

Appendix 2

To count 30 day emergency readmissions, we identified admissions to hospital in each one year observation period, plus the one month predating the period, that could have led to an emergency readmission to hospital. An observation period is a one year period, calculated for a period six months either side of when the PAM score was collected. These admissions were identified using the payment by results guidance criteria,¹ and a previously used methodology.² A 30-day emergency readmission to hospital was then counted if it occurred within the 12 month observation period, within 30 days of an admission that could have led to a readmission.

	PAM Level 1 (least activated)		PAM Level 2		PAM Level 3		PAM level 4 (most activated)		Overall	
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
Number of eligible admissions within an observation period around each PAM response										
1	288	(65.2)	223	(71.7)	486	(73.8)	118	(71.5)	1115	(70.7)
2	91	(20.6)	49	(15.8)	104	(15.8)	26	(15.8)	270	(17.1)
3+	63	(14.3)	39	(12.5)	69	(10.5)	21	(12.7)	192	(12.2)
Total	442		311		659		165		1577	
At least one readmission during the observation period	84	(19.0)	51	(16.4)	93	(14.1)	20	(12.1)	248	(15.7)
Percent of readmissions from eligible admissions*	9.7%		8.0%		7.6%		5.5%		8.1%	

We counted length of stay for a hospital spell as the difference between admission and discharge dates for inpatient spells in hospital, equivalent to the number of nights spent in hospital during the admitted spell in hospital.^{1,3}

	PAM Level 1 (least activated)		PAM Level 2		PAM Level 3		PAM level 4 (most activated)		Overall	
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
ELECTIVE ADMISSIONS										
Number of elective admissions within an observation period around each PAM response										
1	425	(58.1)	349	(64.0)	785	(64.7)	231	(64.5)	1790	(62.9)
2	162	(22.1)	116	(21.3)	238	(19.6)	80	(22.3)	596	(20.9)
3+	145	(19.8)	80	(14.7)	190	(15.7)	47	(13.1)	462	(16.2)
Total	732		545		1219		358		2848	
Frequency (percent) of observation periods with	179	(24.5)	128	(23.5)	283	(23.3)	89	(24.9)	679	(23.8)

at least one elective admission that is overnight, out of observation periods with an elective admission										
Mean (SD) LOS for panels with overnight elective admissions	5.95	(9.36)	4.45	(7.63)	4.08	(5.42)	3.68	(3.80)	4.59	(6.98)
EMERGENCY ADMISSIONS										
Number of emergency admissions within an observation period around each PAM response										
1	318	(66.5)	230	(74.2)	451	(67.6)	114	(69.1)	1113	(68.7)
2	87	(18.2)	49	(15.8)	137	(20.5)	32	(19.4)	305	(18.8)
3+	73	(15.3)	31	(10.0)	79	(11.8)	19	(11.5)	202	(12.5)
Total	478		310		667		165		1620	
Frequency (percent) of observation periods with at least one emergency admission that is overnight, out of observation periods with an elective admission	363	(75.9)	229	(73.9)	527	(79.0)	129	(78.2)	1248	(77.0)
Mean (SD) LOS for panels with overnight emergency admissions	7.73	(12.12)	7.33	(10.66)	7.65	(13.62)	7.75	(13.45)	7.62	(12.66)

- 1 England N. SUS PbR Reference Manual Implementation of National Tariff / Payment by Results (PbR) policy in the Secondary Uses Service. 2016.
- 2 Blunt I, Bardsley M, Grove A, Clarke A. Classifying emergency 30-day readmissions in England using routine hospital data 2004-2010: what is the scope for reduction? *Emerg Med J* 2015; **32**: 44–50.
- 3 Busby J, Purdy S, Hollingworth W. Calculating hospital length of stay using the Hospital Episode Statistics; a comparison of methodologies. *BMC Health Serv Res* 2017; **17**: 347.