

Appendix C

Table C1 – Adjusted Odds of Admission by Patient Characteristics

		Child Ambulance		Child Walk-in		Adult Ambulance		Adult Walk-in	
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Intercept		0.72	(0.70-0.74)	0.37	(0.37-0.38)	1.18	(1.16-1.19)	0.43	(0.43-0.44)
Age	0	1.81	(1.77-1.84)	1.72	(1.70-1.74)	-		-	
	1-4	1.30	(1.28-1.32)	1.09	(1.08-1.10)	-		-	
	5-12	1.29	(1.26-1.31)	0.96	(0.95-0.97)	-		-	
	13-17	1.00		1.00		-		-	
	18-34	-		-		1.00		1.00	
	35-54	-		-		1.60	(1.59-1.61)	1.33	(1.32-1.34)
	55-74	-		-		2.82	(2.80-2.84)	2.00	(1.98-2.01)
	75+	-		-		4.37	(4.34-4.40)	2.86	(2.85-2.88)
Gender	Male	1.00		1.00		1.00		1.00	
	Female	0.97	(0.96-0.98)	0.98	(0.97-0.98)	0.90	(0.90-0.91)	0.99	(0.98-0.99)
Deprivation (IMD04)	Quintile 1 (most deprived)	1.00		1.00		1.00		1.00	
	Quintile 2	1.03	(1.01-1.04)	1.04	(1.03-1.05)	1.02	(1.02-1.03)	1.06	(1.05-1.06)
	Quintile 3	1.04	(1.02-1.06)	1.06	(1.05-1.07)	1.06	(1.05-1.06)	1.09	(1.08-1.09)
	Quintile 4	1.04	(1.03-1.06)	1.05	(1.04-1.06)	1.06	(1.06-1.07)	1.09	(1.08-1.10)
	Quintile 5	1.01	(1.00-1.03)	1.06	(1.05-1.07)	1.05	(1.05-1.06)	1.08	(1.08-1.09)
Ethnicity	White	1.00		1.00		1.00		1.00	
	Black	1.10	(1.07-1.12)	0.97	(0.96-0.99)	0.80	(0.79-0.81)	0.81	(0.80-0.81)
	Asian	0.95	(0.91-0.99)	0.92	(0.90-0.94)	0.88	(0.86-0.91)	0.80	(0.79-0.82)
	Mixed Parentage	0.99	(0.95-1.03)	0.98	(0.96-1.00)	0.94	(0.90-0.97)	0.85	(0.82-0.87)
	Other	0.88	(0.86-0.89)	0.84	(0.83-0.85)	0.82	(0.82-0.83)	0.76	(0.75-0.76)
	Not stated / not known	0.91	(0.87-0.94)	0.83	(0.81-0.84)	0.79	(0.77-0.80)	0.69	(0.68-0.70)

