

Spinal Cord Dysfunction LOS and FIM Change Benchmarks in Australia & New Zealand by AN-SNAP V4, Calendar Year 2015



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												
4AZ1	66	118.2 (101.5 - 135.0)	25.0 (18.5 - 31.5)	1.5	7	64.1 (16.0 - 112.3)	26.4 (10.8 - 42.0)	2.9	73	113.0 (96.9 - 129.2)	25.1 (19.1 - 31.2)	1.6
4AZ2	64	128.3 (107.7 - 148.8)	23.5 (17.6 - 29.3)	1.3	5	40.8 (13.9 - 67.7)	29.2 (-0.3 - 58.7)	5.0	69	121.9 (102.0 - 141.8)	23.9 (18.1 - 29.6)	1.4
4AD1	30	54.6 (28.3 - 80.9)	16.9 (12.2 - 21.5)	2.2	32	19.2 (13.2 - 25.1)	12.6 (9.3 - 16.0)	4.6	62	36.3 (22.6 - 50.0)	14.7 (11.8 - 17.6)	2.8
4AD2	49	73.9 (60.1 - 87.7)	37.0 (31.3 - 42.8)	3.5	21	52.5 (34.4 - 70.6)	27.0 (19.6 - 34.5)	3.6	70	67.5 (56.2 - 78.7)	34.0 (29.4 - 38.7)	3.5
4AD3	39	34.9 (23.8 - 46.1)	24.6 (20.0 - 29.1)	4.9	16	25.0 (14.0 - 36.0)	14.1 (7.3 - 20.8)	3.9	55	32.1 (23.5 - 40.6)	21.5 (17.5 - 25.5)	4.7
4AD4	61	85.3 (70.7 - 100.0)	43.8 (39.1 - 48.4)	3.6	0	n.a	n.a	n.a	61	85.3 (70.7 - 100.0)	43.8 (39.1 - 48.4)	3.6
4AP1	16	71.4 (42.1 - 100.8)	37.9 (28.7 - 47.0)	3.7	37	38.7 (28.0 - 49.4)	25.9 (19.6 - 32.2)	4.7	53	48.6 (36.5 - 60.7)	29.5 (24.2 - 34.9)	4.3
Total episodes	325				118				443			
Non-Traumatic episodes												
4AZ1	18	105.6 (72.7 - 138.4)	35.2 (24.0 - 46.5)	2.3	21	57.8 (39.7 - 75.9)	18.2 (10.8 - 25.6)	2.2	39	79.8 (60.5 - 99.2)	26.1 (19.0 - 33.1)	2.3
4AZ2	6	96.7 (51.7 - 141.7)	42.8 (17.7 - 68.0)	3.1	4	n.a	n.a	n.a	10	73.4 (41.5 - 105.3)	33.3 (13.8 - 52.8)	3.2
4AD1	57	35.5 (28.3 - 42.6)	17.1 (13.1 - 21.2)	3.4	122	19.4 (17.1 - 21.7)	16.6 (14.8 - 18.5)	6.0	179	24.5 (21.6 - 27.4)	16.8 (15.0 - 18.6)	4.8
4AD2	69	80.7 (66.6 - 94.7)	29.9 (25.7 - 34.1)	2.6	73	45.9 (37.2 - 54.6)	23.1 (19.0 - 27.3)	3.5	142	62.8 (54.2 - 71.4)	26.4 (23.4 - 29.4)	2.9
4AD3	40	32.7 (25.4 - 40.0)	18.4 (14.5 - 22.3)	3.9	46	24.3 (18.9 - 29.7)	18.1 (14.4 - 21.8)	5.2	86	28.2 (23.7 - 32.7)	18.3 (15.6 - 20.9)	4.5
4AD4	22	83.5 (65.2 - 101.7)	37.4 (29.2 - 45.7)	3.1	14	72.4 (35.3 - 109.5)	28.6 (17.6 - 39.5)	2.8	36	79.2 (61.3 - 97.1)	34.0 (27.3 - 40.6)	3.0
Total episodes	212				280				492			

