

Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V4, Financial Year 2019



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	48	103.8 (87.6 - 120.1)	28.4 (21.0 - 35.7)	1.9	6	54.2 (44.1 - 64.2)	28.2 (3.9 - 52.4)	3.6	54	98.3 (83.2 - 113.4)	28.4 (21.4 - 35.3)	2.0
4AZ2	37	148.2 (120.4 - 176.1)	21.9 (15.0 - 28.7)	1.0	4	n.a	n.a	n.a	41	142.2 (115.6 - 168.7)	23.6 (15.9 - 31.3)	1.2
4AD1	22	34.1 (20.3 - 48.0)	19.3 (14.1 - 24.6)	4.0	25	19.3 (15.2 - 23.4)	22.5 (18.1 - 26.9)	8.2	47	26.2 (19.2 - 33.3)	21.0 (17.6 - 24.4)	5.6
4AD2	33	70.1 (58.5 - 81.6)	39.9 (33.0 - 46.8)	4.0	29	44.3 (32.4 - 56.3)	27.9 (20.7 - 35.1)	4.4	62	58.0 (49.2 - 66.8)	34.3 (29.2 - 39.4)	4.1
4AD3	42	43.7 (33.7 - 53.7)	25.2 (20.5 - 30.0)	4.0	21	27.9 (19.5 - 36.3)	19.2 (12.6 - 25.9)	4.8	63	38.4 (31.0 - 45.9)	23.2 (19.3 - 27.2)	4.2
4AD4	32	85.1 (67.3 - 102.8)	48.0 (43.8 - 52.2)	4.0	3	n.a	n.a	n.a	35	80.1 (62.8 - 97.4)	48.7 (44.5 - 52.9)	4.3
4AP1	13	69.5 (49.9 - 89.2)	32.0 (21.7 - 42.3)	3.2	27	24.7 (17.7 - 31.6)	22.4 (17.2 - 27.6)	6.4	40	39.3 (29.0 - 49.5)	25.5 (20.5 - 30.5)	4.6
Total episodes	227				115				342			
Non-Traumatic episodes												
4AZ1	23	84.7 (65.5 - 103.8)	29.2 (18.0 - 40.3)	2.4	12	59.0 (38.4 - 79.6)	14.9 (3.0 - 26.8)	1.8	35	75.9 (61.0 - 90.7)	24.3 (15.6 - 32.9)	2.2
4AZ2	2	n.a	n.a	n.a	1	n.a	n.a	n.a	3	n.a n.a	n.a n.a	n.a
4AD1	50	40.8 (34.1 - 47.5)	21.2 (18.4 - 24.0)	3.6	120	21.0 (18.5 - 23.4)	17.7 (15.7 - 19.7)	5.9	170	26.8 (23.8 - 29.7)	18.7 (17.1 - 20.4)	4.9
4AD2	64	87.2 (72.8 - 101.5)	30.4 (26.2 - 34.7)	2.4	86	45.6 (36.6 - 54.5)	26.2 (22.7 - 29.7)	4.0	150	63.3 (54.6 - 72.0)	28.0 (25.3 - 30.7)	3.1
4AD3	44	40.5 (30.7 - 50.2)	23.6 (20.2 - 27.0)	4.1	54	22.0 (17.0 - 26.9)	17.8 (14.2 - 21.3)	5.7	98	30.3 (24.9 - 35.7)	20.4 (17.9 - 22.9)	4.7
4AD4	24	97.0 (70.2 - 123.9)	38.9 (31.0 - 46.7)	2.8	8	52.0 (24.2 - 79.8)	17.1 (4.8 - 29.4)	2.3	32	85.8 (63.8 - 107.8)	33.4 (26.1 - 40.7)	2.7
Total episodes	207				281				488			

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 2019



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												
3-202	55	126.0 (104.9 - 147.1)	23.5 (16.9 - 30.0)	1.3	5	88.8 (36.2 - 141.4)	46.0 (7.2 - 84.8)	3.6	60	122.9 (102.9 - 142.9)	25.3 (18.5 - 32.2)	1.4
3-220	6	12.3 (7.7 - 17.0)	5.8 (2.6 - 9.0)	3.3	1	n.a	n.a	n.a	7	11.9 (7.8 - 15.9)	5.7 (3.1 - 8.4)	3.4
3-221	44	39.7 (29.5 - 49.9)	19.7 (16.3 - 23.0)	3.5	37	22.2 (16.9 - 27.5)	17.7 (14.4 - 21.0)	5.6	81	31.7 (25.4 - 38.0)	18.8 (16.4 - 21.1)	4.1
3-222	78	89.3 (76.9 - 101.8)	37.7 (33.3 - 42.2)	3.0	42	40.7 (32.0 - 49.4)	29.7 (23.6 - 35.8)	5.1	120	72.3 (62.8 - 81.8)	34.9 (31.3 - 38.5)	3.4
3-223	30	72.4 (58.6 - 86.2)	44.0 (38.5 - 49.5)	4.3	2	n.a	n.a	n.a	32	69.8 (56.4 - 83.2)	43.8 (38.1 - 49.6)	4.4
3-238	1	n.a	n.a	n.a	5	11.6 (8.1 - 15.1)	12.0 (5.2 - 18.8)	7.2	6	16.5 (6.3 - 26.7)	12.0 (6.4 - 17.6)	5.1
3-239	5	41.2 (15.7 - 66.7)	17.8 (5.2 - 30.4)	3.0	14	19.1 (14.6 - 23.6)	19.7 (15.6 - 23.8)	7.2	19	24.9 (16.8 - 33.1)	19.2 (15.0 - 23.4)	5.4
3-240	7	107.0 (71.6 - 142.4)	46.4 (36.7 - 56.2)	3.0	8	44.9 (27.4 - 62.4)	37.9 (24.9 - 50.9)	5.9	15	73.9 (49.8 - 97.9)	41.9 (33.7 - 50.0)	4.0
3-241	1	n.a	n.a	n.a	1	n.a	n.a	n.a	2	n.a	n.a	n.a
Total episodes	227				115				342			
Non-Traumatic episodes												
3-202	15	135.3 (83.8 - 186.8)	22.6 (10.4 - 34.8)	1.2	2	n.a	n.a	n.a	17	130.0 (83.4 - 176.6)	23.8 (12.1 - 35.6)	1.3
3-220	4	n.a	n.a	n.a	8	10.3 (6.1 - 14.5)	3.4 (0.9 - 5.8)	2.3	12	11.4 (7.8 - 15.0)	4.1 (2.1 - 6.1)	2.5
3-221	74	40.7 (34.3 - 47.2)	20.5 (18.5 - 22.5)	3.5	146	21.2 (18.9 - 23.5)	17.0 (15.4 - 18.6)	5.6	220	27.8 (24.9 - 30.7)	18.2 (16.9 - 19.4)	4.6
3-222	104	83.6 (72.2 - 94.9)	32.3 (28.8 - 35.8)	2.7	116	44.8 (37.5 - 52.2)	24.8 (21.7 - 27.9)	3.9	220	63.1 (56.0 - 70.2)	28.3 (25.9 - 30.7)	3.1
3-223	10	59.2 (42.8 - 75.6)	46.0 (37.7 - 54.3)	5.4	10	23.2 (13.8 - 32.6)	27.2 (14.3 - 40.1)	8.2	20	41.2 (29.0 - 53.4)	36.6 (28.0 - 45.2)	6.2
Total episodes	207				282				489			

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
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4.212 Paraplegia, complete	4.112 Paraplegia, complete
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Major Multiple Trauma	
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