

Appendix D Tables

This table is designed to be read in conjunction with the main text of the report, and not as a standalone document.

Unless stated otherwise, all data are for 2009/10

TRAC (T) 'Sector' figures relate to data for England, Scotland and Northern Ireland.

TRAC RCR 'Sector' figures relate to the sample of 46 HEIs, drawn from the UK, that participated in the study.

Institutional figures are not all shown in the same order, or with the same identifying letter. Not all were full case studies.

Not all information was available for every case study.

blank cell means not separately identifiable (but included in table)

■ means not relevant

CC01 = clinical medicine

Data covers some (but not all) pre-clinical students, and all clinical students

CC02 = clinical dentistry

CC03 = veterinary science

All terms are defined in the Glossary

1 Size of clinical subject areas

All costs in relevant cost centres

Institution	all costs as % of total institution costs		
	CC01	CC02	CC03
e	26%	2%	■
a	20%	3%	5%
f	19%	1%	■
b	41%	■	■
c	39%	2%	■
d	31%	■	■

Relevant Teaching and Research costs

Institution	---Subject-related costs---			Research
	CC01	CC02	CC03	CC01
a	6%	2%	3%	0%
c	17%	■	■	■
d	5%	1%	■	18%
e	5%	3%	■	30%
f	4%	1%	■	15%
g	5%	2%	2%	14%
h	3%	1%	■	14%
i	3%	1%	■	13%
j	4%	■	■	34%
k	3%	0%	■	32%
l	2%	■	■	28%

2 Activities within clinical medicine

Institution	analysis of costs in CC01						CC01 Total
	Research	Other	-----Teaching-----				
			non-HEFCE-Fundable		non-subject-related	HEFCE-fundable subject-related	
			NPFT	PFT			
a	66%	4%	2%	0%	1%	26%	100%
b	81%	7%	2%	0%	1%	9%	100%
c	83%	7%	1%	0%	1%	7%	100%
d	92%	1%	1%	0%	0%	5%	100%
e	71%	8%	3%	0%	4%	14%	100%
g	63%	8%	3%	6%	2%	18%	100%

Total costs allocated to HEFCE-fundable subject-related costs: Range across 16 institutions

£0 to £26m

Total costs allocated to Research:
Range across 11 institutions

£10m to £266m

3 Activities within clinical dentistry

Institution	analysis of costs in CC02						CC02 total
	Research	Other	-----Teaching-----				
			non-HEFCE-Fundable		non-subject-related	HEFCE-fundable subject-related	
			NPFT	PFT			
a	29%	4%	4%	2%	2%	58%	100%
b	53%	10%	10%	3%	2%	22%	100%
c	32%	7%	1%	1%	5%	54%	100%
d	37%	2%	11%	0%	3%	47%	100%

Total costs allocated to HEFCE-fundable subject-related costs:

Range across 10 institutions

£1m to £16m

4 Size of clinical teaching - student numbers

Institution	% of HEFCE-fundable student population		
	CC01	CC02	CC03
a	16%	5%	5%
b	64%		
c	11%	3%	
d	17%	7%	
f	13%	2%	
g	10%	3%	5%
h	8%	1%	
i	7%	2%	
j	30%		
k	16%	1%	

Cost centre	Range in HEFCE-fundable student FTEs		
CC01	1100	to	2200
CC02	100	to	800
CC03	550	to	600

5 TRAC (T) SUBJECT-FACTS

All costs allocated to HEFCE-fundable Teaching - as listed in Tables 7a-c below, less non-subject-related costs and bursaries

Divided by HEFCE-fundable student FTEs

To produce a cost per student FTE, or Subject-FACTS

These have, below, been compared with the cost/FTE for 'group D' to produce a cost relativity. This does not imply the makeup of that group, or the way the relativity is calculated, has any authority outside of this study.

