

**Appendix 1 Example budget allocation model using case mix measurement**

A	B	C	D	E	F	G	H	I	J	K
Hospital	Reported HIPE Discharges	Annual equiv's	In-patient costs £	In-patient cmi	Cost per case base price £	Case mix adj Hosp base price	Nat av cost per case for all 4 hosp's	Blended allocation rate 15%	Estimated budget £	Variance £
Hospital 1	10500	10000	25,000,000	1.20	2,500	2,083	2,150	2,093	25,119,178	119,178
Hospital 2	7500	8000	21,000,000	1.10	2,625	2,386	2,150	2,351	20,687,397	-312,603
Hospital 3	16000	16000	33,000,000	0.94	2,063	2,194	2,150	2,187	32,899,370	-100,630
Hospital 4	6500	5500	14,000,000	1.35	2,545	1,886	2,150	1,925	14,294,054	294,054
Total	<u>40,500</u>	<u>39,500</u>	<u>93,000,000</u>						<u>93,000,000</u>	<u>0</u>

- A = Hospital.
- B = Reported HIPE in-patient discharges.
- C = Discharge equivalent after trimming for outliers e.g.unusual long or short stays.
- D = As reported per specialty costs.
- E = Relative costliness/complexity of a hospital's workload compared to that of all hospitals.
- F = Cost per case = D/C.
- G = Cost per case adjusted for case complexity = F/E.
- H = National average cost per case = (Total C / (Sum B\*D for each hospital))
- I = Blended cost per case = ((Hospital cpc \* 85%) + (Average cpc \* 15%))
- J = What the hospital budget should be based on hospital case mix = C \* E \* I
- K = J – D = variance e.g. gain or loss in case mix.