

Supplementary Material for

Examination of the dependency and complexity of patients admitted to in-patient rehabilitation in Australia

Duncan McKechnie^{1,5}, Julie Pryor^{2,3}, Murray J. Fisher^{2,3} and Tara Alexander⁴

¹Brain Injury Unit, Royal Rehab, PO Box 6, Ryde, Sydney, NSW 1680, Australia.

²Nursing Research and Development, Royal Rehab, PO Box 6, Ryde, Sydney, NSW 1680, Australia. Email: julie.pryor@royalrehab.com.au

³Susan Wakil School of Nursing and Midwifery, The University of Sydney, 88 Mallett Street, Camperdown, NSW 2050, Australia. Email: murray.fisher@sydney.edu.au

⁴Australasian Rehabilitation Outcomes Centre, Building 234 (iC Enterprise 1), Innovation Campus, University of Wollongong, Wollongong, NSW 2522, Australia. Email: aroc@uow.edu.au

⁵Corresponding author. Email: duncan.mckechnie@royalrehab.com.au

Table S1. Number of comorbidities and complications impacting on rehabilitation by patient age

Comorbidities^A				
	2013		2016	
	n (%)	Age	n (%)	Age
0	53,043	72.7	60,081	72.8
1	(51.3)	74.1	(50.1)	73.8
2	20,135	76.5	22,880	75.7
3	(19.5)	78.1	(19.1)	77
4	14,109	79	16,701	78.4
Not reported	(13.6)	-	(13.9)	-
No valid age	9,034 (8.7)	-	11,327 (9.5)	-
	6,054 (5.9)		8,683 (7.2)	
	1,103 (1.1)		131 (0.1)	
	373		104	

^AEpisodes with valid age. 2013/2016 data only included due to changes in AROC coding in 2013.

Complications^A				
	2013		2016	
	n (%)	Age	n (%)	Age
0	76,452 (73.9)	73.7	90,959	73.5
1	18,621 (18)	75.8	(75.9)	75.7
2	4,091 (4)	77.7	18,919	77.3
3	1,486 (1.4)	77.3	(15.8)	77.9
4	728 (0.7)	77.4	6,091 (5.1)	77.6
Not reported	2,100 (2)	-	2,194 (1.8)	-
No valid age	373	-	1,153 (1)	-
			487 (0.4)	
			104	

^AEpisodes with valid age. 2013/2016 data only included due to changes in AROC coding in 2013.

Table S2. Functional Independence Measure results for all of the 16 AROC impairment groups^A

	Admission FIM				Discharge FIM				Absolute Functional Gain			
	2007	2010	2013	2016	2007	2010	2013	2016	2007	2010	2013	2016
Motor, mean												
Eating	6.1	6.1	6.1	6.1	6.6	6.7	6.6	6.6	0.5	0.5	0.5	0.5
Grooming	5.5	5.5	5.4	5.3	6.4	6.4	6.3	6.3	0.9	0.9	0.9	1
Bathing	4.3	4.4	4.3	4.2	5.6	5.7	5.7	5.6	1.3	1.4	1.3	1.4
Dressing upper body	4.9	4.9	4.7	4.6	6.1	6.2	6	6.1	1.2	1.3	1.4	1.4
Dressing lower body	4	3.9	3.8	3.7	5.5	5.6	5.5	5.5	1.6	1.7	1.7	1.7
Toileting	4.9	4.9	4.8	4.8	6	6.1	6	6	1.1	1.2	1.2	1.2
Bladder management	5.5	5.5	5.4	5.4	6.2	6.3	6.2	6.2	0.7	0.7	0.7	0.8
Bowel management	5.7	5.6	5.5	5.5	6.2	6.2	6.2	6.2	0.5	0.6	0.6	0.6
Transfer: bed, chair, wheelchair	4.7	4.7	4.6	4.6	6	6.1	6	6	1.4	1.4	1.4	1.4
Transfer toilet	4.7	4.7	4.7	4.6	5.9	6	5.9	5.9	1.2	1.2	1.2	1.3
Transfer bath/shower	4.6	4.7	4.6	4.6	5.9	5.9	5.9	5.9	1.2	1.3	1.2	1.3
Walk/wheelchair	4	4.1	4.1	4	5.7	5.8	5.7	5.7	1.8	1.7	1.7	1.8
Stairs	1.5	1.5	1.5	1.4	4	4.2	3.9	4	2.4	2.6	2.4	2.6
Cognition, mean												
Comprehension	6.1	6.2	6.1	6.1	6.3	6.4	6.4	6.3	0.2	0.2	0.2	0.2
Expression	6.2	6.3	6.2	6.2	6.5	6.5	6.5	6.4	0.2	0.2	0.2	0.2
Social interaction	6.2	6.3	6.2	6.2	6.4	6.5	6.5	6.4	0.2	0.2	0.2	0.2
Problem solving	5.8	5.9	5.8	5.8	6.1	6.2	6.1	6.1	0.3	0.3	0.3	0.3
Memory	5.9	6	5.9	5.8	6.1	6.2	6.1	6.1	0.2	0.2	0.3	0.3

^ACompleted episodes with valid FIM and length of stay.