Our case study institutions			
	range of Subject-FACTS		
CC01	£9,831	to	£26,593
CC02	£11,018	to	£30,721
CC03	£13,460	to	£21,634

Sector results

Subject-related Full Average Costs of Teaching a Student (Subject-FACTS) (£ per student)

2009/10		UK sector		(as issued to the sector for benchmarking April 2011)					Cost relativity (of mean)
HESA academic cost centre		Price groups currently in use	Number of HEIs	Average (mean) FTE of FC- fundable students	Subject-FACTS				
					Mean £	LQ £	Median value £	UQ £	
01	Clinical medicine	A	16	745					2.3
		B	15	531					
		Total	35	956	13706	12193	13755	15967	
02	Clinical dentistry	A	11	219					2.6
		B	7	94					
		Total	18	285	15729	12717	15923	18043	
03	Veterinary science	A	5						3.2
		B	5						
		Total	9	437	19281	13460	18711	23516	
10	Biosciences	B	104	522	8603	7234	8211	9405	1.4
27	Business and management studie:	D	115	1110	6222	5218	5856	6880	1.0
29	Social studies	D	107	1163	5873	5221	5843	6434	
31	Humanities and language based st	D	109	881	6017	5055	5961	6840	
41	Continuing education	D	23	196	6022	4207	6430	7970	
		D			6044				

England
Cost relativity (of mean)
2009/10 ⁽¹⁾
2.3
2.6
3.0
1.4
1.0

England - rolling average		
Cost relativity (of median)		Cost relativity (of mean)
3 yrs to 2008/09 ⁽²⁾	4 yrs to 2009/10 ⁽³⁾	4 yrs to 2009/10 ⁽⁴⁾
2.5	2.5	2.4
2.3	2.5	2.6
2.9	3.0	3.0
1.4	1.4	1.5
1.0	1.0	1.0

(1) data for group D and biosciences prepared by HEFCE ASG on same basis (excluding outliers) as for the UK.

data for the clinical subjects based on all English institutions, therefore including any outliers. See for example Tables 13 and 14.

(2) as published in HEFCE EP 06/2010 "Review of subject price groups for 2010"

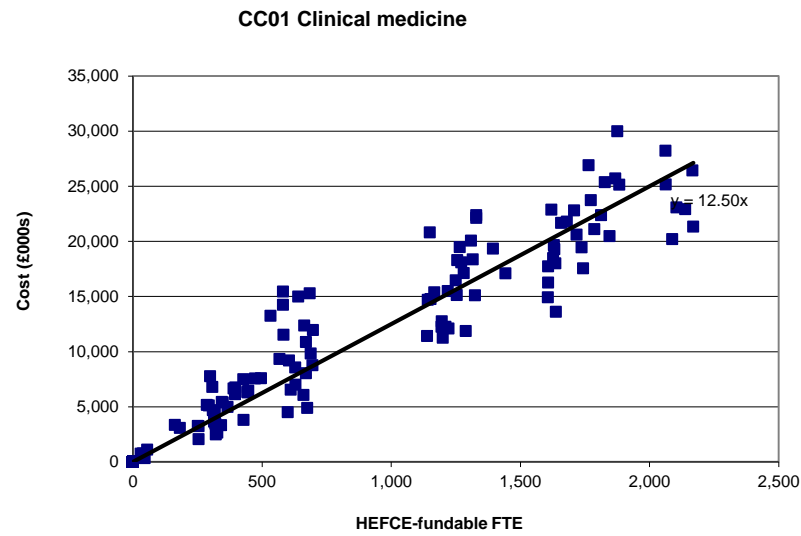
(3) updated for 2009/10 - source Analytical Services Group (ASG), HEFCE

(4) same data as in (2), but based on mean, not median - source ASG, HEFCE

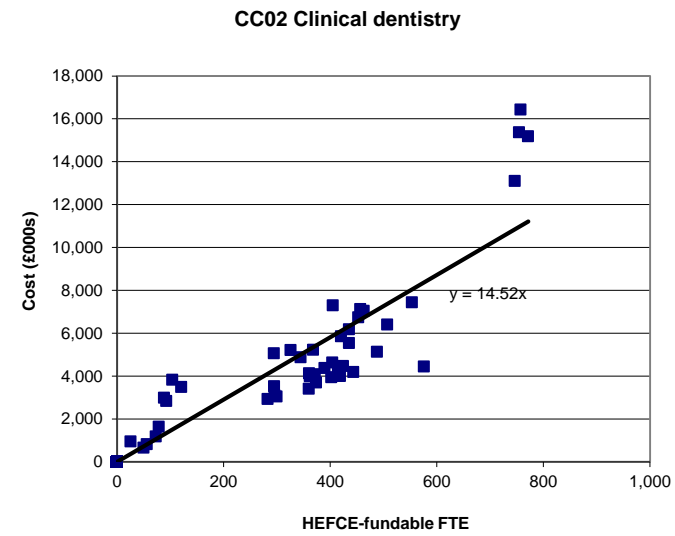
Scatter graphs showing data for four years 2006/07 to 2009/10 - source, ASG, HEFCE

