

# Medical school applications in the UK

*Wiji Arulampalam\**, Robin A. Naylor, and Jeremy Smith

*University of Warwick*

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## **Abstract.**

In the context of the UK Government's ambitious programme of medical school expansion and widening access, it is important to have an understanding of how the medical school admissions process works. Using individual-level data for 1997 and 1998 applications to UK medical schools, we estimate models of the probability of applying to a particular medical school. We find that while social class has only a limited effect on whether an individual applies to a particular medical school, ethnicity, region of residence and the set of other universities to which the student has applied as well as academic performance have a substantial effect on the application decision to apply to a particular medical school.

Corresponding author:

Wiji Arulampalam  
Department of Economics  
University of Warwick,  
Coventry, CV4 7AL, UK.  
Email: [wiji.arulampalam@warwick.ac.uk](mailto:wiji.arulampalam@warwick.ac.uk)  
Web-site: [http://www.warwick.ac.uk /Economics](http://www.warwick.ac.uk/Economics)

\* Also, IZA, Bonn, Germany.

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## **1. Introduction**

Both the Third Report of the UK's Medical Workforce Standing Advisory Committee (MWSAC, 1997) and the NHS Plan 2000 recommended a substantial increase in medical school intake. Over the 10 year period since 1997 UK medical school intakes will have almost doubled. This rapid expansion in numbers is taking place along side targets set by the Government to widen access. The issue of access to undergraduate medical education has been a topic of discussion for a number of years; see, for example, McManus (1998a) and (1998b) and Angel and Johnson (2000).

A dual policy of widening access along with expanding student numbers raises questions regarding the strategy of students, in having decided to apply to study medicine, in terms of the combination of medical schools to which they apply. In this paper we model the probability of a student applying to a particular medical school. However, the analysis is undertaken conditional on students having applied to at least one medical school. We are unable therefore to address questions regarding the determinants of the decision to apply to study medicine.

The rest of this paper is organised as follows. Section 2 presents a discussion of the institutional and policy contexts, which provide the backdrop to our analysis of data on UK medical student applications. Section 3 describes the data set. The econometric model is presented in Section 4 along with the discussion of the results. Finally, Section 5 closes the paper with conclusions and further remarks.

## **2. Institutional context and public policy**

All applications and admissions to UK universities for full-time undergraduate courses are through the Universities and Colleges Admissions Service (UCAS). Currently, an applicant is permitted to apply through UCAS for a maximum of six distinct (and unranked) university courses and five in the case of medical applications. There are no restrictions on what course-university combination one can apply for, with the exception that one is permitted to apply to only one of Oxford or Cambridge.<sup>1</sup> In each annual round, the closing date for applications is mid-December (or mid-October in the case of applicants to Oxford and Cambridge) of the calendar year prior to University entry. It follows that applicants intending to proceed from

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<sup>1</sup> For this reason we will treat Oxford and Cambridge as a single institution to which one can apply, called Oxbridge.

school to higher education within the same year – that is, not postponing their application to include a ‘gap year’ interval – will submit their application form *prior to* the completion of their school studies and hence without knowledge of their final school grades (that is, A-levels, in the majority of cases of applicants from England, Wales and Northern Ireland, and Highers for Scottish students).<sup>2</sup> The university response to an application can either be a rejection or a conditional (subject to the applicant achieving certain minimum grades) offer of a place. Most medical schools also interview candidates.

Some students apply once they have received their final school grades. In this case, both the applicant and the institution to which the application has been made have full information about grades achieved. The university response to an application is then either to reject or to make an unconditional offer and this will often be made only after an interview.

The UCAS handbook contains, for all university-course combinations the “typical” offer that is made to those students, in terms of A-levels and Highers scores as well as in terms of any pre-requisite subjects they require, to whom a conditional offer is made. In the case of medical students only around one-in-four of applications (and only 3 out of 5 applicants) receive an offer, see Arulampalam et al (2005). In general, students will apply to those medical schools which they perceive as their best match (academically and socially), subject to the condition that they are likely to be able to make the offer which the medical school *typically* uses. In such cases we can imagine that we will observe enclaves of students on the basis of some of their key characteristics.

### **3. The Data**

In this paper, we use data on all applications that were made by students to any medical school in the U.K in either 1996 or 1997, just prior to the big expansion in medical student numbers. In 1996 there were 44,353 applications made by 9,520 distinct applicants. The corresponding figures for 1997 were very similar to those in the previous year, with 44,629 applications made by 9,513 distinct applicants. Figure 1 shows the ratio of applications received to places available in each medical school.

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<sup>2</sup> Whilst students taking A-levels are generally 17-18 years old, students taking Highers are generally a year younger, but these Scottish students may stay on for an extra year to take the additional Certificate of Sixth Year of Study (CSYS) qualification.

The figure shows marked variations in this ratio across medical schools, where London-based medical schools are generally in higher demand than those in Scotland, Wales and Northern Ireland.

While the medical schools recommend that applicants apply to no more than five medical schools, there are differences in the number of applications that applicants made, with approximately 15% applying to less than five medical schools, 80% applying to five medical schools and 5% applying to six medical schools. Approximately 5% of applicants make an application to at least one non-medical school course.

In this paper we take the applications made across the two years taken together as the results from separate analyses showed that there were very similar effects across the two years, a result consistent with that of Arulampalam *et al* (2005) in their analysis of medical school offers.

Table 1 presents summary statistics of the characteristics of the students applying to different groups of medical schools. While we have data for each medical school, for ease of reporting data we distinguish between five groups of medical schools: London (=Charing Cross, Imperial College, Kings' College, Queen Mary and Westfield (QMW), Royal Holloway, St. George, Guys and St Thomas and University College London (UCL)), Scottish (=Aberdeen, Dundee, Edinburgh, Glasgow and St. Andrews) Other English (=Birmingham, Bristol, Leeds, Leicester, Liverpool, Manchester, Newcastle, Nottingham, Sheffield and Southampton), Oxbridge and Other (Queens Belfast and Wales Medical School).

In general, there are not marked differences in terms of the gender breakdown across the different medical schools, with the exception that males account for 55% of applications to Oxbridge medical school and 44% of applications at an Other medical school, compared to 49% of all applications. In terms of the age mix of the students applying to the different medical schools, we find that the age distribution of students is similar for London, Other England and Other medical school. In contrast, Scottish medical schools account for 18% of younger (less than 18 years old) applicants,<sup>3</sup> compared to 4% of all applications. 77% of Oxbridge applications are from 18 year olds (compared to 57% of all applications) with only 18% of applications from students over 18 years old, compared to 39% of all applications.

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<sup>3</sup> Probably due to the fact that students can be admitted in university with Scottish Highers, which are generally taken when students are aged 16-17.

In addition to attracting more mature students, another of the key indicators on widening access is in terms of the parental social class background of the students. Given that a student has made an application to at least one medical school, we note that the social class background of students at the different groups of medical schools is fairly similar. However, we note that more students whose background is from social class I (Professional) apply to Oxbridge, (42% compared to 35% overall) and fewer apply to Other medical schools (32%).

The other major indicator, which is the focus of widening access is ethnic background. The most striking feature here is the comparatively small number of applications from white students to London medical schools, with a figure of 46% compared to 63% of all applications (and 60% of the London population as estimated by the 2001 census). All other medical school groups have an offsetting higher proportion of white applications, with the exception of Oxbridge, whose ethnic application mix is very similar to that of all applications.

With the exception of Oxbridge, whose distribution of applications across the regions is very similar to that for all applications, there appear to be very strong regional influences on the application strategy of the students. In particular, we find that nearly 46% of all applications to Scottish medical schools come from Scotland and 15% come from Northern Ireland, these figures compare to just 8% of all applications coming from Scotland and 5% from Northern Ireland. We also note that 42% of applications to London universities come from London, and 65% come from either London or the South East. These figures compare to 23% of all applications coming from London and 40% from London or the South East. Applications to the Other medical schools largely come from Wales, Northern Ireland, West Midlands or the South West.

Students from Independent schools are more likely to apply to Oxbridge and are less likely to apply to Other medical schools. However, students from Grammar schools are more likely to apply to Other medical schools.

The average science A-level (Higher) scores differ across medical schools. Of applicants to Oxbridge the average science A-level score is 9.18 (out of 10) compared to 8.1 for those applying to either Scottish, Other English or Other medical schools and 7.5 for those applying to London. For the average science Higher score, again Oxbridge has the highest average at 5.8 (out of 6), followed by Scottish medical

schools at 5.3, Other English medical schools 5.1, and Other and London medical schools at 4.5.

If we measure academic preparedness also by the number of science A-levels, we note that a disproportionate number of Oxbridge applications come for students with at least 3 sciences (90%), compared to all applications, where the proportion is 77%. There is a similar pattern of academic performance in Highers across the different medical schools.

Looking now at the actual characteristics of the application form, we note that Oxbridge applications are unlikely to have a non-medical school application, whereas Scottish and Other medical schools are much more likely to see applications with a non-medical school application on it.

A small proportion of applications have previously applied to study medicine (approximately 7.5%), in general, these students are much more likely to apply to a London medical school, where around 10% of all applications are from students who have previously made an application to a medical school. The date of application shows that all students applying to Oxbridge have had their application processed by November, whereas Scottish medical schools have a disproportionately large number of December applications.