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

NOTE 2: Incomplete episodes are excluded from analysis

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 2015



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	97	127.9 (112.6 - 143.2)	23.6 (18.7 - 28.5)	1.3	5	66.6 (-4.0 - 137.2)	7.4 (-4.4 - 19.2)	0.8	102	124.9 (109.9 - 139.9)	22.8 (18.1 - 27.5)	1.3
3-220	5	28.2 (0.2 - 56.2)	2.6 (0.1 - 5.1)	0.6	2	n.a	n.a	n.a	7	23.0 (2.4 - 43.6)	2.0 (0.1 - 3.9)	0.6
3-221	52	41.3 (25.1 - 57.4)	18.4 (15.4 - 21.5)	3.1	42	19.6 (14.7 - 24.6)	12.9 (9.6 - 16.1)	4.6	94	31.6 (22.2 - 41.0)	15.9 (13.7 - 18.2)	3.5
3-222	108	81.0 (70.1 - 91.9)	36.1 (31.9 - 40.3)	3.1	30	46.8 (33.6 - 60.1)	28.4 (22.2 - 34.6)	4.2	138	73.6 (64.2 - 82.9)	34.4 (30.8 - 38.0)	3.3
3-223	48	94.9 (75.7 - 114.1)	41.2 (35.5 - 46.9)	3.0	1	n.a	n.a	n.a	49	95.0 (76.2 - 113.7)	40.9 (35.2 - 46.5)	3.0
3-238	1	n.a	n.a	n.a	7	25.6 (-4.4 - 55.5)	7.4 (1.9 - 12.9)	2.0	8	24.3 (-1.7 - 50.2)	6.9 (2.0 - 11.7)	2.0
3-239	1	n.a	n.a	n.a	14	28.8 (14.0 - 43.6)	26.7 (21.2 - 32.3)	6.5	15	27.8 (14.1 - 41.5)	26.4 (21.3 - 31.5)	6.6
3-240	13	70.0 (43.8 - 96.2)	39.8 (30.7 - 48.8)	4.0	11	53.6 (36.8 - 70.4)	37.9 (24.5 - 51.3)	4.9	24	62.5 (46.3 - 78.7)	38.9 (31.3 - 46.6)	4.4
3-241	2	n.a	n.a	n.a	6	58.2 (26.3 - 90.0)	31.7 (5.4 - 58.0)	3.8	8	79.9 (35.9 - 123.8)	34.1 (13.5 - 54.8)	3.0
Total episodes	327				118				445			
Non-Traumatic episodes												
3-202	13	91.9 (52.6 - 131.3)	45.0 (33.0 - 57.0)	3.4	9	77.1 (44.9 - 109.3)	22.4 (8.9 - 36.0)	2.0	22	85.9 (59.6 - 112.1)	35.8 (25.8 - 45.7)	2.9
3-220	4	n.a	n.a	n.a	5	11.8 (5.7 - 17.9)	2.8 (0.8 - 4.8)	1.7	9	15.3 (5.9 - 24.7)	3.6 (0.9 - 6.2)	1.6
3-221	79	32.1 (26.9 - 37.3)	15.9 (12.9 - 18.9)	3.5	145	20.3 (18.0 - 22.6)	16.9 (15.2 - 18.6)	5.8	224	24.5 (22.0 - 26.9)	16.5 (15.0 - 18.0)	4.7
3-222	109	82.2 (71.5 - 92.9)	30.5 (27.0 - 34.1)	2.6	115	46.5 (38.8 - 54.1)	22.7 (19.4 - 26.0)	3.4	224	63.9 (57.0 - 70.7)	26.5 (24.1 - 29.0)	2.9
3-223	10	56.9 (40.7 - 73.1)	39.3 (28.8 - 49.8)	4.8	6	29.7 (16.4 - 43.0)	22.2 (6.8 - 37.5)	5.2	16	46.7 (33.8 - 59.6)	32.9 (23.5 - 42.2)	4.9
Total episodes	215				280				495			

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

NOTE 2: Incomplete episodes are excluded from analysis

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
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Major Multiple Trauma	
14.1 Brain + spinal cord injury	
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