The plots below show subject-related costs against HEFCE-fundable student FTEs for each cost centre, for the 2006/07, 2007/08, 2008/09 and 2009/10 data. The plotted line is the least squares regression of costs against student FTE, and the coefficient therefore represents the least squares estimate of the costs per FTE student. Also shown for comparison between cost centres are the mean (total subject-related costs divided by total HEFCE-fundable FTE), and both the median and standard deviation of the individual rates associated with each observation. The Subject-FACTS average and standard deviation figures are shown in £(000).

Data are for English HEIs only
stdv = standard deviation

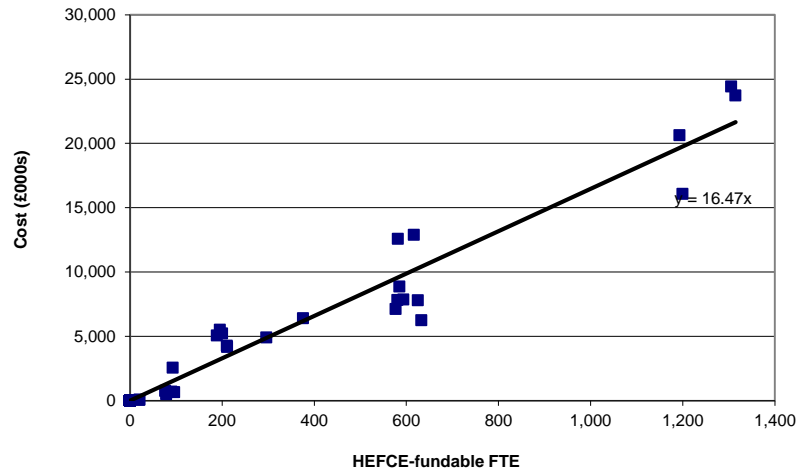


CC01 **mean = 12.96** **median = 13.35** **stdv = 4.18**



CC02 **mean = 14.14** **median = 13.44** **stdv = 7.31**

CC03 Veterinary science



CC03 mean = 16.47 median = 15.90 stdv = 7.15

6 TRAC RCR CC01

The data covers all Research activities, including I/O, PGRs, and externally funded Research Grants and Contracts. The calculations are based on all Research costs, as analysed in Table 8 below. This includes research assistant costs.

Divided by the direct time recorded against Research by academics. This does not include research assistant FTEs.

To give a cost/FTE. Note this is different from Subject-FACTS which shows a cost/student, not the cost/staff FTE used here.

For the purpose of the TRAC RCR study only, these cost/FTEs were compared against the average (mean) for group v - humanities and social sciences excluding management, to provide a cost relativity. This does not imply that the makeup of that group, or the way the relativity is calculated, has any authority outside of this study.

Results from institutions participating in the RCR study

(extract from Annex 3 of TRAC RCR report)

Review of research cost relativities 2009-10: summary

Number of HEIs who participated in the study

Key of Acronyms	
I-O	Institution-own funded Research
PGR	Postgraduate Research
RG&C	Externally Funded Research Grants and Contracts
HEIs	Higher Education Institutions

Table 5. Research cost per FTE (£s)

Note: RG&C is calculated using the net RG&C costs (i.e. without scholarships etc)

HESA academic cost centre			I-O cost per academic staff FTE	PGR cost per student FTE	RG&C cost per academic staff FTE	I-O and RG&C cost per academic staff FTE	Total research costs per academic staff FTE
Subject group for comparative purposes only			Sector	Sector	Sector	Sector	Sector
1	Total clinical medicine	i	30	30	30	30	30
		Number of HEIs	30	30	30	30	30
		Average	362,236	26,018	1,035,525	887,026	963,724
		1st Quartile	265,314	16,008	631,569	590,636	673,731
		Median Value	360,636	25,347	882,118	773,015	833,741
		3rd Quartile	535,455	35,919	1,329,872	1,141,142	1,216,621

This is a continuation of Table 6

It is an extract from the TRAC-RCR report, and the reference to Table 7 relates to that report.