It is interesting to investigate the bundle of universities to which a student has applied. We again note strong regional influences, with students tending to apply to medical schools in the same region. We note that 70% of all applications to a Scottish university has at least one other Scottish university application on it, whilst only 26% of these applications had at least one London medical school on. Similarly we find that 89% of applications to a London medical school have an application to at least one other London medical school on it.

## 4. Econometric Model and Results

We are interested in the probability individual  $i$ , applies to university  $j$ , that is,

$$\Pr[Y_{ij} = 1] = \Phi \left[ \alpha_{0j} + \sum_{k=1}^5 \alpha_{jk} D_{ik}^j + \beta_j' x_{ij} + \gamma_j n_i + u_{ij} \right] \quad i = 1, \dots, N, j = 1, \dots, 26 \quad (1)$$

where  $Y_{ij} = 1$  denotes the an application to medical school  $j$ . That is,  $Y_{ij} = 1$  if student  $i = 1, \dots, N$  applies to medical school  $j$ .  $D_{ik}^j$  is a binary indicator which takes the value

of one if a student applying to medical school  $j$ , also made an application to a medical school in group,  $g$ , we use the same five groups of medical schools that were used in describing the summary statistics: Oxbridge, London, Scottish, Other English and Other. In addition, we include various individual specific characteristics in  $x$ . The variable  $n_i$  is a dummy variable for applying to fewer than five medical school applications and is modelled as:

$$\Pr[n_i = 1] = \Phi[\gamma_0 + \gamma' z_i + u_{i0}] \quad i = 1, \dots, N \quad (2)$$

To allow for the possible endogeneity of this variable equation (1) includes the Mills' Ratio from equation (2). Even though the inclusion of this term means that the assumption of homoscedasticity in equation (1) is no longer appropriate.

We now discuss the main results for the two years taken together for each medical school in turn. The coefficient estimates and their significance are reported in table 2 for Scottish and Other medical schools. Table 3 reports the results for the London medical schools, while tables 3 and 4 report the results for the Other English and Oxbridge medical schools. Additionally, we report some marginal effects along with their 95% confidence intervals for all medical schools for some variables in figure 2a through to figure 2j.

We observe (see figure 2a) some significant effects associated with a 1997 applications, relative to 1996 applications. In general, we note that London medical schools experienced about a 1-3 percentage point increase in their applications, with the exception of Royal Holloway, which experienced a marked fall of around 6 percentage points. Correspondingly, there was a 1-3 percentage point fall in 1997 applications to many of the Other English medical schools, compared to 1996.

***Personal Characteristics:***

There are some significant effects associated with the gender of the applicant, we find that, holding all else constant, male students are significantly (at the 5% level) more likely to apply (by between 1-2 percentage points) to a number of the London medical schools as well as Dundee, Manchester, Nottingham and Oxford and are less likely to apply to Birmingham, Newcastle, Sheffield and Wales, see figure 2a

While in the summary statistics we noted a preponderance of younger applications to Scottish medical schools, once we control for other effect (in particular, prior qualifications), we observe no significant effect of younger students applying to Scottish medical schools, but find that students over 18 years of age are

significantly more likely to apply to Aberdeen, Dundee, St. Andrews, as well as Charing Cross, Royal Holloway, St. George and Newcastle and less likely to apply to Birmingham, Nottingham, QMW, Guys and Oxbridge, see figure 2b.

In line with the issue of widening participation, there are very few social class effects for any medical school, having controlled for the applicants other characteristics. The only real significant effects are observed for those students whose parental background is SC I (Professional), who are more likely apply to Royal Holloway, Guys, Oxbridge, Birmingham and Leeds and less likely to apply to Edinburgh, Queens and Leicester, relative to those students whose background is SC II, see Figure 2b.

In contrast to social class, the ethnicity variables are significant for many medical schools. We note that there are very similar effects on the variables for Indian, Pakistani and other Asian – in fact, the bivariate correlations between the estimated marginal effects across the different medical schools are all in excess of 0.85. We find that all three of these ethnic groups are more likely to apply to the London medical schools, by around 4-5 percentage points (see Figure 2c for Indians). We also find significant and positive effects for Dundee, Leicester, Manchester, relative to white students. Offsetting this we find these Asian students are less likely to apply to Bristol, Edinburgh, Glasgow, Newcastle, Nottingham, Southampton and Wales. Students who are black behave slightly differently from the other non-white ethnic groups (see Figure 2c) being significantly more likely to apply to Birmingham, Kings, Leicester, Manchester, St George and Oxbridge and less likely to apply to Bristol, Royal Holloway and St. Andrews.

Having controlled for other personal characteristics there remains very strong regional effects in line with those observed in the summary statistics (in table 1). We find a strong tendency for students to apply to their local medical schools (see Figure 2d for Scotland and Northern Ireland and Figure 2e for the West Midlands and the North). We find that, relative to the default category of a student from London, Scottish students are more likely to apply to every Scottish medical school (by between 30-40 percentage points) as well as Queens, Manchester, Newcastle and Sheffield – although the estimated marginal effects are much smaller at between 5-15 percentage points. These Scottish students are then around 10 percentage points less likely to apply to London universities, Southampton, Wales and Oxbridge. Similarly, Northern Irish students are around 40 percentage points more likely (relative to



London students) to apply to Scottish medical schools and 70 percentage points more likely to apply to Queens. There are also smaller but significant positive effects associated with applications to Liverpool, Manchester and Newcastle medical schools by around 20 percentage points. Offsetting this we find Northern Irish students are around 10 percentage points less likely to apply to London, Oxbridge, Bristol, Nottingham, Sheffield and Southampton medical schools. Welsh students are more likely to apply to all Midlands, Liverpool and Wales medical schools and are less likely to apply to London, Dundee, Edinburgh and Newcastle medical schools. With the regions of England we find that students from each of the regions being more likely to apply to medical schools in the general vicinity of their residence and markedly less likely to apply to London medical schools as well as other medical schools further away, relative to London students.

***Schooling and prior qualifications:***

We find there are some effects associated with school type, in particular, students who went to an Independent school, relative to students who went to a Comprehensive school, are more likely to apply to most London medical schools as well as St. Andrews, Oxbridge, Bristol and Leeds medical schools, with the effect varying between 2 and 6 percentage points (see Figure 2f). Offsetting this we find these students are less likely to apply to Glasgow, Leicester, Liverpool, QMW, Queens and Wales. We also find that students from Grammar, 6<sup>th</sup> form and FE colleges are some 4 percentage points more likely, than equivalent students from comprehensive schools to apply to Guys medical school.

Prior qualifications have an effect on the universities to which one applies. In Figure 2f we scale the marginal effect by two-thirds such that for a medical school applicant with 3 science A-levels a two-thirds increase in the average A-level sciences corresponds to raising performance by one A-level grade across the 3 science subjects, from say BBB to ABB. We find that an increase in the science score by one grade makes the student more likely to apply to Oxbridge and Nottingham by around 2 percentage points, and to Guys, Birmingham, Leeds and Southampton by around 0.67 percentage points. There is a small fall in the probability of applying to all Scottish and London (excluding Guys) medical schools as well as Leicester and Newcastle medical schools.

An increase in the average non-science A-levels score makes a student more likely to apply to Bristol, Edinburgh, Kings, Manchester, Newcastle, Nottingham and

Oxbridge and are less likely to apply to Aberdeen, Charing Cross, Leeds, Leicester, Liverpool, QMW, Royal Holloway and St. Andrews (Figure 2g). In terms of Scottish Highers we see that better performing students are more likely to apply to Aberdeen, Dundee and Glasgow as well as Oxbridge (figure 2g). There are few effects associated with possessing a CSYS.

There are few effects associated with the number of science A-levels one has, with the exception that students with 4 or more science A-levels, relative to those with 3 science A-levels, are markedly more likely to apply to Oxbridge, Queens and Royal Holloway and those with less than 3 science A-levels are significantly less likely to apply to Oxbridge, Guys and St. Andrews. Having taken resits in your exams has substantial effects on which medical schools one applies to, with students who have taken resits between 5-10 percentage points less likely to apply to Oxbridge, Bristol, Edinburgh, Glasgow, Guys and Nottingham and Southampton.

### ***Application information***

Students with 1-4 applications (compared to 5 or 6 applications) are roughly between 5-15 percentage points less likely to apply to all universities. Students with at least one previous application are more likely to apply to Charing Cross, QMW, Royal Holloway and UCL by around 4 percentage points, and are less likely to apply to Edinburgh, Kings, St. George, Guys, Oxbridge, Bristol and Nottingham (see figure 2h). With the exception of Oxbridge, there are no real patterns associated with an October (compared to November) application. However, students applying in December or later are more likely to apply to Edinburgh, Glasgow and Queens and less likely to apply to Nottingham, Sheffield, Southampton and Guys medical schools (figure 2h).

Finally, we look for patterns in the groups of universities to which one applies. Given that we have already controlled for residential effects, we find surprisingly large and significant effects. In particular, students who have an application with Oxbridge are then less likely to apply to a Scottish medical school (with the exception of Edinburgh) by around 4 percentage points, are less likely to apply to a London medical school (with the exception of Imperial, Kings and UCL) by around 7 percentage points and less likely to apply to an Other English medical school (with the exception of Bristol and Nottingham) by around 8 percentage points (see figure 2i).

