

## Appendices

### Appendix 1: Descriptive statistics for patients attending A&E

Variable	Weekday n	Weekend n	Weekday %	Weekend %
	9,074,928	3,595,860	100.00	100.00
Female	4,518,407	1,786,423	49.79	49.68
<i>Age category</i>				
<1 year	234,133	103,920	2.58	2.89
1-4 years	613,465	283,354	6.76	7.88
5-9 years	387,499	163,612	4.27	4.55
10-14 years	464,636	151,745	5.12	4.22
15-19 years	572,628	239,844	6.31	6.67
20-24 years	735,069	321,829	8.1	8.95
25-29 years	676,990	278,679	7.46	7.75
30-34 years	589,870	235,169	6.5	6.54
35-39 years	491,861	192,738	5.42	5.36
40-44 years	524,531	201,368	5.78	5.6
45-49 years	525,438	199,211	5.79	5.54
50-54 years	477,341	178,714	5.26	4.97
55-59 years	393,852	146,352	4.34	4.07
60-64 years	362,090	135,924	3.99	3.78
65-69 years	378,424	142,396	4.17	3.96
70-74 years	347,570	130,170	3.83	3.62
75-79 years	378,424	141,317	4.17	3.93
80-84 years	383,869	143,475	4.23	3.99
85-89 years	312,178	118,663	3.44	3.3
90-94 years	176,054	68,321	1.94	1.9
95-99 years	40,837	16,181	0.45	0.45
100+ years	6,352	2,517	0.07	0.07
<i>Ethnic group</i>				
Unknown	1,247,803	509,893	13.75	14.18
White	6,565,710	2,591,536	72.35	72.07
Mixed	118,882	47,465	1.31	1.32
Asian	550,848	220,426	6.07	6.13
Black	336,680	125,136	3.71	3.48
Other	255,005	101,403	2.81	2.82
<i>Quintile of area deprivation</i>				
1 (most deprived)	2,570,020	988,502	28.32	27.49
2	2,038,229	795,764	22.46	22.13
3	1,672,509	665,953	18.43	18.52
4	1,477,398	600,149	16.28	16.69

5 (least deprived)	1,316,772	545,492	14.51	15.17
<i>Arrival mode</i>				
By ambulance	2,727,016	1,120,470	30.05	31.16
Other	6,308,890	2,463,524	69.52	68.51
Not known	38,115	11,866	0.42	0.33
<i>Incident location</i>				
Home	4,523,852	1,886,029	49.85	52.45
Work	343,940	64,366	3.79	1.79
Educational establishment	217,798	12,226	2.4	0.34
Public place	829,448	411,366	9.14	11.44
Other	2,333,164	897,527	25.71	24.96
Not known	826,726	324,706	9.11	9.03
<i>Referral source</i>				
General medical practitioner	664,285	84,143	7.32	2.34
Self-referral	5,447,679	2,302,429	60.03	64.03
Local authority social services	7,260	3,236	0.08	0.09
Emergency services	1,185,186	503,780	13.06	14.01
Work	63,524	11,507	0.7	0.32
Educational establishment	36,300	1,798	0.4	0.05
Police	43,560	23,733	0.48	0.66
Other health care provider	345,755	144,913	3.81	4.03
Other	1,183,371	485,441	13.04	13.5
Not known	98,917	34,880	1.09	0.97
<i>Diagnosis category</i>				
Laceration	302,195	138,441	3.33	3.85
Contusion/abrasion	251,376	93,852	2.77	2.61
Soft tissue inflammation	299,473	110,033	3.3	3.06
Head injury	190,573	83,064	2.1	2.31
Dislocation/fracture/joint injury/amputation	444,671	176,916	4.9	4.92
Sprain/ligament injury	352,107	124,776	3.88	3.47
Muscle/tendon injury	128,864	46,027	1.42	1.28
Nerve injury	65,339	25,890	0.72	0.72
Vascular injury	5,445	1,798	0.06	0.05
Burns and scalds	42,652	18,698	0.47	0.52
Electric shock	5,445	2,158	0.06	0.06
Foreign body	68,062	23,733	0.75	0.66
Bites/stings	29,947	15,462	0.33	0.43
Poisoning (inc overdose)	97,102	45,667	1.07	1.27
Near drowning	907	360	0.01	0.01
Visceral injury	2,722	1,079	0.03	0.03
Infectious disease	80,767	36,678	0.89	1.02
Local infection	118,882	51,780	1.31	1.44
Septicaemia	20,872	8,630	0.23	0.24
Cardiac conditions	282,230	95,650	3.11	2.66

Cerebro-vascular conditions	63,524	23,014	0.7	0.64
Other vascular conditions	43,560	13,664	0.48	0.38
Haematological conditions	24,502	7,551	0.27	0.21
Central nervous system conditions (exc stroke)	156,089	56,455	1.72	1.57
Respiratory conditions	297,658	125,136	3.28	3.48
Gastrointestinal conditions	417,447	162,892	4.6	4.53
Urological conditions (inc cystitis)	178,776	72,996	1.97	2.03
Obstetric conditions	27,225	10,788	0.3	0.3
Gynaecological conditions	71,692	28,048	0.79	0.78
Diabetes and other endocrinological conditions	32,670	12,226	0.36	0.34
Dermatological conditions	39,930	19,418	0.44	0.54
Allergy (inc anaphylaxis)	34,485	16,541	0.38	0.46
Facio-maxillary conditions	25,410	13,664	0.28	0.38
ENT conditions	111,622	50,342	1.23	1.4
Psychiatric conditions	87,119	34,161	0.96	0.95
Ophthalmological conditions	99,824	40,993	1.1	1.14
Social problems (inc chronic alcoholism and homelessness)	22,687	10,068	0.25	0.28
Diagnosis not classifiable	1,349,442	531,468	14.87	14.78
Nothing abnormal detected	206,001	84,143	2.27	2.34
Missing	2,996,541	1,181,959	33.02	32.87

