



## Appendix 2

**This appendix was part of the submitted manuscript and has been peer reviewed.  
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Appendix to: Morello RT, Barker AL, Watts JJ, et al. The extra resource burden of in-hospital falls: a cost of fall study. *Med J Aust* 2015; 203: 367. doi: 10.5694/mja15.00296.

**Appendix 2: Supplementary table of adjusted excess hospital utilisation for patient hospital admissions with a fall or fall injury, by the number of falls or fall injuries‡**

Multivariate linear regression models					
		Hospital length of stay		Hospital costs	
		(95% CI)	P value	AUD\$ (95% CI)	P value
<b>Number of falls (Model 1b)</b>					
	0	1.0		1.0	
	1	6.2 (4.5, 7.9)	<0.001	4,742 (3,950, 5,535)	<0.001
	2	11.9 (7.9, 15.8)	<0.001	12,050 (2,978, 21,122)	0.009
	≥3	23.0 (10.7, 35.4)	<0.001	21,195 (3,035, 39,355)	0.022
Female		0.4 (0.3, 0.6)	<0.001	588 (24, 1,152)	0.041
Age (years)					
	<55	1.0		1.0	
	55-69	1.1 (0.6, 1.6)	<0.001	833 (-1,629, 3,295)	0.507
	70-84	1.6 (0.8, 2.4)	<0.001	1,720 (-823, 4,263)	0.185
	≥85	2.0 (1.0, 3.0)	<0.001	862 (-1,232, 2,955)	0.420
Cognitive impairment		4.6 (3.2, 6.1)	<0.001	5,049 (636, 9,463)	0.025
Admission type					
	Medical non-emergency	1.0		1.0	
	Medical emergency	0.9 (-0.4, 2.2)	0.176	910 (-538, 2,359)	0.218
	Surgical non-emergency	1.7 (0.2, 3.2)	0.028	7,358 (3,586, 11,131)	<0.001
	Surgical emergency	6.1 (3.8, 8.3)	<0.001	12,418 (1,089, 23,748)	0.032
Number of comorbidities <sup>¶</sup>		2.1 (1.5, 2.6)	<0.001	2,605 (1,520, 3,690)	<0.001
Admitted from Nursing Home		-0.2 (-1.1, 2.2)	0.867	4,323 (-2,676, 11,323)	0.226
History of falls on admission		0.5 (-1.1, 2.1)	0.544	-523 (-2,643, 1,597)	0.629

<b>Number of fall injuries (Model 2b)</b>					
	0	1.0		1.0	
	1	3.0 (0.5, 5.5)	0.021	4,106 (-1,689, 9,903)	0.165
	2	4.6 (2.0, 7.2)	<0.001	4,318 (-1,156, 9,792)	0.122
	≥3	9.0 (2.8, 15.1)	0.004	7,255 (-3,126, 17,636)	0.171
Female		1.0 (-0.9, 2.9)	0.306	521 (-1,384, 2,425)	0.592
Age					
	<55	1.0		1.0	
	55-69	-0.4 (-2.9, 2.1)	0.757	-7,113 (-20,549, 6,731)	0.314
	70-84	-0.8 (-3.9, 2.3)	0.611	-5,716 (-18,095, 6,296)	0.351
	≥85	-1.5 (-3.1, 0.1)	0.066	-8,419 (-21,780, 4,474)	0.201
Cognitive impairment		5.2 (2.6, 7.7)	<0.001	6,828 (1,664, 11,992)	0.010
Admission type					
	Medical non-emergency	1.0		1.0	
	Medical emergency	-0.7 (-3.6, 2.1)	0.610	-1,038 (-3,250, 1,174)	0.358
	Surgical non-emergency	9.8 (2.8, 16.8)	0.006	11,207 (2,832, 19,582)	0.009
	Surgical emergency	10.0 (5.4, 14.6)	<0.001	19,522 (1,351, 37,695)	0.035
Number of comorbidities <sup>9</sup>		2.7 (1.3, 4.1)	<0.001	3,071 (1,374, 4,769)	<0.001
Admitted from Nursing Home		-4.1 (-12.3, 4.1)	0.327	6,726 (-14,393, 27,844)	0.533
History of falls on admission		-0.2 (-2.2, 1.8)	0.858	-3,619 (-7,457, 219)	0.065
<b>Type of fall injury (Model 2c)</b>					
	No injury	1.0		1.0	
	Minor	5.9 (1.7, 10.1)	0.006	7,271 (-2,070, 16,613)	0.127
	Moderate	2.3 (-2.4, 7.0)	0.340	2,447 (-394, 5,289)	0.091
	Major	0.2 (-3.5, 3.9)	0.924	-3,106 (-12,764, 6,552)	0.528
Female		1.0 (-0.7, 2.6)	0.260	346 (-2,082, 2,773)	0.780

Age					
	<55	1.0		1.0	
	55-69	-0.4 (-2.9, 2.2)	0.783	-7,204 (-20,750, 6,341)	0.297
	70-84	-0.9 (-3.9, 2.1)	0.559	-5,724 (-17,496, 6,048)	0.341
	≥85	-0.9 (-2.9, 1.0)	0.348	-8,075 (-20,704, 4,554)	0.210
Cognitive impairment		5.2 (2.5, 7.8)	<0.001	6,856 (2,223, 11,488)	0.004
Admission type					
	Medical non-emergency	1.0		1.0	
	Medical emergency	-0.5 (-3.6, 2.6)	0.237	-521 (-3,242, 2,201)	0.708
	Surgical non-emergency	9.8 (2.7, 16.8)	0.068	11,504 (2,806, 20,202)	0.010
	Surgical emergency	10.4 (5.0, 15.7)	0.003	20,322 (675, 39,970)	0.043
Number of comorbidities <sup>¶</sup>		2.7 (1.2, 4.2)	0.001	3,072 (1,454, 4,690)	<0.001
Admitted from Nursing Home		-4.0 (-12.6, 4.8)	0.853	7,207 (-18,683, 33,096)	0.585
History of falls on admission		-0.4 (-2.4, 1.5)	0.540	-3,749 (-8,273, 775)	0.104

<sup>¶</sup>Elixhauser comorbidity method(14)

<sup>‡</sup>The intra-class correlation coefficient (ICC), was 0.002 for the number of falls (95% CI: 0.000-0.005) and 0.001 for number of fall injuries (95% CI: 0.000-0.003)