

Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V4, Calendar 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												
4AZ1	42	105.4 (85.7 - 125.1)	24.5 (16.3 - 32.8)	1.6	11	60.1 (42.0 - 78.2)	34.0 (15.9 - 52.1)	4.0	53	96.0 (79.3 - 112.7)	26.5 (19.0 - 34.0)	1.9
4AZ2	35	138.2 (112.0 - 164.4)	26.2 (17.8 - 34.6)	1.3	4	n.a	n.a	n.a	39	129.7 (104.5 - 155.0)	25.3 (17.2 - 33.4)	1.4
4AD1	22	33.8 (20.6 - 46.9)	18.2 (14.0 - 22.4)	3.8	31	23.7 (14.3 - 33.2)	20.9 (17.4 - 24.4)	6.2	53	27.9 (20.1 - 35.7)	19.8 (17.1 - 22.5)	5.0
4AD2	42	90.1 (63.5 - 116.7)	35.8 (29.4 - 42.3)	2.8	22	39.2 (30.0 - 48.4)	31.0 (22.2 - 39.9)	5.5	64	72.6 (53.9 - 91.3)	34.2 (29.0 - 39.4)	3.3
4AD3	38	49.9 (35.2 - 64.7)	27.1 (22.3 - 31.9)	3.8	23	31.2 (20.5 - 41.9)	22.6 (15.5 - 29.6)	5.1	61	42.9 (32.5 - 53.2)	25.4 (21.4 - 29.4)	4.1
4AD4	22	76.4 (59.0 - 93.8)	45.2 (38.5 - 51.9)	4.1	1	n.a	n.a	n.a	23	74.8 (57.9 - 91.7)	45.9 (39.3 - 52.4)	4.3
4AP1	14	102.5 (73.9 - 131.1)	32.0 (24.7 - 39.3)	2.2	32	26.7 (17.1 - 36.3)	21.8 (16.3 - 27.4)	5.7	46	49.8 (35.0 - 64.5)	24.9 (20.3 - 29.5)	3.5
Total episodes	215				124				339			
Non-Traumatic episodes												
4AZ1	26	91.5 (73.2 - 109.8)	34.3 (24.1 - 44.6)	2.6	12	63.1 (43.9 - 82.2)	27.1 (11.8 - 42.4)	3.0	38	82.5 (68.2 - 96.9)	32.1 (23.6 - 40.5)	2.7
4AZ2	7	268.4 (186.4 - 350.4)	18.0 (2.8 - 33.2)	0.5	3	n.a	n.a	n.a	10	195.0 (104.2 - 285.8)	15.9 (5.2 - 26.6)	0.6
4AD1	46	38.5 (29.8 - 47.2)	19.3 (16.1 - 22.5)	3.5	148	20.4 (18.1 - 22.6)	19.3 (17.6 - 20.9)	6.6	194	24.7 (21.8 - 27.6)	19.3 (17.8 - 20.8)	5.5
4AD2	79	87.9 (73.4 - 102.3)	30.6 (26.6 - 34.5)	2.4	107	47.8 (39.7 - 55.9)	29.6 (25.9 - 33.3)	4.3	186	64.8 (56.6 - 73.0)	30.0 (27.3 - 32.7)	3.2
4AD3	41	40.4 (29.5 - 51.3)	19.4 (15.5 - 23.3)	3.4	55	21.4 (16.7 - 26.1)	17.9 (14.6 - 21.3)	5.9	96	29.5 (23.9 - 35.2)	18.6 (16.0 - 21.1)	4.4
4AD4	22	102.6 (70.6 - 134.7)	39.4 (32.2 - 46.6)	2.7	7	37.0 (24.8 - 49.2)	19.1 (-0.3 - 38.6)	3.6	29	86.8 (60.4 - 113.2)	34.5 (26.9 - 42.2)	2.8
Total episodes	221				332				553			

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, Calendar Year 2019



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	52	121.9 (100.3 - 143.4)	23.3 (16.0 - 30.7)	1.3	6	74.3 (39.5 - 109.1)	46.0 (17.1 - 74.9)	4.3	58	116.9 (97.0 - 136.9)	25.7 (18.3 - 33.0)	1.5
3-220	3	n.a	n.a	n.a	0	n.a	n.a	n.a	3	n.a	n.a	n.a
3-221	40	31.8 (24.0 - 39.5)	18.8 (15.7 - 21.8)	4.1	42	25.0 (17.3 - 32.8)	17.5 (14.4 - 20.5)	4.9	82	28.3 (22.8 - 33.8)	18.1 (16.0 - 20.2)	4.5
3-222	85	94.1 (77.8 - 110.4)	35.2 (30.7 - 39.7)	2.6	40	37.8 (30.2 - 45.4)	32.1 (25.9 - 38.3)	5.9	125	76.1 (63.9 - 88.3)	34.2 (30.6 - 37.8)	3.1
3-223	21	81.7 (67.0 - 96.5)	43.1 (36.0 - 50.2)	3.7	2	n.a	n.a	n.a	23	79.3 (65.3 - 93.4)	39.9 (32.0 - 47.7)	3.5
3-238	0	n.a	n.a	n.a	7	9.1 (6.3 - 12.0)	9.1 (4.2 - 14.1)	7.0	7	9.1 (6.3 - 12.0)	9.1 (4.2 - 14.1)	7.0
3-239	5	61.0 (40.2 - 81.8)	27.8 (18.2 - 37.4)	3.2	12	17.2 (11.9 - 22.4)	19.1 (14.7 - 23.5)	7.8	17	30.1 (18.2 - 42.0)	21.6 (17.2 - 26.1)	5.0
3-240	9	125.6 (91.1 - 160.1)	34.3 (24.3 - 44.3)	1.9	13	50.5 (31.9 - 69.2)	29.8 (19.5 - 40.2)	4.1	22	81.2 (57.8 - 104.7)	31.7 (24.5 - 38.9)	2.7
3-241	0	n.a	n.a	n.a	2	n.a	n.a	n.a	2	n.a	n.a	n.a
Total episodes	215				124				339			
Non-Traumatic episodes												
3-202	18	167.4 (114.9 - 219.9)	30.5 (18.5 - 42.5)	1.3	2	n.a	n.a	n.a	20	157.7 (109.0 - 206.3)	30.4 (19.1 - 41.7)	1.3
3-220	4	n.a	n.a	n.a	7	7.9 (5.1 - 10.6)	3.9 (0.9 - 6.8)	3.4	11	10.6 (7.2 - 14.1)	4.5 (2.1 - 6.8)	2.9
3-221	74	39.7 (32.2 - 47.2)	18.7 (16.2 - 21.2)	3.3	172	19.4 (17.5 - 21.4)	17.9 (16.5 - 19.3)	6.5	246	25.5 (22.6 - 28.4)	18.1 (16.9 - 19.4)	5.0
3-222	114	89.9 (77.8 - 102.0)	31.3 (27.8 - 34.8)	2.4	141	46.3 (39.8 - 52.8)	28.7 (25.5 - 31.9)	4.3	255	65.8 (58.8 - 72.8)	29.9 (27.5 - 32.2)	3.2
3-223	11	56.9 (35.0 - 78.8)	42.1 (32.9 - 51.2)	5.2	10	32.3 (21.5 - 43.1)	28.5 (15.0 - 42.0)	6.2	21	45.2 (31.9 - 58.5)	35.6 (27.3 - 44.0)	5.5
Total episodes	221				332				553			

NOTE 1: Where the number of episodes < 5 details are not given for reasons of privacy and accuracy.

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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

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