Table 7. Cost relativities

Note: RG&C is calculated using the net RG&C costs (i.e. without scholarships etc)

HESA academic cost centre		Subject group for comparative purposes only		I-O cost relativity	PGR cost relativity	RG&C cost relativity	I-O and RG&C cost relativity	Total research cost relativity
				Sector	Sector	Sector	Sector	Sector
1	Total clinical medicine	i	Number of HEIs	29	28	28	28	28
			Average	2.39	2.26	3.48	4.44	3.83
			1st Quartile	1.97	1.58	2.28	3.18	2.78
			Median Value	2.45	2.12	3.28	3.96	3.36
			3rd Quartile	3.08	2.79	4.26	5.01	4.30

Our case study institutions (who participated in the RCR study)

(these institutions represented 63% of costs reported under TRAC-RCR)

number of institutions 11 of 31 participants

Range of total cost/FTE results £574k to £4666k

(One of these end-range figures was not robust, one was excluded as an outlier)

7c Teaching cost per student in CC02	Analysis of Subject-FACTS									
	£	a	b	c	d	e	f	g	h	average
Direct academic staff time		3388	5382	1757	7541	4805	3873	3921	2788	4182
Support time of academics incl scholarship				2304	1088		4444	856	1983	2135
O(CS) time		3514		814	273		6160	888	2160	2301
Support staff and technicians				990	2995	1071	7551	1223	920	2458
Other departmental and faculty costs		6489	3300	1656	2640	2223	216	1020	5025	2821
Estates		1519	721	1980	1839	1994	3128	211	2085	1685
Central services		3726	5331	2228	7630	2295	8306	3526	2723	4471
RFI on expenditure				495	417	328		414	635	458
non-subject related costs		-593	-1293	-743	-2715		-2967	-1041	-1121	-1496
		18042	13440	11483	21709	12715	30712	11018	17199	17040

7d Dentistry: change in Subject-FACTS from 2008/09 to 2009/10

institution	change in Subject-FACTS
a	0%
b	19%
c	10%
d	-15%
e	6%
f	65%
g	9%
h	-9%
these 8 institutions: change in mean	9%

9 An alternative calculation for the cost relativity for teaching in clinical medicine

Biosciences and Band D figures based on England-sector TRAC(T) results for 2009/10, excluding outliers - see Table 5.
Clinical medicine costs and student FTEs based on TRAC (T) results for 2009/10 for all institutions in England.

	Total TRAC costs £'000 in CC01 a	Number of price group B students in CC01 b	Mean Subject-FACTS for bio-sciences (CC10) c	Proxy cost of clinical medicine group B students in CC01 £'000 b*c=d	Remaining TRAC costs in CC01 £'000 a-d=e	Number of price group A students in CC01 f	To derive a cost/FTE of price group A students only in CC01 e/f=g	Mean Subject-FACTS for price group D h	Derived relativity for group A students in CC01 g/h=i
CC01	389813	10485	£8,473	88839	300974	17833.2	£16,877	£6,097	2.8

Compared to relativity for combined A/B students for 2009/10 reported in TRAC (see Table 5)

2.3

This is only one illustration of how the figures might be calculated. For example, the median might be considered to be a better average to use; biosciences may not be the most appropriate proxy for price group B students with some clinical element; and so on

10 The impact of O(CS) costs

Institution	Method used (see next page)	% of costs that is O(CS) time (from tables 7-9 above) ¹			
		Teaching -----		Research	
		CC01	CC02	CC03	CC01R
a	C	0%			0%
b	E	4%	3%		not avail
c	A	7%	7%		0%
d	E	1%	1%		1%
e	D	12%	0%		0%
f	D	27%	20%		0%
g	A	15%			0%
h	E	19%			0%
i	D	29%	20%		0%
j	C	0%			0%
k	D		12%		

⁽¹⁾ in most cases, O(CS) pay costs and time have driven department and central services costs to Teaching as well, therefore the overall impact is understated. This is partially offset by an overstatement of T&R costs in some institutions. This arises from their including the reimbursed costs of distinction awards, which should be allocated to Other.