We find a significant and positive effect (of around 8 percentage points) on the probability of applying to each Scottish medical school associated with the UCAS application form having at least one other Scottish medical school on it. Having a Scottish medical school on the application form also increases the probability (by around 3 percentage points) of applying to Queens, Oxbridge, Bristol and Newcastle. For all others medical school (except Wales, where there is no significant effect) there is a significantly negative effect associated with having a Scottish medical school on the UCAS form (see figure 2i).

We similarly find there is a significant and positive effect (of between 5-15 percentage points) on the probability of applying to each London medical school associated with the UCAS application form having at least one other London medical school on it. However, having at least one London university on the application form reduces the probability of applying to all non-London medical schools.

A UCAS application with an Other English medical school on it (see figure 2j), marginally reduces the probability of applying to Scottish and Other medical schools by around 3-4 percentage points, markedly reduces the probability of applying to a London medical school by between 15-30 percentage points and increases (by around 10 percentage points) the probability of applying to each Other English medical school. Students with an application to either Wales or Queens are more likely to apply to Bristol, Dundee and Southampton and less likely to apply to all other universities with the exception of Queens and Wales.

## **5. Concluding Remarks**

Recent years have seen a rapid expansion of medical student numbers, following recommendations of the MWSAC (1997) and NHS Plan 2000. Additionally there has been an effort on the part of the Government by setting targets to widen access into all universities courses, including medical degrees. Both of these policies will undoubtedly have implications for the decisions of potential students both in terms of who applies to a medical degree and, conditional upon this, the suite of institutions the student puts on their UCAS form.

This paper uses data from before the expansion of the medical schools and the effort to widen participation to look at the second of these two issues. We use data on all students who applied to at least one medical school in the UK for the years 1996

and 1997. Endogenising the variable for the number of medical school applications a student makes, we use a binomial probit model to estimate the probability of applying to each medical school.

There are some gender and age effects across the medical schools. There are unsurprisingly some effects associated with prior qualifications. We find only limited evidence of social class effects, suggesting that once students have decided to apply to at least one medical school, there is no sub-division in the actual medical school one then applies to on the basis of their social class background. There are some effects associated with having come from an Independent school, as perhaps Independent schools flag certain medical schools as being better for their students.

There are very strong regional effects in determining the application strategy of students. In addition to this we find evidence that students apply to similar groups of medical schools and these groups are determined yet again on regional grounds. Additionally, we observe strong effects associated with ethnicity, with Indian, Pakistani and Other Asian students applying to similar universities, which tend to be ones with a large Asian ethnic community.

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**Table 1: Summary statistics on applications**

	All		Oxbridge		Scottish		London		Other England		Other	
	Mean	Std dev	Mean	Std dev	Mean	Std dev	Mean	Std dev	Mean	Std dev	Mean	Std dev
Male	0.488	0.499	0.547	0.498	0.478	0.499	0.512	0.528	0.469	0.499	0.444	0.497
<b>Age groups</b>												
<18	0.041	0.191	0.048	0.215	0.176	0.379	0.015	0.127	0.024	0.154	0.013	0.112
18	0.574	0.494	0.770	0.421	0.535	0.499	0.515	0.500	0.623	0.485	0.574	0.494
19	0.188	0.387	0.136	0.343	0.121	0.325	0.228	0.441	0.176	0.380	0.199	0.399
20	0.040	0.194	0.014	0.117	0.023	0.150	0.057	0.243	0.032	0.177	0.038	0.191
21-23	0.075	0.263	0.015	0.121	0.072	0.258	0.087	0.297	0.071	0.256	0.084	0.277
>23	0.082	0.273	0.016	0.127	0.072	0.258	0.100	0.315	0.074	0.260	0.093	0.289
<b>Social Class</b>												
SC I	0.352	0.477	0.423	0.494	0.353	0.478	0.355	0.505	0.347	0.476	0.315	0.462
SC II	0.369	0.483	0.364	0.481	0.388	0.487	0.340	0.474	0.387	0.487	0.394	0.489
SC IIINM	0.081	0.272	0.061	0.239	0.081	0.273	0.083	0.291	0.080	0.270	0.089	0.285
SC IIIM	0.084	0.278	0.077	0.267	0.079	0.270	0.094	0.308	0.078	0.268	0.089	0.285
SC IV	0.047	0.211	0.034	0.181	0.040	0.197	0.051	0.233	0.046	0.209	0.045	0.208
SC V	0.010	0.102	0.007	0.082	0.007	0.083	0.012	0.113	0.011	0.103	0.012	0.107
Other	0.057	0.231	0.034	0.182	0.051	0.220	0.067	0.263	0.052	0.221	0.055	0.229
<b>Ethnic group</b>												
White	0.625	0.484	0.625	0.484	0.796	0.403	0.461	0.498	0.702	0.457	0.765	0.424
Black	0.036	0.187	0.027	0.162	0.016	0.124	0.056	0.242	0.028	0.165	0.024	0.153
Indian	0.118	0.319	0.131	0.338	0.050	0.218	0.169	0.395	0.098	0.297	0.074	0.259
Pakistani	0.084	0.275	0.051	0.220	0.046	0.209	0.124	0.347	0.067	0.249	0.044	0.203
Other Asian	0.074	0.260	0.099	0.299	0.040	0.195	0.114	0.336	0.050	0.219	0.040	0.195
Other	0.063	0.242	0.067	0.250	0.052	0.223	0.077	0.282	0.054	0.226	0.053	0.225

**Table 1 (cont'd): Summary statistics on applications**

	All		Oxbridge		Scottish		London		Other England		Other	
	Mean	Std dev	Mean	Std dev	Mean	Std dev	Mean	Std dev	Mean	Std dev	Mean	Std dev
<b>Region</b>												
North	0.036	0.184	0.037	0.189	0.047	0.212	0.020	0.148	0.048	0.213	0.011	0.106
York+Humber	0.063	0.240	0.065	0.246	0.044	0.205	0.038	0.201	0.094	0.290	0.032	0.175
North West	0.100	0.293	0.092	0.289	0.081	0.271	0.057	0.244	0.148	0.349	0.053	0.222
East Midlands	0.050	0.216	0.047	0.211	0.018	0.134	0.036	0.197	0.074	0.261	0.030	0.170
West Midlands	0.077	0.264	0.076	0.266	0.029	0.167	0.062	0.254	0.103	0.303	0.100	0.294
East Anglia	0.026	0.160	0.034	0.180	0.013	0.113	0.027	0.172	0.031	0.172	0.012	0.111
London	0.230	0.421	0.223	0.416	0.072	0.259	0.415	0.493	0.129	0.335	0.099	0.299
South East	0.181	0.379	0.218	0.413	0.061	0.238	0.230	0.444	0.180	0.379	0.116	0.315
South West	0.064	0.243	0.076	0.265	0.023	0.151	0.059	0.250	0.075	0.262	0.117	0.314
Wales	0.046	0.205	0.058	0.233	0.009	0.094	0.035	0.195	0.052	0.222	0.181	0.371
Northern Ireland	0.048	0.192	0.032	0.175	0.145	0.348	0.012	0.113	0.034	0.181	0.232	0.212
Scotland	0.079	0.221	0.043	0.204	0.456	0.482	0.009	0.100	0.032	0.174	0.017	0.131
<b>School type</b>												
LEA	0.272	0.445	0.273	0.445	0.352	0.477	0.218	0.413	0.296	0.456	0.263	0.440
Independent	0.305	0.456	0.453	0.498	0.276	0.441	0.327	0.494	0.295	0.454	0.177	0.371
Grammar	0.116	0.315	0.139	0.346	0.140	0.346	0.099	0.315	0.110	0.313	0.236	0.343
FE College	0.102	0.301	0.048	0.214	0.058	0.233	0.127	0.352	0.096	0.294	0.119	0.321
Sixth Form	0.050	0.217	0.039	0.193	0.024	0.154	0.051	0.233	0.058	0.234	0.042	0.201
Other	0.155	0.360	0.049	0.215	0.150	0.356	0.177	0.402	0.145	0.351	0.163	0.369
<b>School qualifications</b>												
A-levels	0.876	0.330	0.933	0.249	0.523	0.499	0.933	0.251	0.928	0.258	0.918	0.275
Highers	0.075	0.264	0.041	0.199	0.438	0.496	0.008	0.091	0.029	0.167	0.015	0.121
Other qualification	0.049	0.215	0.025	0.157	0.039	0.194	0.059	0.249	0.043	0.203	0.067	0.250



