108.5)	31.6 (19.8 - 43.5)	3.1	32	98.2 (74.1 - 122.3)	35.2 (28.4 - 42.0)	2.5
Total episodes	217				326				543			

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 2021



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	73	135.7 (120.6 - 150.9)	24.7 (19.2 - 30.2)	1.3	6	48.3 (30.4 - 66.2)	36.3 (10.2 - 62.5)	5.3	79	129.1 (114.3 - 143.9)	25.6 (20.2 - 31.0)	1.4
3-220	4	n.a	n.a	n.a	2	n.a	n.a	n.a	6	17.0 (8.2 - 25.8)	6.3 (3.4 - 9.3)	2.6
3-221	48	36.9 (27.8 - 46.1)	22.4 (19.7 - 25.2)	4.3	24	17.0 (14.1 - 19.8)	20.6 (17.4 - 23.8)	8.5	72	30.3 (23.8 - 36.8)	21.8 (19.8 - 23.9)	5.0
3-222	93	83.8 (73.6 - 94.0)	34.7 (30.5 - 38.9)	2.9	39	48.6 (33.9 - 63.3)	24.4 (18.2 - 30.6)	3.5	132	73.4 (64.7 - 82.1)	31.6 (28.1 - 35.2)	3.0
3-223	31	68.4 (54.2 - 82.5)	37.6 (30.0 - 45.1)	3.8	2	n.a	n.a	n.a	33	67.6 (53.7 - 81.6)	38.0 (30.7 - 45.3)	3.9
3-238	2	n.a	n.a	n.a	3	n.a	n.a	n.a	5	36.6 (6.0 - 67.2)	9.6 (7.9 - 11.3)	1.8
3-239	2	n.a	n.a	n.a	7	18.9 (11.1 - 26.6)	30.0 (24.0 - 36.0)	11.1	9	44.2 (5.8 - 82.6)	28.4 (23.5 - 33.3)	4.5
3-240	10	144.7 (111.6 - 177.8)	32.9 (14.7 - 51.1)	1.6	6	39.5 (3.7 - 75.3)	37.8 (18.1 - 57.6)	6.7	16	105.3 (70.1 - 140.4)	34.8 (21.5 - 48.0)	2.3
3-241	2	n.a	n.a	n.a	4	n.a	n.a	n.a	6	123.0 (59.1 - 186.9)	52.5 (34.6 - 70.4)	3.0
Total episodes	265				93				358			
Non-Traumatic episodes												
3-202	12	113.2 (90.6 - 135.7)	33.8 (18.1 - 49.4)	2.1	4	n.a	n.a	n.a	16	106.5 (87.1 - 125.9)	30.0 (17.3 - 42.7)	2.0
3-220	4	n.a	n.a	n.a	11	5.5 (3.8 - 7.3)	2.8 (0.7 - 4.9)	3.6	15	10.4 (5.1 - 15.7)	2.7 (1.0 - 4.4)	1.8
3-221	78	37.5 (31.1 - 43.8)	19.8 (17.7 - 21.8)	3.7	150	20.4 (18.0 - 22.8)	18.0 (16.3 - 19.7)	6.2	228	26.3 (23.4 - 29.1)	18.6 (17.3 - 19.9)	5.0
3-222	112	82.9 (72.9 - 93.0)	31.5 (28.1 - 34.9)	2.7	150	45.4 (40.2 - 50.6)	29.0 (26.0 - 32.0)	4.5	262	61.5 (55.8 - 67.1)	30.0 (27.8 - 32.3)	3.4
3-223	11	112.3 (93.6 - 131.0)	35.0 (21.5 - 48.5)	2.2	11	64.0 (15.5 - 112.5)	31.9 (18.2 - 45.6)	3.5	22	88.1 (60.9 - 115.4)	33.5 (24.1 - 42.8)	2.7
Total episodes	217				326				543			

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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
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