Simplified illustration of five methods used to allocate O(CS)

(these are described in paragraph 3.28 of the main report)

Teaching Research O(CS) Other

Method A

per TRAC Guidance

(broadly, used by 2 institutions out of 13)

Allocate O(CS) costs of staff whose salaries are reimbursed (partly or wholly) to O

Allocate balance to Teaching and Research in relation to services received from NHS



Method B

(two institutions)

Allocate costs of reimbursed salaries to O(CS); and keep in O

Allocate balance of O(CS) to Teaching and Research



Method C

(two institutions)

Allocate all O(CS) to O

Therefore none is allocated to Teaching and Research



Method D

(five institutions)

Allocate all O(CS) to Teaching



Method E

(three institutions - although with different approaches and different results)

Allocate O(CS) to Teaching and Research based on staff time



11 The costs in institution-own-funded Research

An example of I/O costs	£ cost/FTE
Academic pay (including Support, no O(CS))	121257
Support staff	20366
Department non-pay costs	11675
Faculty costs	21675
Estates	83560
Central services and RFI	131099
	389634

costs are all TRAC costs allocated to I/O funded Research for this cost centre
 FTEs are the direct Research time of academic staff allocated to I/O Research for this cost centre

12 veterinary sciences Subject-FACTS

English institutions, 2009/10

Institution	Subject-related cost (£000s)	HEFCE-fundable student FTE	Subject-FACTS (£)
a	5,066	188.9	26,824
b	12,589	581.9	21,634
c	24,430	1,305.6	18,711
d	6,414	376.0	17,060
e	7,818	580.8	13,460
f	659	96.3	6,847
g	42	8.8	4,788
h	78	20.8	3,733
total	57,096	3,159	
mean			18074

cost relativity (with Band D, England, 2009/10)

3.0 (see Table 5)

13 dentistry Subject-FACTS

English institutions, 2009/10

Institution	Subject-related cost (£000s)	HEFCE-fundable student FTE	Subject-FACTS (£)
a	955	25.8	36,982
b	2,847	92.7	30,721
c	16,440	757.3	21,710
d	1,644	78.6	20,905
e	7,307	405.0	18,043
f	5,065	294.5	17,199
g	1,186	73.1	16,228
h	7,135	456.8	15,618
i	5,227	368.2	14,195
j	7,442	553.7	13,440
k	5,541	435.8	12,717
l	4,639	404.0	11,483
m	4,090	371.2	11,018
total	69,519	4,316.7	
mean			16105

cost relativity (with Band D, England, 2009/10)

2.6 (see Table 5)

14 The impact of reimbursed costs in clinical medicine (CC01)

institution	reimbursed clinical excellence awards etc as a % of salaries		all other reimbursed costs as a % of S-FACTS
	NHS funded	HEFCE funded	
	a	b	c
a	15%	7%	35%
b			30%
c		6%	29%
d	11%	4%	64%
e	5%	2%	
f			16%
g	not known	8%	54%
h	17%	5%	33%
i	12%	5%	
(iii) average % of subject-related costs			37%
(i) average % of salaries	12%	5%	
(ii) salaries as proportion of subject-related costs (avge of 10 case study institutions)	34%	34%	
(iii) proportion of subject-related costs relating to each element (i)*(ii)	4%	2%	
(iv) percentage of 11 case studies that include these costs in subject-related costs	27%	100%	73%
average proportion of subject-related costs in case study institutions which relate to each type of reimbursed cost (iii)*(iv)	1%	2%	27%
results of using same methodology for Research costs: impact on Research costs	2%	1%	0%

assuming most of costs are in SFACTS