**Table 1 (cont'd): Summary statistics on applications**

	All		Oxbridge		Scottish		London		Other England		Other	
	Mean	Std dev	Mean	Std dev	Mean	Std dev	Mean	Std dev	Mean	Std dev	Mean	Std dev
<b>A-levels</b>												
Average science	7.920	1.908	9.180	1.258	8.116	1.961	7.507	2.152	8.128	1.833	8.076	1.855
Average other	2.133	3.681	2.564	4.101	1.823	3.524	1.956	3.733	2.302	3.800	2.250	3.759
<i>Science subjects</i>												
<3	0.214	0.410	0.097	0.279	0.228	0.374	0.219	0.407	0.215	0.388	0.228	0.390
3	0.649	0.477	0.598	0.490	0.620	0.485	0.656	0.475	0.653	0.476	0.643	0.479
>3	0.138	0.345	0.305	0.454	0.152	0.348	0.126	0.337	0.132	0.330	0.129	0.321
<b>Highers</b>												
CSYS	0.709	0.449	0.772	0.421	0.734	0.442	0.437	0.515	0.660	0.472	0.434	0.503
Average science	5.257	0.976	5.790	0.588	5.325	0.942	4.583	1.268	5.082	1.073	4.515	1.331
Average other	5.028	1.344	5.561	1.148	5.106	1.276	4.275	1.883	4.804	1.519	4.572	1.587
<i>Science subjects</i>												
<4	0.225	0.415	0.163	0.371	0.207	0.405	0.433	0.516	0.256	0.436	0.358	0.483
4	0.714	0.452	0.772	0.419	0.726	0.446	0.515	0.500	0.706	0.456	0.604	0.489
>4	0.062	0.241	0.065	0.248	0.067	0.250	0.052	0.232	0.039	0.193	0.038	0.194
Non-medic app	0.342	0.464	0.241	0.428	0.534	0.493	0.289	0.477	0.329	0.469	0.417	0.465
<b>Previous applic</b>												
1	0.066	0.246	0.024	0.153	0.045	0.207	0.094	0.306	0.052	0.221	0.063	0.242
>1	0.008	0.086	0.002	0.045	0.005	0.072	0.010	0.107	0.006	0.078	0.007	0.084
<b>Application date</b>												
October	0.091	0.286	0.184	0.387	0.046	0.207	0.095	0.310	0.096	0.294	0.080	0.268
November	0.737	0.440	0.805	0.396	0.681	0.466	0.721	0.449	0.765	0.424	0.729	0.444
December	0.153	0.355	0.007	0.084	0.256	0.434	0.159	0.386	0.124	0.330	0.170	0.375
Late	0.019	0.135	0.004	0.066	0.017	0.129	0.025	0.164	0.015	0.121	0.021	0.143
<b>Other applications</b>												
Oxbridge		0.089			0.133	0.329	0.116	0.336	0.148	0.351	0.117	0.321
Scottish		0.090	0.368	0.482	0.707	0.430	0.124	0.348	0.259	0.432	0.358	0.405
London		0.068	0.617	0.486	0.257	0.432	0.886	0.333	0.513	0.496	0.505	0.478
Other England		0.063	0.835	0.372	0.647	0.471	0.595	0.518	0.913	0.281	0.866	0.323
Other		0.089	0.137	0.344	0.193	0.392	0.096	0.311	0.175	0.379	0.027	0.160

Table 2: Probit model of the probability of an application to a particular Scottish or Other medical school

	Scottish					Other	
	Aberdeen Coeff	Dundee Coeff	Edinburgh Coeff	Glasgow Coeff	St. Andrews Coeff	Queens Coeff	Wales Coeff
Year 1996	-0.108**	0.001	-0.006	-0.064	0.197***	0.087	-0.074**
Male	0.044	0.084***	0.043*	-0.021	0.059*	-0.001	-0.093***
<b>Age groups (18)</b>							
<18	0.116	0.027	-0.053	0.033	0.078	0.197	-0.236**
19	0.130**	0.052	0.076**	-0.005	0.292***	-0.014	0.029
20	0.211**	0.212**	-0.010	0.166	0.426***	-0.100	0.075
21-23	0.187**	0.243***	-0.153**	0.111	0.082	0.028	0.263***
>23	0.032	0.198***	-0.087	0.087	0.045	0.040	0.227***
<b>Social class (SC II)</b>							
SC I (Professional)	-0.081*	0.023	-0.066**	-0.073*	0.058	-0.193***	0.024
SC IIINM (Skilled non-manual)	0.023	0.040	-0.011	0.100	-0.097	0.208*	0.000
SC IIIM (Skilled manual)	0.074	-0.014	-0.044	-0.105	0.005	0.009	-0.006
SC IV (Partly skilled)	0.019	0.051	0.054	0.018	-0.018	-0.014	-0.042
SC V (Unskilled)	-0.226	-0.026	-0.371**	0.181	-0.058	0.248	0.239**
Other	0.090	-0.070	0.038	0.068	-0.056	-0.074	0.001
<b>Ethnic (White)</b>							
Black	0.060	0.081	-0.090	0.084	-0.338**	0.212	-0.059
Indian	-0.169**	0.083	-0.500***	-0.409***	0.014	-0.260	-0.002
Pakistani	-0.135	0.183***	-0.574***	-0.339***	0.030	-0.368**	-0.149**
Other Asian	-0.044	0.129*	-0.273***	-0.156*	0.055	0.034	-0.043
Other	0.077	0.107	0.053	-0.099	-0.113	0.130	-0.007
<b>Region (London)</b>							
North	0.681***	0.893***	0.561***	0.739***	0.200*	0.011	-0.452***
Yorkshire+Humberside	0.445***	0.334***	0.395***	0.357***	0.151*	0.211	-0.213***
North West	0.365***	0.287***	0.342***	0.389***	0.619***	0.123	-0.154***
East Midlands	0.121	0.096	-0.061	0.043	-0.099	0.174	-0.070
West Midlands	0.282***	0.152*	-0.061	0.186*	0.102	-0.475	0.517***
East Anglia	0.302**	0.029	0.221***	-0.056	0.058	0.241	-0.156*
South East	0.118	0.027	0.002	0.039	0.085	0.167	0.125***
South West	0.195*	0.054	-0.054	0.272***	-0.087	-0.031	0.877***

Table 2 (cont'd): Probit model of the probability of an application to a particular Scottish or Other medical school

	Scottish			Other			
	Aberdeen Coeff	Dundee Coeff	Edinburgh Coeff	Glasgow Coeff	St. Andrews Coeff	Queens Coeff	Wales Coeff
Wales	-0.068	-0.320**	-0.373***	-0.049	-0.037	0.366*	1.899***
Northern Ireland	1.552***	1.449***	1.190***	1.928***	-0.012	3.417***	-0.250
Scotland	1.562***	1.053***	1.211***	1.476**	0.852***	0.845***	-0.416**
<b>School type (LEA)</b>							
Independent	-0.047	-0.078	0.019	-0.186***	0.488***	-0.369***	-0.118**
Grammar	-0.074	-0.003	-0.145***	-0.146*	0.251***	0.170	-0.051
Further Education College	-0.012	-0.165***	0.020	0.002	-0.145*	0.029	-0.047
Sixth Form College	-0.233**	-0.039	-0.111*	-0.017	0.108	0.017	0.023
Other	0.129*	0.066	-0.029	0.081	-0.116	0.288**	-0.206***
<b>Prior Qualifications (A-levels)</b>							
Highers	-0.061	-0.274**	0.757***	0.396***	-0.345**	0.387	-0.122
No qualification	-0.202*	-0.340***	0.701***	0.102	-0.148	0.615***	0.100
<b>A-level Qualifications</b>							
Average science score	-0.070***	-0.074***	-0.008	-0.061***	0.014	-0.014	-0.020
Average other score	-0.030**	-0.008	0.029***	-0.010	-0.028***	-0.006	0.012***
<i>No. of science subjects (3)</i>							
0-1	-0.085	0.065	0.363***	0.125	-0.407***	0.342*	0.124
2	0.067	-0.084	-0.216***	0.131**	-0.221***	0.087	-0.091*
4	0.066	-0.087	0.167***	0.080	-0.052	0.293***	-0.049
5+	-0.234	0.246	0.225	-0.056	-0.170	0.495*	-0.012
Resit in science	-0.105	-0.129**	-0.701***	-0.266***	0.603***	0.020	-0.078
<b>Scottish Qualifications</b>							
CSYS	0.142	0.169*	-0.154	-0.154	0.111	-0.373*	-0.341
Average science score	0.072*	0.089**	0.025	0.072**	0.042	-0.214***	-0.058
Average other score	0.045	0.002	-0.012	0.012	0.077***	0.093	0.006
<i>No. of science subjects (4)</i>							
<4	-0.109	-0.092	0.153	0.270**	-0.134	0.213	0.138
5+	0.180	0.137	0.403**	0.579***	-0.041	0.138	0.047
Resit in science	-0.348*	0.025	-0.550***	-0.515***	0.292	-0.047	0.007

Table 2 (cont'd): Probit model of the probability of an application to a particular Scottish or Other medical school

	Scottish					Other	
	Aberdeen Coeff	Dundee Coeff	Edinburgh Coeff	Glasgow Coeff	St. Andrews Coeff	Queens Coeff	Wales Coeff
Less than 5 medical applies	-0.584***	-0.492***	-0.545***	-0.811***	-0.396***	-0.187**	-0.376***
At least 1 non-med applic.	0.000	0.037	-0.038	0.010	0.061	0.035	-0.112***
<b>Previous applications (0)</b>							
1	0.085	0.122*	-0.206***	0.114	0.053	0.183	-0.030
2+	0.291	0.332**	-0.508**	0.380*	0.390**	-0.047	0.044
<b>Application received (Nov)</b>							
October	-0.127	-0.007	-0.085*	-0.181**	0.070	-0.238	0.091*
December	0.103	-0.036	0.319***	0.224***	-0.058	0.325***	0.015
Late	0.315**	-0.416***	0.652***	0.590***	-0.619***	0.716***	-0.099
<b>Other schools</b>							
Oxbridge	-0.424***	-0.662***	0.501***	-0.249***	-0.098*	-0.037	-0.291***
Scotland	0.633***	0.594***	0.509***	0.600***	0.367***	0.400***	-0.025
London	-0.466***	-0.406***	-0.422***	-0.545***	-0.373***	-0.290***	-0.268***
Other England	-0.479***	-0.262***	-0.009	-0.434***	-0.411***	-0.357***	0.502***
Other	0.078	0.238***	-0.077**	-0.120**	-0.121**	-0.105	-0.137
Constant	-0.823***	-1.101***	-0.506***	-0.494**	-2.241***	-2.009***	-1.262***
Mills	-1.009***	0.198	-1.800***	-1.622***	1.008***	-1.451***	0.190

Notes:\*\*\* indicates significance at the 1% level, \*\* indicates significance at the 5% level and \* indicates significance at the 10% level.

