

Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V4, Calendar Year 2018



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	57	119.0 (100.3 - 137.7)	29.3 (22.7 - 35.9)	1.7	8	59.0 (37.9 - 80.1)	21.4 (2.1 - 40.6)	2.5	65	111.6 (94.5 - 128.7)	28.3 (22.2 - 34.5)	1.8
4AZ2	44	133.6 (109.5 - 157.8)	28.0 (20.7 - 35.4)	1.5	2	n.a	n.a	n.a	46	133.6 (109.7 - 157.6)	28.8 (21.1 - 36.5)	1.5
4AD1	27	23.5 (17.1 - 30.0)	17.5 (12.3 - 22.7)	5.2	21	18.6 (13.8 - 23.3)	19.5 (14.4 - 24.6)	7.3	48	21.4 (17.1 - 25.6)	18.4 (14.7 - 22.0)	6.0
4AD2	34	73.6 (58.7 - 88.5)	35.5 (28.4 - 42.6)	3.4	29	54.6 (38.0 - 71.3)	25.4 (18.9 - 31.9)	3.3	63	64.8 (53.5 - 76.2)	30.8 (25.8 - 35.8)	3.3
4AD3	49	54.9 (40.3 - 69.5)	20.8 (16.7 - 24.8)	2.6	9	24.0 (9.2 - 38.8)	15.6 (7.8 - 23.3)	4.5	58	50.1 (37.2 - 63.0)	19.9 (16.3 - 23.6)	2.8
4AD4	41	94.4 (73.2 - 115.7)	47.6 (43.0 - 52.2)	3.5	5	88.2 (-27.1 - 203.5)	39.4 (16.1 - 62.7)	3.1	46	93.7 (71.8 - 115.6)	46.7 (42.0 - 51.4)	3.5
4AP1	21	116.9 (63.7 - 170.0)	35.1 (25.8 - 44.4)	2.1	20	40.8 (25.2 - 56.3)	28.3 (21.7 - 34.8)	4.9	41	79.7 (49.3 - 110.1)	31.8 (26.0 - 37.5)	2.8
Total episodes	273				94				367			
Non-Traumatic episodes												
4AZ1	22	84.5 (61.2 - 107.7)	23.5 (14.7 - 32.3)	2.0	12	50.0 (25.8 - 74.2)	19.4 (6.3 - 32.6)	2.7	34	72.3 (54.2 - 90.4)	22.1 (14.8 - 29.4)	2.1
4AZ2	4	n.a	n.a	n.a	2	n.a	n.a	n.a	6	95.5 (6.5 - 184.5)	34.5 (13.0 - 56.0)	2.5
4AD1	56	40.7 (33.1 - 48.4)	22.2 (19.4 - 25.0)	3.8	138	22.1 (19.8 - 24.4)	18.9 (16.9 - 20.8)	6.0	194	27.5 (24.5 - 30.4)	19.8 (18.2 - 21.5)	5.1
4AD2	75	83.1 (71.2 - 94.9)	31.0 (26.9 - 35.1)	2.6	93	43.7 (37.4 - 50.1)	27.1 (23.1 - 31.1)	4.3	168	61.3 (54.3 - 68.3)	28.8 (26.0 - 31.7)	3.3
4AD3	32	35.8 (25.9 - 45.7)	24.7 (20.9 - 28.5)	4.8	48	20.8 (16.1 - 25.4)	16.8 (13.1 - 20.5)	5.7	80	26.8 (21.6 - 31.9)	20.0 (17.1 - 22.8)	5.2
4AD4	25	90.1 (70.5 - 109.8)	31.5 (23.4 - 39.6)	2.4	6	111.0 (50.0 - 172.0)	32.2 (20.3 - 44.0)	2.0	31	94.2 (75.0 - 113.3)	31.6 (24.9 - 38.4)	2.4
Total episodes	214				299				513			

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 2018



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	66	134.2 (114.2 - 154.2)	23.3 (17.6 - 28.9)	1.2	3	n.a	n.a	n.a	69	133.8 (114.2 - 153.4)	23.8 (18.0 - 29.6)	1.2
3-220	14	22.2 (11.0 - 33.4)	5.4 (3.6 - 7.2)	1.7	1	n.a	n.a	n.a	15	21.3 (11.0 - 31.7)	5.4 (3.7 - 7.1)	1.8
3-221	49	44.3 (30.2 - 58.3)	19.8 (16.5 - 23.1)	3.1	26	20.0 (14.2 - 25.8)	16.8 (12.8 - 20.8)	5.9	75	35.9 (26.2 - 45.6)	18.7 (16.2 - 21.3)	3.7
3-222	81	90.0 (77.3 - 102.7)	37.7 (32.9 - 42.4)	2.9	41	55.9 (37.9 - 73.9)	24.4 (18.7 - 30.1)	3.1	122	78.5 (67.8 - 89.3)	33.2 (29.3 - 37.1)	3.0
3-223	40	85.0 (66.9 - 103.2)	45.0 (40.0 - 49.9)	3.7	2	n.a	n.a	n.a	42	82.6 (65.1 - 100.1)	45.8 (40.9 - 50.6)	3.9
3-238	2	n.a	n.a	n.a	1	n.a	n.a	n.a	3	n.a	n.a	n.a
3-239	6	45.8 (11.7 - 80.0)	20.5 (7.4 - 33.6)	3.1	12	31.1 (16.6 - 45.5)	20.3 (15.8 - 24.7)	4.6	18	36.0 (21.3 - 50.7)	20.3 (15.3 - 25.4)	4.0
3-240	13	169.9 (95.0 - 244.9)	46.1 (35.4 - 56.8)	1.9	7	70.1 (34.5 - 105.8)	51.1 (42.8 - 59.5)	5.1	20	135.0 (81.6 - 188.4)	47.9 (40.4 - 55.3)	2.5
3-241	2	n.a	n.a	n.a	1	n.a	n.a	n.a	3	n.a	n.a	n.a
Total episodes	273				94				367			
Non-Traumatic episodes												
3-202	17	103.8 (66.9 - 140.6)	24.2 (13.1 - 35.3)	1.6	2	n.a	n.a	n.a	19	100.0 (66.3 - 133.7)	25.5 (14.2 - 36.9)	1.8
3-220	2	n.a	n.a	n.a	9	11.4 (6.7 - 16.1)	3.4 (1.7 - 5.2)	2.1	11	12.5 (7.6 - 17.3)	3.9 (2.3 - 5.5)	2.2
3-221	68	37.0 (30.1 - 44.0)	20.4 (18.3 - 22.4)	3.8	152	21.6 (19.4 - 23.7)	18.1 (16.4 - 19.7)	5.9	220	26.4 (23.6 - 29.1)	18.8 (17.5 - 20.0)	5.0
3-222	116	79.4 (70.1 - 88.8)	31.7 (28.5 - 34.9)	2.8	133	44.2 (38.0 - 50.4)	26.0 (22.8 - 29.3)	4.1	249	60.6 (54.8 - 66.5)	28.7 (26.4 - 31.0)	3.3
3-223	11	67.7 (46.0 - 89.4)	32.1 (19.3 - 44.9)	3.3	4	n.a	n.a	n.a	15	52.9 (32.8 - 73.0)	30.7 (20.0 - 41.4)	4.1
Total episodes	214				300				514			

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

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4.212 Paraplegia, complete	4.112 Paraplegia, complete
4.2211 Quadriplegia, incomplete C1-4	4.1211 Quadriplegia, incomplete C1-4
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4.2221 Quadriplegia, complete C1-4	4.1221 Quadriplegia, complete C1-4
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Major Multiple Trauma	
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