Table C2 – Adjusted Odds of Admission by Diagnosis

	Child Ambulance		Child Walk-in		Adult Ambulance		Adult Walk-in	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Respiratory conditions	1.00		1.00		1.00		1.00	
Laceration	0.18	(0.17-0.19)	0.09	(0.09-0.09)	0.10	(0.10-0.10)	0.06	(0.06-0.06)
Contusion/abrasion	0.15	(0.14-0.15)	0.04	(0.04-0.04)	0.10	(0.10-0.10)	0.02	(0.02-0.02)
Soft tissue inflammation	0.12	(0.11-0.13)	0.07	(0.07-0.07)	0.16	(0.16-0.16)	0.09	(0.09-0.09)
Head injury	0.31	(0.30-0.32)	0.22	(0.22-0.22)	0.21	(0.21-0.21)	0.15	(0.15-0.15)
Dislocation/fracture/joint injury/amputation	1.00	(0.97-1.03)	0.24	(0.23-0.24)	0.65	(0.64-0.65)	0.15	(0.15-0.15)
Sprain/ligament injury	0.04	(0.03-0.04)	0.01	(0.01-0.01)	0.08	(0.07-0.08)	0.01	(0.01-0.02)
Muscle/tendon injury	0.10	(0.09-0.11)	0.05	(0.05-0.05)	0.10	(0.09-0.10)	0.05	(0.05-0.05)
Nerve injury	1.28	(1.08-1.51)	0.20	(0.19-0.22)	0.43	(0.41-0.45)	0.17	(0.16-0.17)
Vascular injury	0.40	(0.28-0.57)	0.18	(0.15-0.21)	0.37	(0.35-0.38)	0.39	(0.38-0.41)
Burns and scalds	0.33	(0.31-0.35)	0.18	(0.17-0.19)	0.19	(0.18-0.20)	0.08	(0.08-0.09)
Electric shock	0.14	(0.09-0.20)	0.02	(0.02-0.03)	0.07	(0.06-0.08)	0.03	(0.02-0.03)
Foreign body	0.26	(0.24-0.29)	0.18	(0.17-0.18)	0.22	(0.21-0.23)	0.10	(0.10-0.10)
Bites/stings	0.31	(0.28-0.36)	0.13	(0.12-0.14)	0.12	(0.11-0.13)	0.07	(0.07-0.08)
Poisoning (inc overdose)	1.77	(1.72-1.82)	1.94	(1.90-1.98)	0.85	(0.84-0.86)	1.36	(1.34-1.39)
Near drowning	0.94	(0.74-1.20)	0.18	(0.14-0.23)	0.41	(0.35-0.48)	0.09	(0.07-0.11)
Visceral injury	1.60	(1.24-2.07)	0.35	(0.31-0.41)	1.67	(1.51-1.84)	0.48	(0.45-0.52)
Infectious disease	0.72	(0.70-0.74)	0.62	(0.61-0.63)	0.81	(0.79-0.82)	0.54	(0.53-0.55)
Local infection	0.60	(0.57-0.62)	0.53	(0.52-0.54)	0.85	(0.84-0.87)	0.48	(0.47-0.48)
Septicaemia	3.82	(3.38-4.31)	2.39	(2.25-2.53)	10.1	(9.6-10.6)	2.29	(2.22-2.36)
Cardiac conditions	0.55	(0.52-0.58)	0.55	(0.53-0.57)	0.96	(0.95-0.97)	1.55	(1.53-1.56)
Cerebro-vascular conditions	1.11	(1.05-1.18)	0.65	(0.61-0.69)	1.13	(1.11-1.14)	1.62	(1.59-1.65)
Other vascular conditions	0.67	(0.57-0.78)	0.58	(0.54-0.64)	0.58	(0.57-0.59)	0.57	(0.56-0.58)
Haematological conditions	1.66	(1.45-1.90)	1.78	(1.68-1.88)	1.21	(1.17-1.25)	1.13	(1.10-1.15)
Central nervous system conditions	1.65	(1.61-1.69)	1.91	(1.87-1.96)	0.59	(0.59-0.60)	1.00	(0.99-1.02)
Gastrointestinal conditions	0.83	(0.80-0.85)	1.11	(1.09-1.12)	0.80	(0.79-0.80)	1.48	(1.47-1.50)
Urological conditions (inc cystitis)	0.61	(0.58-0.64)	0.89	(0.87-0.91)	0.50	(0.50-0.51)	0.76	(0.75-0.77)
Obstetric conditions	1.56	(1.35-1.79)	1.79	(1.68-1.90)	1.28	(1.23-1.32)	2.05	(2.01-2.08)
Gynaecological conditions	1.07	(0.98-1.16)	1.13	(1.08-1.18)	1.12	(1.10-1.15)	1.20	(1.18-1.21)
Diabetes& other endocrinological conditions	3.26	(3.02-3.51)	3.89	(3.69-4.10)	1.02	(1.00-1.04)	1.93	(1.89-1.98)
Dermatological conditions	0.55	(0.51-0.59)	0.40	(0.39-0.41)	0.38	(0.36-0.39)	0.19	(0.19-0.20)
Allergy (inc anaphylaxis)	0.52	(0.49-0.55)	0.36	(0.35-0.37)	0.23	(0.23-0.24)	0.22	(0.21-0.22)
Facio-maxillary conditions	0.36	(0.31-0.41)	0.33	(0.31-0.35)	0.25	(0.23-0.26)	0.21	(0.21-0.22)
ENT conditions	0.27	(0.26-0.28)	0.29	(0.28-0.29)	0.21	(0.21-0.21)	0.38	(0.37-0.38)
Psychiatric conditions	0.99	(0.94-1.04)	1.38	(1.33-1.42)	0.24	(0.24-0.25)	0.34	(0.34-0.35)
Ophthalmological conditions	0.12	(0.10-0.15)	0.10	(0.09-0.10)	0.08	(0.07-0.08)	0.02	(0.02-0.02)
Social problems	0.77	(0.70-0.84)	1.25	(1.14-1.37)	0.59	(0.58-0.60)	0.73	(0.70-0.76)
Not classified	1.05	(1.03-1.07)	0.95	(0.94-0.96)	0.59	(0.58-0.59)	0.56	(0.56-0.57)
Nothing abnormal detected	0.38	(0.37-0.39)	0.28	(0.27-0.28)	0.33	(0.33-0.33)	0.36	(0.36-0.36)