Table 3: Probit model of the probability of an application to a particular London medical school

	London							
	Charing Coeff	Imperial Coeff	Kings Coeff	QMW Coeff	Royal Coeff	St. George Coeff	Guys Coeff	UCL Coeff
Year 1996	-0.096 <sup>***</sup>	-0.071 <sup>**</sup>	-0.053 <sup>*</sup>	0.299 <sup>***</sup>	-0.026	-0.221 <sup>***</sup>	-0.136 <sup>***</sup>	-0.048 <sup>*</sup>
Male	0.076 <sup>***</sup>	0.083 <sup>***</sup>	0.114 <sup>***</sup>	0.022	-0.063 <sup>**</sup>	0.050 <sup>**</sup>	-0.018	-0.014
<b>Age groups (18)</b>								
<18	0.001	-0.029	-0.066	-0.382 <sup>***</sup>	-0.136	-0.094	-0.217 <sup>**</sup>	-0.094
19	0.322 <sup>***</sup>	-0.030	-0.072 <sup>**</sup>	-0.011	0.320 <sup>***</sup>	0.166 <sup>***</sup>	-0.117 <sup>***</sup>	0.053
20	0.324 <sup>***</sup>	-0.049	0.043	0.011	0.349 <sup>***</sup>	0.144 <sup>**</sup>	-0.205 <sup>***</sup>	0.113 <sup>*</sup>
21-23	0.197 <sup>***</sup>	0.038	0.102 <sup>*</sup>	-0.329 <sup>***</sup>	0.357 <sup>***</sup>	0.279 <sup>***</sup>	0.059	-0.066
>23	0.175 <sup>***</sup>	0.081	0.069	-0.246 <sup>***</sup>	0.324 <sup>***</sup>	0.455 <sup>***</sup>	0.064	-0.152 <sup>***</sup>
<b>Social class (SC II)</b>								
SC I (Professional)	0.021	-0.027	-0.042	-0.009	0.114 <sup>***</sup>	0.041	0.102 <sup>***</sup>	0.016
SC IIINM (Skilled non-manual)	0.018	-0.006	-0.058	0.196 <sup>***</sup>	-0.062	-0.048	-0.038	-0.057
SC IIIM (Skilled manual)	0.046	-0.020	0.057	0.108 <sup>**</sup>	0.002	-0.017	0.000	-0.004
SC IV (Partly skilled)	-0.006	-0.040	-0.044	0.101 <sup>*</sup>	-0.027	-0.114 <sup>*</sup>	0.006	-0.043
SC V (Unskilled)	-0.042	-0.091	0.111	0.031	0.073	0.104	0.081	-0.028
Other	0.025	-0.096 <sup>*</sup>	-0.021	0.178 <sup>***</sup>	-0.043	0.050	0.019	0.010
<b>Ethnic (White)</b>								
Black	-0.083	0.046	0.345 <sup>***</sup>	0.108 <sup>*</sup>	-0.255 <sup>***</sup>	0.167 <sup>**</sup>	0.029	0.101 <sup>*</sup>
Indian	0.246 <sup>***</sup>	0.032	0.453 <sup>***</sup>	0.006	-0.107 <sup>**</sup>	0.061	0.360 <sup>***</sup>	0.291 <sup>***</sup>
Pakistani	0.222 <sup>***</sup>	0.132 <sup>***</sup>	0.381 <sup>***</sup>	0.075	-0.034	0.067	0.287 <sup>***</sup>	0.172 <sup>***</sup>
Other Asian	0.221 <sup>***</sup>	0.211 <sup>***</sup>	0.353 <sup>***</sup>	-0.052	-0.028	0.111 <sup>**</sup>	0.163 <sup>***</sup>	0.261 <sup>***</sup>
Other	0.092 <sup>*</sup>	0.068	0.289 <sup>***</sup>	-0.005	-0.097 <sup>*</sup>	0.115 <sup>**</sup>	0.203 <sup>***</sup>	0.202 <sup>***</sup>
<b>Region (London)</b>								
North	-0.151 <sup>**</sup>	-0.354 <sup>***</sup>	-0.388 <sup>***</sup>	-0.091	-0.535 <sup>***</sup>	-0.453 <sup>***</sup>	-0.344 <sup>***</sup>	-0.552 <sup>***</sup>
Yorkshire+Humberside	-0.275 <sup>***</sup>	-0.257 <sup>***</sup>	-0.327 <sup>***</sup>	-0.108 <sup>*</sup>	-0.470 <sup>***</sup>	-0.377 <sup>***</sup>	-0.570 <sup>***</sup>	-0.703 <sup>***</sup>
North West	-0.351 <sup>***</sup>	-0.383 <sup>***</sup>	-0.522 <sup>***</sup>	-0.089 <sup>*</sup>	-0.468 <sup>***</sup>	-0.442 <sup>***</sup>	-0.448 <sup>***</sup>	-0.605 <sup>***</sup>
East Midlands	-0.252 <sup>***</sup>	-0.377 <sup>***</sup>	-0.424 <sup>***</sup>	-0.040	-0.369 <sup>***</sup>	-0.327 <sup>***</sup>	-0.390 <sup>***</sup>	-0.471 <sup>***</sup>
West Midlands	-0.118 <sup>**</sup>	-0.286 <sup>***</sup>	-0.406 <sup>***</sup>	-0.018	-0.325 <sup>***</sup>	-0.330 <sup>***</sup>	-0.445 <sup>***</sup>	-0.486 <sup>***</sup>
East Anglia	-0.174 <sup>**</sup>	-0.080	-0.200 <sup>***</sup>	0.186 <sup>***</sup>	-0.203 <sup>**</sup>	-0.106	-0.137 <sup>*</sup>	-0.258 <sup>***</sup>
South East	0.022	-0.076 <sup>**</sup>	-0.090 <sup>**</sup>	0.071 <sup>*</sup>	-0.085 <sup>**</sup>	0.037	-0.116 <sup>***</sup>	-0.184 <sup>***</sup>
South West	-0.111 <sup>*</sup>	-0.035	-0.116 <sup>**</sup>	0.091	-0.169 <sup>***</sup>	-0.103 <sup>*</sup>	-0.148 <sup>***</sup>	-0.237 <sup>***</sup>

Table 3 (cont'd): Probit model of the probability of an application to a particular London medical school

