



Appendix 3

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

Appendix to: Chen J, Ou L, Hillman KM, et al. Cardiopulmonary arrest and mortality trends, and their association with rapid response system expansion. *Med J Aust* 2014; 201: 167-170. doi: 10.5694/mja14.00019.

Appendix 3.

Table: Multivariate risk-adjustment results IHCA rate, IHCA-related mortality rate, hospital mortality rate, IHCA surviving to discharge and 1-yr post-discharge mortality after IHCA(Risk Ratio and its 95%CI)

Adjusted variables	IHCA		IHCA-related mortality		Hospital mortality		IHCA surviving to discharge		1yr post-discharge mortality after IHCA	
	RR	95%CI	RR	95%CI	RR	95%CI	RR	95%CI	RR	95%CI
Year										
2002 [‡]	1.00	-	1.00	-	1.00	-	1.00	-	1.00	-
2003	0.89	0.83 - 0.96**	0.88	0.81 - 0.96**	0.96	0.94 - 0.98***	1.02	0.96 - 1.08	0.92	0.60 - 1.39
2004	0.79	0.70 - 0.88***	0.76	0.68 - 0.86***	0.94	0.91 - 0.98**	1.07	0.99 - 1.16	0.72	0.46 - 1.13
2005	0.72	0.64 - 0.81***	0.70	0.62 - 0.79***	0.89	0.85 - 0.92***	1.08	0.99 - 1.18	0.83	0.54 - 1.27
2006	0.67	0.57 - 0.78***	0.66	0.54 - 0.80***	0.84	0.80 - 0.89***	1.03	0.92 - 1.16	0.67	0.44 - 1.04
2007	0.65	0.58 - 0.72***	0.63	0.56 - 0.72***	0.84	0.80 - 0.88***	1.05	0.95 - 1.15	0.77	0.55 - 1.09
2008	0.56	0.49 - 0.63***	0.53	0.46 - 0.60***	0.83	0.78 - 0.88***	1.11	1.01 - 1.23*	0.55	0.38 - 0.79**
2009	0.48	0.42 - 0.55***	0.45	0.38 - 0.52***	0.77	0.73 - 0.82***	1.15	1.02 - 1.29*	1.01	0.66 - 1.52
Age groups										
>=14yr<<35yr [‡]	1.00	-	1.00	-	1.00	-	1.00	-	1.00	-
>=35yr<<55yr	2.59	2.23 - 3.02***	2.62	2.14 - 3.22***	4.17	3.42 - 5.09***	0.96	0.87 - 1.06	1.50	0.66 - 3.41
>=55yr<<75yr	5.13	4.19 - 6.28***	5.95	4.59 - 7.72***	11.7	8.90 - 15.42***	0.76	0.68 - 0.85***	2.55	1.22 - 5.35*
>=75yr	8.58	6.94 - 10.61***	11.9	9.18 - 15.48***	28.3	21.74 - 36.99***	0.47	0.41 - 0.54***	5.28	2.37 - 11.79***
Female vs Male	0.66	0.62 - 0.70***	0.67	0.62 - 0.72***	0.75	0.71 - 0.78***	1.01	0.96 - 1.07	0.95	0.74 - 1.23
Marital status										
married [‡]	1.00	-	1.00	-	1.00	-	1.00	-	1.00	-
never married	1.05	0.94 - 1.18	1.10	0.97 - 1.24	1.10	1.00 - 1.20*	0.91	0.87 - 0.95***	1.56	1.03 - 2.38*
widowed	1.23	1.18 - 1.29***	1.29	1.22 - 1.35***	1.34	1.29 - 1.39***	0.87	0.80 - 0.95**	1.15	0.83 - 1.60
divorced/separated	1.00	0.93 - 1.07	1.00	0.93 - 1.09	1.01	0.97 - 1.06	0.97	0.91 - 1.03	0.68	0.45 - 1.02
unknown	1.83	1.58 - 2.13***	1.98	1.68 - 2.34***	1.68	1.49 - 1.89***	0.76	0.67 - 0.85***	1.00	0.64 - 1.56
Country of Birth										
Australia and New Zealand [‡]	1.00	-	1.00	-	1.00	-	1.00	-	1.00	-
UK, US & Canada	0.91	0.85 - 0.98**	0.88	0.82 - 0.94***	0.97	0.93 - 1.01	1.12	1.05 - 1.21**	1.20	0.79 - 1.83
Non-English Europe	0.87	0.81 - 0.95***	0.89	0.81 - 0.97**	0.86	0.79 - 0.94***	0.99	0.92 - 1.05	0.95	0.67 - 1.35
North Africa	0.82	0.70 - 0.96*	0.90	0.78 - 1.04	0.91	0.81 - 1.02	0.84	0.69 - 1.03	0.22	0.03 - 1.69
Asia	0.83	0.72 - 0.96*	0.93	0.80 - 1.07	0.90	0.80 - 1.02	0.82	0.68 - 0.98*	1.09	0.60 - 1.99
Others	0.74	0.66 - 0.84***	0.79	0.69 - 0.89***	0.74	0.66 - 0.82***	0.92	0.84 - 0.99*	0.52	0.29 - 0.94*