Table C3 – Adjusted Odds of Admission by Attendance Characteristics

		Child Ambulance		Child Walk-in		Adult Ambulance		Adult Walk-in	
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Year	April 2010 - March 2011	1.00		1.00		1.00		1.00	
	April 2011 - March 2012	0.97	(0.95-0.99)	0.86	(0.85-0.87)	0.93	(0.92-0.93)	0.93	(0.92-0.94)
	April 2012 - March 2013	0.96	(0.94-0.98)	0.85	(0.84-0.86)	0.86	(0.85-0.86)	0.85	(0.85-0.86)
	April 2013 - March 2014	0.91	(0.89-0.92)	0.83	(0.82-0.84)	0.82	(0.82-0.83)	0.81	(0.80-0.81)
	April 2014 - March 2015	0.88	(0.87-0.90)	0.78	(0.77-0.79)	0.81	(0.81-0.82)	0.79	(0.78-0.79)
Part of year	March - October	1.00		1.00		1.00		1.00	
	November - February	0.91	(0.90-0.92)	0.94	(0.93-0.95)	0.98	(0.98-0.99)	0.98	(0.98-0.98)
Part of week	Monday - Friday	1.00		1.00		1.00		1.00	
	Saturday - Sunday	0.96	(0.95-0.97)	0.92	(0.91-0.93)	0.97	(0.97-0.98)	0.85	(0.85-0.86)
Part of day	8am-10pm	1.00		1.00		1.00		1.00	
	10pm-8am	0.78	(0.77-0.79)	1.10	(1.09-1.11)	0.96	(0.95-0.96)	1.02	(1.02-1.03)
Prior Activity (28 days)	None	1.00		1.00		1.00		1.00	
	Attended and admitted	2.02	(1.96-2.08)	2.51	(2.47-2.56)	1.45	(1.44-1.46)	2.41	(2.38-2.43)
	Attended not admitted	0.97	(0.95-1.00)	1.01	(1.00-1.03)	0.72	(0.71-0.72)	0.90	(0.89-0.91)
Prior Activity (365 days)	None	1.00		1.00		1.00		1.00	
	Attended and admitted	1.35	(1.32-1.37)	1.53	(1.51-1.54)	1.36	(1.35-1.37)	1.73	(1.72-1.74)
	Attended not admitted	0.79	(0.78-0.80)	0.78	(0.77-0.78)	0.79	(0.78-0.79)	0.83	(0.82-0.83)

Table C4 – Random Effects

	Child Ambulance	Child Walk-in	Adult Ambulance	Adult Walk in
	Std. dev.	Std. dev.	Std. dev.	Std. dev.
Provider (intercept)	0.49	0.47	0.33	0.40