	London							
	Charing Coeff	Imperial Coeff	Kings Coeff	QMW Coeff	Royal Coeff	St. George Coeff	Guys Coeff	UCL Coeff
Wales	-0.088	0.242 <sup>***</sup>	-0.212 <sup>***</sup>	-0.025	-0.310 <sup>***</sup>	-0.231 <sup>***</sup>	-0.269 <sup>***</sup>	-0.227 <sup>***</sup>
Northern Ireland	-0.393 <sup>***</sup>	-0.655 <sup>***</sup>	-0.613 <sup>***</sup>	0.051	-0.396 <sup>***</sup>	-0.431 <sup>***</sup>	-1.163 <sup>***</sup>	-0.615 <sup>***</sup>
Scotland	-0.397 <sup>**</sup>	-0.633 <sup>***</sup>	-0.673 <sup>***</sup>	-0.031	-0.642 <sup>***</sup>	-0.523 <sup>***</sup>	-0.717 <sup>***</sup>	-0.934 <sup>***</sup>
<b>School type (LEA)</b>								
Independent	0.124 <sup>***</sup>	0.077 <sup>*</sup>	0.046	-0.281 <sup>***</sup>	0.094 <sup>*</sup>	0.114 <sup>**</sup>	0.241 <sup>***</sup>	0.152 <sup>***</sup>
Grammar	-0.019	0.004	0.117 <sup>**</sup>	0.023	-0.117 <sup>*</sup>	-0.005	0.221 <sup>***</sup>	0.035
Further Education College	0.022	-0.054	-0.009	0.022	-0.099 <sup>*</sup>	0.090 <sup>*</sup>	0.099 <sup>**</sup>	-0.002
Sixth Form College	0.042	-0.004	0.035	-0.169 <sup>***</sup>	-0.062	0.065	0.201 <sup>***</sup>	-0.028
Other	0.017	-0.072	0.048	-0.156 <sup>***</sup>	0.076	0.098 <sup>*</sup>	0.094 <sup>*</sup>	0.028
<b>Prior Qualifications (A-levels)</b>								
Highers	-0.741 <sup>***</sup>	-0.682 <sup>***</sup>	-0.536 <sup>***</sup>	-0.892 <sup>***</sup>	-0.114	-0.455 <sup>*</sup>	-0.507 <sup>**</sup>	0.003
No qualification	-0.544 <sup>***</sup>	-0.112	0.001	-0.376 <sup>***</sup>	-0.244 <sup>***</sup>	-0.390 <sup>***</sup>	-0.119 <sup>*</sup>	-0.103
<b>A-level Qualifications</b>								
Average science score	-0.074 <sup>***</sup>	0.012	-0.010	-0.091 <sup>***</sup>	-0.033 <sup>**</sup>	-0.032 <sup>**</sup>	0.055 <sup>***</sup>	-0.006
Average other score	-0.014 <sup>***</sup>	0.000	0.020 <sup>***</sup>	-0.019 <sup>***</sup>	-0.015 <sup>***</sup>	-0.005	0.001	0.001
<i>No. of science subjects (3)</i>								
0-1	-0.082	-0.200 <sup>**</sup>	0.185 <sup>***</sup>	0.030	-0.029	0.014	-0.351 <sup>***</sup>	-0.059
2	0.097 <sup>**</sup>	-0.021	-0.177 <sup>***</sup>	0.210 <sup>***</sup>	0.121 <sup>**</sup>	0.012	-0.123 <sup>***</sup>	0.043
4	-0.099 <sup>**</sup>	0.056	0.013	-0.165 <sup>***</sup>	0.091 <sup>**</sup>	0.071 <sup>*</sup>	-0.065 <sup>*</sup>	-0.014
5+	0.101	0.010	-0.180	-0.161	0.276 <sup>**</sup>	-0.069	-0.079	0.108
Resit in science	0.546 <sup>***</sup>	-0.225 <sup>***</sup>	-0.511 <sup>***</sup>	-0.279 <sup>***</sup>	0.723 <sup>***</sup>	0.293 <sup>***</sup>	-0.404 <sup>***</sup>	0.413 <sup>***</sup>
<b>Scottish Qualifications</b>								
CSYS	-0.123	0.368 <sup>*</sup>	-0.100	0.329	-0.262	0.161	-0.032	-0.166
Average science score	-0.159 <sup>***</sup>	-0.027	-0.087 <sup>*</sup>	-0.263 <sup>***</sup>	-0.031	-0.092	0.051	-0.097 <sup>**</sup>
Average other score	0.044	-0.056	0.041	0.049	-0.045	-0.003	-0.086 <sup>**</sup>	0.033
<i>No. of science subjects (4)</i>								
<4	0.356	0.301 <sup>*</sup>	0.125	0.764 <sup>***</sup>	0.596 <sup>***</sup>	0.174	-0.162	0.056
5+	-0.116	0.123	-0.280	0.730 <sup>**</sup>		0.031	-0.314	0.051
Resit in science	0.247	0.447	0.731 <sup>***</sup>	0.022	-0.730	0.125		0.092

Table 3 (cont'd): Probit model of the probability of an application to a particular London medical school

	London							
	Charing Coeff	Imperial Coeff	Kings Coeff	QMW Coeff	Royal Coeff	St. George Coeff	Guys Coeff	UCL Coeff
Less than 5 medical applies	-0.706***	-0.690***	-0.584***	-0.605***	-0.778***	-0.562***	-0.757***	-0.683***
At least 1 non-med applic.	-0.015	0.082***	0.108***	0.041	-0.025	-0.059*	-0.021	-0.073***
<b>Previous applications (0)</b>								
1	0.274***	-0.051	-0.177***	0.245***	0.171***	-0.141***	-0.167***	0.107**
2+	0.278**	-0.141	-0.419***	0.606***	0.142	-0.136	-0.398***	-0.047
<b>Application received (Nov)</b>								
October	-0.067	0.018	-0.088*	-0.027	0.036	-0.017	-0.010	-0.049
December	-0.010	-0.048	-0.014	0.047	0.065	0.008	-0.204***	-0.058
Late	-0.245*	-0.305**	0.080	0.366***	0.348**	-0.230*	-0.603***	0.001
<b>Other schools</b>								
Oxbridge	-0.569***	0.151***	-0.045	-0.512***	-0.272***	-0.323***	-0.340***	-0.033
Scotland	-0.345***	-0.269***	-0.262***	-0.455***	-0.287***	-0.360***	-0.402***	-0.308***
London	0.733***	0.506***	0.244***	0.486***	0.542***	0.431***	0.587***	0.479***
Other England	-0.860***	-0.739***	-0.629***	-0.817***	-0.762***	-0.542***	-0.962***	-0.758***
Other	-0.252***	-0.317***	-0.179***	-0.305***	-0.241***	-0.218***	-0.286***	-0.430***
Constant	0.155	-0.524***	-0.387**	0.661***	-0.396**	-0.559***	-0.640***	0.257
Mills	-0.604*	0.626**	0.504*	-1.220***	-0.356	0.251	1.300***	-0.084

Notes:\*\*\* indicates significance at the 1% level, \*\* indicates significance at the 5% level and \* indicates significance at the 10% level.

Table 4: Probit model of the probability of an application to a particular Other English medical school

	Other English					
	Birmingham Coeff	Bristol Coeff	Leeds Coeff	Leicester Coeff	Liverpool Coeff	Manchester Coeff
Year 1996	0.003	0.039	0.088***	0.130***	0.070**	0.043
Male	-0.065***	-0.040*	0.014	0.047**	0.040*	0.062***
<b>Age groups (18)</b>						
<18	-0.024	0.085	-0.151**	0.059	-0.093	0.119*
19	-0.119***	-0.021	-0.059*	0.055	0.043	-0.082**
20	-0.205***	-0.045	-0.063	0.017	0.083	-0.181***
21-23	-0.258***	-0.045	-0.026	0.033	0.164**	0.064
>23	-0.314***	0.039	-0.182***	-0.019	0.026	-0.109*
<b>Social class (SC II)</b>						
SC I (Professional)	0.060**	0.024	0.051*	-0.103***	-0.040	-0.043
SC IIINM (Skilled non-manual)	0.055	-0.162***	-0.002	0.023	-0.061	-0.074*
SC IIIM (Skilled manual)	0.006	-0.076*	-0.010	-0.052	-0.089**	-0.036
SC IV (Partly skilled)	0.025	-0.003	-0.034	-0.009	0.009	0.016
SC V (Unskilled)	0.158	-0.296**	-0.017	0.064	-0.024	-0.017
Other	0.038	0.085	-0.108**	0.062	-0.055	-0.050
<b>Ethnic (White)</b>						
Black	0.234***	-0.140**	0.043	0.176***	0.002	0.232***
Indian	-0.008	-0.408***	-0.007	0.181***	-0.119**	0.271***
Pakistani	0.045	-0.459***	-0.006	0.128**	-0.160***	0.240***
Other Asian	-0.032	-0.286***	-0.048	0.031	-0.127**	0.089*
Other	0.064	-0.175***	-0.030	0.093*	0.036	0.201***
<b>Region (London)</b>						
North	-0.289***	-0.686***	0.769***	0.424***	0.457***	0.462***
Yorkshire+Humberside	0.144**	-0.375***	0.698***	0.682***	0.535***	0.513***
North West	0.154***	-0.412***	0.748***	0.226***	1.000***	0.767***
East Midlands	0.485***	-0.237***	0.665***	0.657***	0.400***	0.278***
West Midlands	0.731***	-0.069	0.407***	0.667***	0.312***	0.352***
East Anglia	0.211***	-0.105	0.409***	0.659***	0.048	0.109
South East	0.218***	0.196***	0.077**	0.345***	0.080*	0.054
South West	0.411***	0.463***	-0.085	0.359***	0.065	0.100*



Table 4 (cont'd): Probit model of the probability of an application to a particular Other English medical school

	Other English					
	Birmingham Coeff	Bristol Coeff	Leeds Coeff	Leicester Coeff	Liverpool Coeff	Manchester Coeff
Wales	0.365***	0.359***	0.180***	0.383***	0.645***	0.321***
Northern Ireland	-0.200	-0.733***	-0.166*	0.220*	0.687***	0.668***
Scotland	-0.383**	-0.195	-0.106	0.308*	-0.005	0.291**
<b>School type (LEA)</b>						
Independent	-0.030	0.149***	0.085**	-0.327***	-0.140***	-0.021
Grammar	0.002	0.075	0.055	-0.162***	-0.056	-0.016
Further Education College	0.092**	0.024	-0.032	-0.040	-0.045	-0.040
Sixth Form College	0.047	0.024	-0.003	0.026	0.143**	0.013
Other	0.135**	0.052	0.033	-0.033	-0.060	0.012
<b>Prior Qualifications (A-levels)</b>						
Highers	0.012	-0.030	-0.545***	-0.511**	-0.220	0.055
No qualification	0.196***	0.337***	-0.150**	-0.128*	-0.099	-0.115*
<b>A-level Qualifications</b>						
Average science score	0.028*	0.020	0.045***	-0.051***	0.017	0.006
Average other score	0.000	0.029***	-0.012***	-0.024***	-0.008**	0.016***
<i>No. of science subjects (3)</i>						
0-1	-0.202**	0.171**	-0.295***	0.020	-0.172**	0.138**
2	-0.037	-0.138***	0.016	0.207***	0.013	-0.045
4	-0.002	0.066*	-0.033	-0.107***	-0.049	-0.078**
5+	-0.337**	0.064	0.065	-0.211	-0.226*	-0.279**
Resit in science	-0.592***	-0.508***	0.106***	-0.018	0.442***	-0.406***
<b>Scottish Qualifications</b>						
CSYS	0.202	-0.258*	0.226*	0.882***	0.183	-0.288***
Average science score	-0.074	-0.089**	-0.001	-0.235***	-0.078	-0.037
Average other score	0.001	0.024	-0.054*	-0.054	0.005	-0.001
<i>No. of science subjects (4)</i>						
<4	0.112	0.099	-0.015	0.528**	0.237	-0.085
5+	-0.159	-0.278	-0.463*	-0.093		-0.129
Resit in science	0.929***	0.053	0.730***	0.606**	0.197	-0.179