Unknown	1.99	1.46 - 2.72***	2.07	1.51 - 2.83***	1.62	1.29 - 2.04***	0.83	0.67 - 1.03	1.01	0.54 - 1.88
Quartiles of SEIFA†										
1st quartile (most disadvantaged)*	1.00	-	1.00	-	1.00	-	1.00	-	1.00	-
2nd quartile	0.99	0.90 - 1.09	1.01	0.89 - 1.13	0.99	0.89 - 1.09	0.98	0.90 - 1.06	0.88	0.66 - 1.19
3rd quartile	0.97	0.86 - 1.09	1.00	0.88 - 1.15	0.99	0.91 - 1.07	0.95	0.85 - 1.06	0.96	0.63 - 1.47
4th quartile (most advantaged)	1.11	0.89 - 1.38	1.15	0.89 - 1.50	0.97	0.87 - 1.08	0.95	0.81 - 1.11	1.07	0.75 - 1.54
unknown	1.78	1.48 - 2.15***	1.67	1.31 - 2.11***	1.18	0.86 - 1.61	1.13	0.89 - 1.44	0.71	0.19 - 2.64
Geological area of hospitals										
Metropolitan‡	1.00	-	1.00	-	1.00	-	1.00	-	1.00	-
Rural & Regional NSW	0.90	0.70 - 1.16	0.91	0.65 - 1.26	0.94	0.76 - 1.16	0.99	0.83 - 1.19	1.08	0.81 - 1.43
Hospital peer groups¶										
Principal referral group‡	1.00	-	1.00	-	1.00	-	1.00	-	1.00	-
Ungrouped acute	0.40	0.19 - 0.88*	0.45	0.19 - 1.07	2.14	0.74 - 6.19	0.74	0.47 - 1.17	1.99	1.25 - 3.17**
Major hospitals	1.03	0.75 - 1.40	1.05	0.72 - 1.53	1.13	0.93 - 1.38	0.98	0.81 - 1.19	1.09	0.84 - 1.41
District group 1	0.83	0.57 - 1.20	0.82	0.51 - 1.33	1.09	0.78 - 1.51	1.06	0.77 - 1.44	0.63	0.38 - 1.04
District group2	0.47	0.35 - 0.64***	0.45	0.31 - 0.65***	1.21	0.97 - 1.51	1.11	0.90 - 1.37	0.76	0.42 - 1.41
N	9,220,942		9,220,942		9,220,942		24,613		5,323	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

‡: Reference category

†: **SEIFA**: Socio-Economic Indexes for Areas developed by Australia Bureau of Statistics (Pink, 2011)

¶: **Principal Referral Group**: Acute hospitals, treating 25,000 or more acute casemix weighted separations per annum, with an average cost weight greater than 1;

Ungrouped Acute: Establishments whose primary role is the provision of acute services of a specialised nature for which there is insufficient peers to form additional peer groups. Limited comparisons can be made with other hospitals in principal referral group.

Major hospitals: Acute hospitals, treating 10,000 or more acute casemix weighted separations per annum, but having less than 25,000 acute casemix weighted separations or an average casemix weight of less than 1; or Acute hospitals treating 10,000 or more acute casemix weighted separations per annum that are located in rural areas providing acute specialist and referral services for a catchment population from a large geographical area.

District Group 1: Acute hospitals, treating 5,000 or more, but less than 10,000 acute casemix weighted separations per annum.

District Group 2: Acute hospitals, treating 2,000 or more, but less than 5,000 acute casemix weighted separations per annum, plus acute hospitals treating less than 2,000 acute casemix weighted separations per annum but with more than 2,000 separations per annum.

Pink, B. (2011). Socio-Economic Indexes for Areas (SEIFA) 2011: Australian Bureau of Statistics.