

Supplementary Table 1: Univariate analysis results for UK OST applicants

Group	Factor	Category	Percent offered place on OST training programme	N doctors in sample – UKMED rounding rules applied.	Bivariate Association. Bonferroni correction applied for 18 tests
Applicant Behaviour	Exam relative to application	FRCOphth_Part_1 NOT taken before OST App	27.1%	760	X ² = 62.534 P < 0.0001
		FRCOphth_Part_1 taken before OST App	56.4%	210	
	TIME from PMQ to first OST application	2 year	38.7%	955	X ² = 6.597 P = 0.665
		3 year	41.0%	210	
		4 or more years	29.6%	190	
	Only applied to OST	Applied to multiple specialties	30.8%	785	X ² = 38.501 P < 0.001
		Only applied to OST	47.5%	565	
	ORIEL Year for 1 st application	2012	55.8%	215	X ² = 39.020 P < 0.0001
		2013	40.0%	165	
		2014	32.3%	190	
2015		35.7%	195		
2016		33.9%	220		
2017		31.0%	195		
Demographics	Sex	Man	36.6%	760	X ² = 0.925 P = 1
		Woman	39.3%	590	
	Ethnicity	No record	55.0%	20	X ² = 17.576 P = 0.133
		Asian or Asian British	35.1%	595	
		Black or Black British	29.2%	70	
		Mixed	36.7%	50	
		Not stated	38.9%	20	
		Other Ethnic Groups	29.1%	110	
White		43.7%	485		
HESA Disability last	No record	52.9%	15	Cells counts too	

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		A long-standing illness or health condition	63.6%	10	low to meet expected frequency criterion.
		Another disability, impairment or medical condition	100.0%	0	
		Deaf or a serious hearing impairment	30.8%	15	
		No known disability		0	
		Not known		0	
		Specific learning difficulty	33.3%	5	
		Two or more conditions	38.0%	1200	
	HESA Disability summary	No	33.3%	10	X ² = 1.638 P= 1
		Yes	31.2%	95	
		Missing	32.8%	265	
	IMD Quintile	Missing	31.8%	130	X ² =9.378 P= 1
		1 - Most deprived	37.0%	190	
		2	39.3%	180	
		3	38.2%	240	
		4	43.2%	345	
	POLAR quintile	5 - Least deprived	32.8%	265	X ² = 3.610 P= 1
		Missing	31.3%	65	
		1 - Lowest rate of participation	36.4%	105	
		2	36.4%	175	
		3	39.1%	255	
	SEC Combined	4	41.4%	490	X ² = 4.676 P= 1
		5 - Highest rate of participation	33.0%	100	
		1 semi-routine and routine occupations	35.3%	15	
		2 lower supervisory and technical occupations	26.5%	35	
		3 small employers and own account workers	34.3%	105	
		4 intermediate occupations	39.6%	830	
	Graduate on entry	5 managerial and professional occupations	36.9%	270	X ² = 1.905 P= 1
99 Missing		38.7%	955		
No HESA record		40.9%	20		
	Graduate on entry	33.8%	225	P= 1	

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	Bursary	Not graduate on entry	38.6%	1105	
		N	38.2%	1330	$\chi^2 = 6.082$
		Y	9.5%	20	$P = 0.246$
	Parental education – cases with HESA data only	No	29.7%	35	$\chi^2 = 2.767$ $P = 1$
		Yes	31.1%	105	
		Don't know	31.5%	180	
		Unknown	37.0%	420	
	Age on application	Mean age - not offered	27.3853	840	$F = 10.989$
		Mean age - offered	26.7867	510	$P = 0.017$
	Medical school	Course type grouped	Standard entry	38.6%	1150
Graduate entry			35.4%	125	
Gateway and Preliminary			22.4%	50	
Missing			47.8%	25	
Intercalation		No record of intercalating	36.2%	995	$\chi^2 = 2.859$
		Record of intercalating	41.6%	340	$P = 1$
Final Medical School		Aberdeen	21.1%	20	$\chi^2 = 83.491$ $P = 0.001$
		Barts	34.2%	80	
		Birmingham	40.3%	65	
		Brighton and Sussex	42.1%	20	
		Bristol	46.3%	40	
		Cambridge	65.9%	40	
		Cardiff	25.6%	40	
		Dundee	29.7%	35	
	Edinburgh	39.5%	40		
	Glasgow	25.0%	40		
	Hull York	15.8%	20		
	Imperial	52.9%	105		
Keele	23.1%	15			
King's	36.8%	85	London and Lancaster removed due to low Ns		

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		Leeds	43.6%	40	
		Leicester	31.7%	40	
		Liverpool	25.0%	35	
		Manchester	31.1%	75	
		Newcastle	33.3%	50	
		Norwich	30.4%	25	
		Nottingham	40.0%	40	
		Oxford	62.8%	45	
		Peninsula	32.5%	40	
		Queen's	20.7%	30	
		Sheffield	34.4%	30	
		Southampton	23.8%	40	
		St George's	30.3%	90	
		Swansea	14.3%	5	
		UCL	55.6%	100	
		Warwick	23.5%	15	