Table 4 (cont'd): Probit model of the probability of an application to a particular Other English medical school

	Other English					
	Birmingham Coeff	Bristol Coeff	Leeds Coeff	Leicester Coeff	Liverpool Coeff	Manchester Coeff
Less than 5 medical applies	-0.731 <sup>***</sup>	-0.377 <sup>***</sup>	-0.302 <sup>***</sup>	-0.674 <sup>***</sup>	-0.727 <sup>***</sup>	-0.622 <sup>***</sup>
At least 1 non-med applic.	-0.048 <sup>*</sup>	-0.056 <sup>**</sup>	0.017	-0.074 <sup>***</sup>	0.003	0.046 <sup>*</sup>
<b>Previous applications (0)</b>						
1	-0.090	-0.122 <sup>**</sup>	-0.037	-0.021	-0.087	-0.075
2+	-0.094	0.079	-0.032	0.152	-0.161	-0.077
<b>Application received (Nov)</b>						
October	0.026	0.009	0.052	0.044	-0.075	0.040
December	0.007	0.042	-0.068	0.090 <sup>*</sup>	0.002	0.018
Late	0.021	0.114	-0.396 <sup>***</sup>	0.248 <sup>*</sup>	-0.111	0.157
<b>Other schools</b>						
Oxbridge	-0.230 <sup>***</sup>	0.242 <sup>***</sup>	-0.308 <sup>***</sup>	-0.494 <sup>***</sup>	-0.420 <sup>***</sup>	-0.204 <sup>***</sup>
Scotland	-0.477 <sup>***</sup>	0.044	-0.295 <sup>***</sup>	-0.406 <sup>***</sup>	-0.261 <sup>***</sup>	-0.222 <sup>***</sup>
London	-0.533 <sup>***</sup>	-0.289 <sup>***</sup>	-0.717 <sup>***</sup>	-0.373 <sup>***</sup>	-0.487 <sup>***</sup>	-0.439 <sup>***</sup>
Other England	0.618 <sup>***</sup>	0.493 <sup>***</sup>	0.267 <sup>***</sup>	0.692 <sup>***</sup>	0.435 <sup>***</sup>	0.506 <sup>***</sup>
Other	-0.123 <sup>***</sup>	0.122 <sup>***</sup>	-0.388 <sup>***</sup>	-0.073 <sup>**</sup>	-0.296 <sup>***</sup>	-0.192 <sup>***</sup>
Constant	-1.022 <sup>***</sup>	-1.105 <sup>***</sup>	-0.960 <sup>***</sup>	-0.673 <sup>***</sup>	-1.317 <sup>***</sup>	-1.131 <sup>***</sup>
Mills	-0.290	-0.225	0.872 <sup>***</sup>	-0.935 <sup>***</sup>	0.329	0.304

Notes:\*\*\* indicates significance at the 1% level, \*\* indicates significance at the 5% level and \* indicates significance at the 10% level.

Table 5: Probit model of the probability of an application to a particular Other English or Oxbridge medical school

	Other English				Oxbridge
	Newcastle Coeff	Nottingham Coeff	Sheffield Coeff	Southampton Coeff	Oxbridge Coeff
Year 1996	0.054 <sup>*</sup>	-0.023	-0.100 <sup>***</sup>	-0.026	-0.114 <sup>***</sup>
Male	-0.128 <sup>***</sup>	0.049 <sup>**</sup>	-0.044 <sup>**</sup>	0.057 <sup>**</sup>	0.170 <sup>***</sup>
<b>Age groups (18)</b>					
<18	0.029	-0.082	0.059	0.050	0.136 <sup>*</sup>
19	0.137 <sup>***</sup>	-0.223 <sup>***</sup>	0.145 <sup>***</sup>	-0.019	-0.271 <sup>***</sup>
20	0.132 <sup>**</sup>	-0.113 <sup>*</sup>	0.237 <sup>***</sup>	0.043	-0.543 <sup>***</sup>
21-23	-0.193 <sup>***</sup>	-0.151 <sup>**</sup>	0.140 <sup>**</sup>	0.474 <sup>***</sup>	-0.430 <sup>***</sup>
>23	-0.076	-0.200 <sup>***</sup>	0.164 <sup>***</sup>	0.483 <sup>***</sup>	-0.460 <sup>***</sup>
<b>Social class (SC II)</b>					
SC I (Professional)	0.009	0.010	-0.029	0.013	0.066 <sup>**</sup>
SC IIINM (Skilled non-manual)	-0.004	-0.007	0.001	-0.173 <sup>***</sup>	-0.067
SC IIIM (Skilled manual)	0.025	-0.041	-0.014	-0.002	0.018
SC IV (Partly skilled)	0.002	-0.009	0.066	-0.177 <sup>***</sup>	-0.165 <sup>**</sup>
SC V (Unskilled)	-0.311 <sup>**</sup>	-0.237 <sup>**</sup>	-0.030	-0.002	0.018
Other	0.005	0.009	-0.024	-0.061	-0.079
<b>Ethnic (White)</b>					
Black	-0.165 <sup>**</sup>	-0.046	0.001	-0.121 <sup>*</sup>	0.414 <sup>***</sup>
Indian	-0.498 <sup>***</sup>	-0.112 <sup>***</sup>	-0.121 <sup>***</sup>	-0.200 <sup>***</sup>	0.123 <sup>**</sup>
Pakistani	-0.571 <sup>***</sup>	-0.272 <sup>***</sup>	-0.057	-0.194 <sup>***</sup>	0.078
Other Asian	-0.470 <sup>***</sup>	-0.133 <sup>***</sup>	-0.073	-0.008	0.244 <sup>***</sup>
Other	-0.151 <sup>***</sup>	-0.044	-0.062	-0.124 <sup>**</sup>	0.282 <sup>***</sup>
<b>Region (London)</b>					
North	1.159 <sup>***</sup>	0.090	0.531 <sup>***</sup>	-0.918 <sup>***</sup>	-0.352 <sup>***</sup>
Yorkshire+Humberside	0.973 <sup>***</sup>	0.134 <sup>***</sup>	0.547 <sup>***</sup>	-0.889 <sup>***</sup>	-0.249 <sup>***</sup>
North West	0.597 <sup>***</sup>	0.000	0.772 <sup>***</sup>	-1.028 <sup>***</sup>	-0.353 <sup>***</sup>
East Midlands	0.605 <sup>***</sup>	0.175 <sup>***</sup>	0.729 <sup>***</sup>	-0.342 <sup>***</sup>	-0.222 <sup>***</sup>
West Midlands	0.246 <sup>***</sup>	0.160 <sup>***</sup>	0.590 <sup>***</sup>	-0.221 <sup>***</sup>	-0.126 <sup>**</sup>
East Anglia	0.464 <sup>***</sup>	0.218 <sup>***</sup>	0.591 <sup>***</sup>	-0.013	0.044
South East	0.067	0.217 <sup>***</sup>	0.244 <sup>***</sup>	0.236 <sup>***</sup>	-0.011
South West	-0.002	0.262 <sup>***</sup>	0.209 <sup>***</sup>	0.411 <sup>***</sup>	0.085

Table 5 (cont'd): Probit model of the probability of an application to a particular Other English or Oxbridge medical school

	Other English				Oxbridge
	Newcastle Coeff	Nottingham Coeff	Sheffield Coeff	Southampton Coeff	Oxbridge Coeff
Wales	-0.158 **	0.198 ***	0.148 **	-0.105 *	0.255 ***
Northern Ireland	0.611 ***	-0.340 ***	-0.339 ***	-1.348 ***	-0.535 ***
Scotland	0.635 ***	-0.172	0.404 ***	-0.691 ***	-0.686 ***
<b>School type (LEA)</b>					
Independent	-0.003	0.002	-0.046	0.062	0.098 **
Grammar	-0.162 ***	-0.031	-0.113 **	0.008	0.014
Further Education College	0.104 **	-0.068	-0.036	-0.021	-0.031
Sixth Form College	-0.002	-0.067	-0.028	0.034	-0.193 ***
Other	-0.137 ***	0.093 *	-0.158 ***	0.077	-0.131 **
<b>Prior Qualifications (A-levels)</b>					
Highers	0.033	-0.094	0.293 *	-0.163	0.447 **
No qualification	0.249 ***	0.597 ***	0.299 ***	-0.082	1.940 ***
<b>A-level Qualifications</b>					
Average science score	-0.041 ***	0.122 ***	-0.003	0.047 ***	0.250 ***
Average other score	0.018 ***	0.011 ***	0.006	-0.003	0.059 ***
<i>No. of science subjects (3)</i>					
0-1	0.407 ***	-0.224 ***	0.281 ***	-0.299 ***	-0.337 ***
2	-0.014	-0.115 ***	-0.020	-0.025	-0.629 ***
4	0.008	0.099 ***	0.055	-0.037	0.775 ***
5+	0.155	0.152	0.171	-0.135	0.574 ***
Resit in science	0.278 ***	-0.219 ***	0.677 ***	-0.402 ***	-0.726 ***
<b>Scottish Qualifications</b>					
CSYS	0.087	0.283 *	0.106	0.223	0.279 *
Average science score	-0.058	-0.057	-0.109 ***	-0.044	0.131 ***
Average other score	-0.005	0.040	-0.096 ***	-0.020	0.109 ***
<i>No. of science subjects (4)</i>					
<4	0.168	0.132	0.116	-0.275	-0.281 *
5+	0.068	-0.350	0.132	0.080	-0.240
Resit in science	-0.181	0.150	-0.137	0.002	0.484