## Appendix 2: Descriptive statistics for direct admissions

Variable	Weekday	Weekend	Weekday	Weekend
	n	n	%	%
Observations	817,024	123,835	100.00	100.00
Female	441,520	67,180	54.04	54.25
<i>Age category</i>				
<1 year	51,799	10,699	6.34	8.64
1-4 years	54,414	12,161	6.66	9.82
5-9 years	22,141	4,520	2.71	3.65
10-14 years	19,037	2,923	2.33	2.36
15-19 years	24,184	4,235	2.96	3.42
20-24 years	34,887	6,217	4.27	5.02
25-29 years	36,276	6,056	4.44	4.89
30-34 years	35,704	5,560	4.37	4.49
35-39 years	30,965	4,594	3.79	3.71
40-44 years	34,805	4,966	4.26	4.01
45-49 years	38,809	5,201	4.75	4.2
50-54 years	39,871	5,152	4.88	4.16
55-59 years	39,544	4,842	4.84	3.91
60-64 years	45,672	5,535	5.59	4.47
65-69 years	56,538	6,811	6.92	5.5
70-74 years	55,639	6,737	6.81	5.44
75-79 years	61,195	7,517	7.49	6.07
80-84 years	60,215	8,148	7.37	6.58

85-89 years	46,407	6,972	5.68	5.63
90-94 years	23,612	4,000	2.89	3.23
95-99 years	4,739	879	0.58	0.71
100+ years	572	124	0.07	0.1

*Ethnic group*

White	698,147	105,074	85.45	84.85
Mixed	7,435	1,313	0.91	1.06
Asian	35,622	6,068	4.36	4.9
Black	11,030	1,474	1.35	1.19
Other	9,069	1,375	1.11	1.11
Unknown	55,721	8,532	6.82	6.89

*Quintile of area deprivation*

1 (most deprived)	191,020	29,671	23.38	23.96
2	165,284	25,176	20.23	20.33
3	165,284	25,052	20.23	20.23
4	155,725	23,095	19.06	18.65
5 (least deprived)	139,711	20,841	17.1	16.83

*Admission method*

GP	633,275	102,709	77.51	82.94
Bed bureau	64,627	11,529	7.91	9.31
Consultant clinic	119,204	9,597	14.59	7.75

*SHMI diagnosis group (138 in total, 10 most common on weekday and/or weekend listed)*

Abdominal pain	48,531	8,235	5.94	6.65
Influenza and other upper respiratory infections...	41,913	8,334	5.13	6.73
Headache and eye disorders	29,658	3,740	3.63	3.02
Complications of fertility and pregnancy	29,331	4,359	3.59	3.52
Skin and subcutaneous infections	26,390	4,161	3.23	3.36
Acute bronchitis	25,164	4,891	3.08	3.95
Other connective tissue disease	24,919	2,340	3.05	1.89
Nonspecific chest pain	24,592	2,142	3.01	1.73
Urinary tract infections	23,040	5,077	2.82	4.1
Hepatitis and sexually transmitted infections	22,386	4,978	2.74	4.02
Intestinal infections	22,223	5,275	2.72	4.26
Pneumonia (excluding tuberculosis and sexually transmitted disease)	22,141	4,012	2.71	3.24

*Elixhauser conditions*

Congestive heart failure	30,965	3,926	3.79	3.17
Cardiac arrhythmias	78,598	10,514	9.62	8.49
Valvular disease	21,569	2,365	2.64	1.91
Pulmonary circulation disorders	5,392	582	0.66	0.47
Peripheral vascular disorders	16,831	1,895	2.06	1.53
Hypertension, uncomplicated	179,827	22,340	22.01	18.04
Hypertension, complicated	980	124	0.12	0.1
Paralysis	4,984	842	0.61	0.68

Other neurological disorders	26,717	4,347	3.27	3.51
Chronic pulmonary disease	110,053	14,390	13.47	11.62
Diabetes, uncomplicated	85,216	11,294	10.43	9.12
Diabetes, complicated	9,804	892	1.2	0.72
Hypothyroidism	32,599	4,409	3.99	3.56
Renal failure	62,257	6,353	7.62	5.13
Liver disease	14,788	1,709	1.81	1.38
Peptic ulcer disease excluding bleeding	1,797	248	0.22	0.2
Lymphoma	5,066	854	0.62	0.69
Metastatic cancer	27,125	3,913	3.32	3.16
Solid tumour without metastasis	35,541	5,374	4.35	4.34
Rheumatoid arthritis/collagen vascular diseases	21,079	2,650	2.58	2.14
Congulopathy	4,902	681	0.6	0.55
Obesity	14,461	1,833	1.77	1.48
Weight loss	10,785	1,090	1.32	0.88
Fluid and electrolyte disorders	34,233	5,610	4.19	4.53
Blood loss anaemia	409	50	0.05	0.04
Deficiency anaemia	12,827	1,560	1.57	1.26
Alcohol abuse	19,037	2,402	2.33	1.94