Table 5 (cont'd): Probit model of the probability of an application to a particular Other English or Oxbridge medical school

	Other English				Oxbridge
	Newcastle Coeff	Nottingham Coeff	Sheffield Coeff	Southampton Coeff	Oxbridge Coeff
Less than 5 medical applies	-0.698***	-0.635***	-0.737***	-0.604***	-0.307***
At least 1 non-med applic.	-0.042	-0.078***	-0.075***	-0.013	-0.180***
<b>Previous applications (0)</b>					
1	0.114**	-0.249***	0.018	0.106**	-0.337***
2+	0.171	0.177	0.027	0.025	-0.308
<b>Application received (Nov)</b>					
October	0.032	-0.026	-0.074*	0.078*	0.283***
December	0.087*	-0.109**	-0.142***	-0.136***	-1.298***
Late	0.284**	-0.220*	-0.144	-0.764***	-0.716***
<b>Other schools</b>					
Oxbridge	-0.382***	0.125***	-0.479***	-0.236***	0.000***
Scotland	0.129***	-0.192***	-0.261***	-0.231***	0.321***
London	-0.547***	-0.576***	-0.678***	-0.271***	-0.085***
Other England	0.439***	0.571***	0.595***	0.470***	-0.079**
Other	-0.208***	-0.233***	-0.093***	0.130***	-0.257***
Constant	-0.515***	-1.568***	-0.748***	-1.383***	-3.106***
Mills	-1.027***	0.446	0.139	1.024***	0.896**

Notes:\*\*\* indicates significance at the 1% level, \*\* indicates significance at the 5% level and \* indicates significance at the 10% level.

**Figure 1: Ratio of applications to places 1996 and 1997**

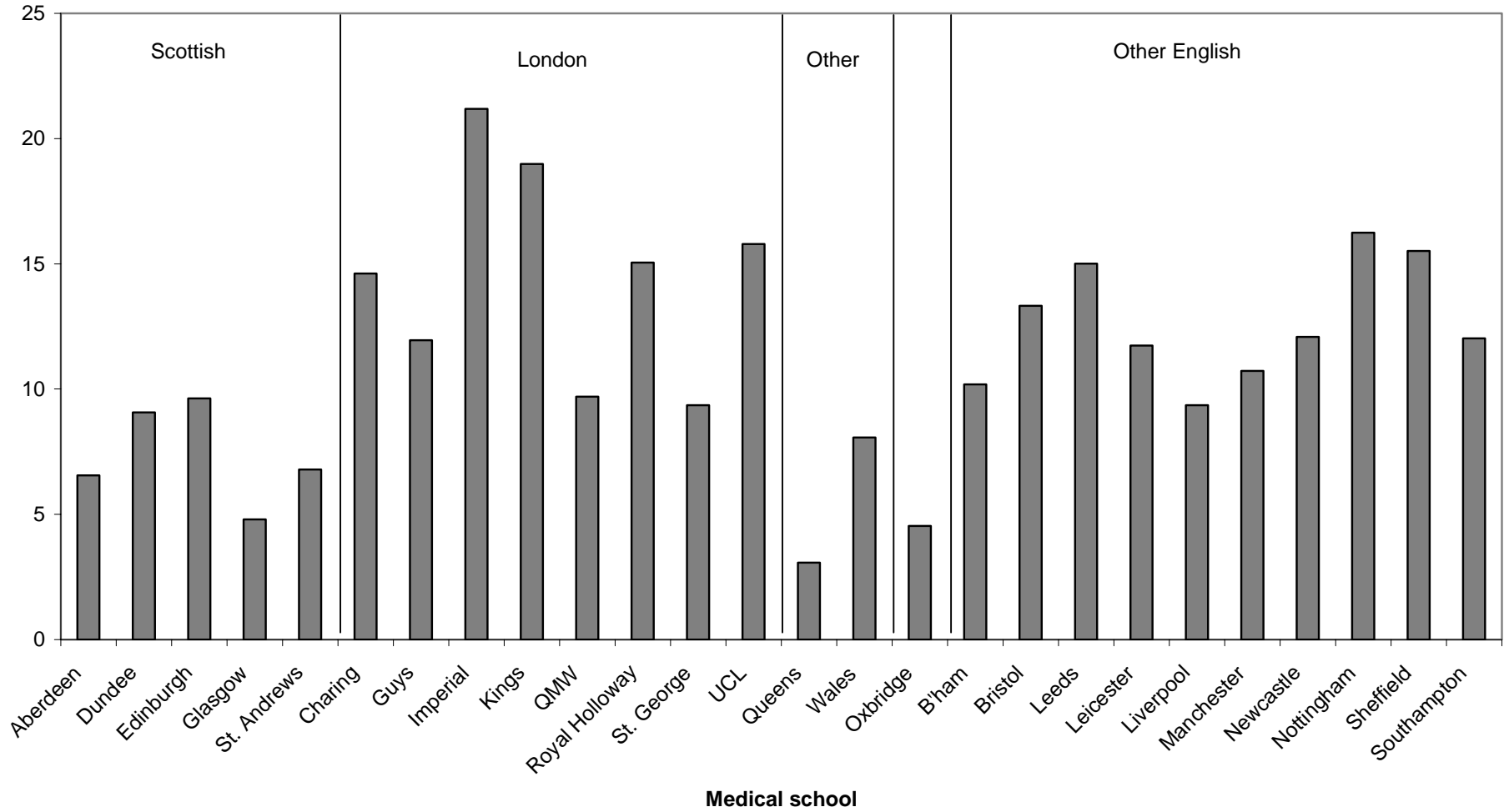


Figure 2a: Marginal Effects ( $\times 100$ ) and 95% confidence intervals

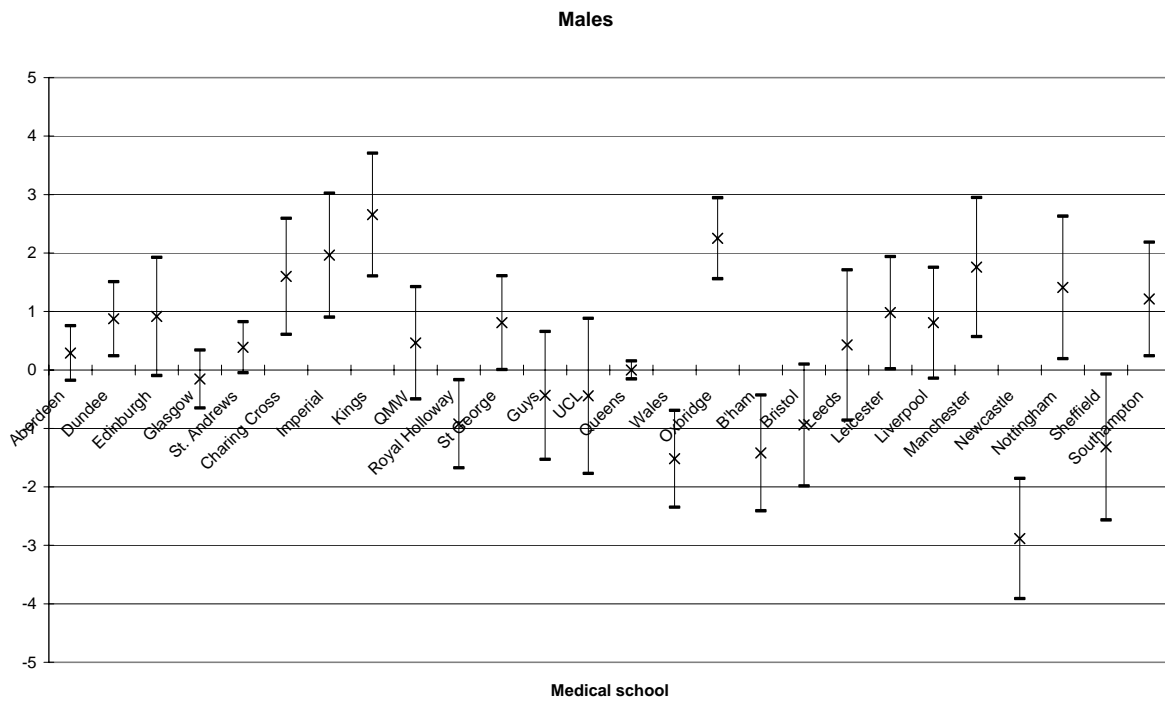
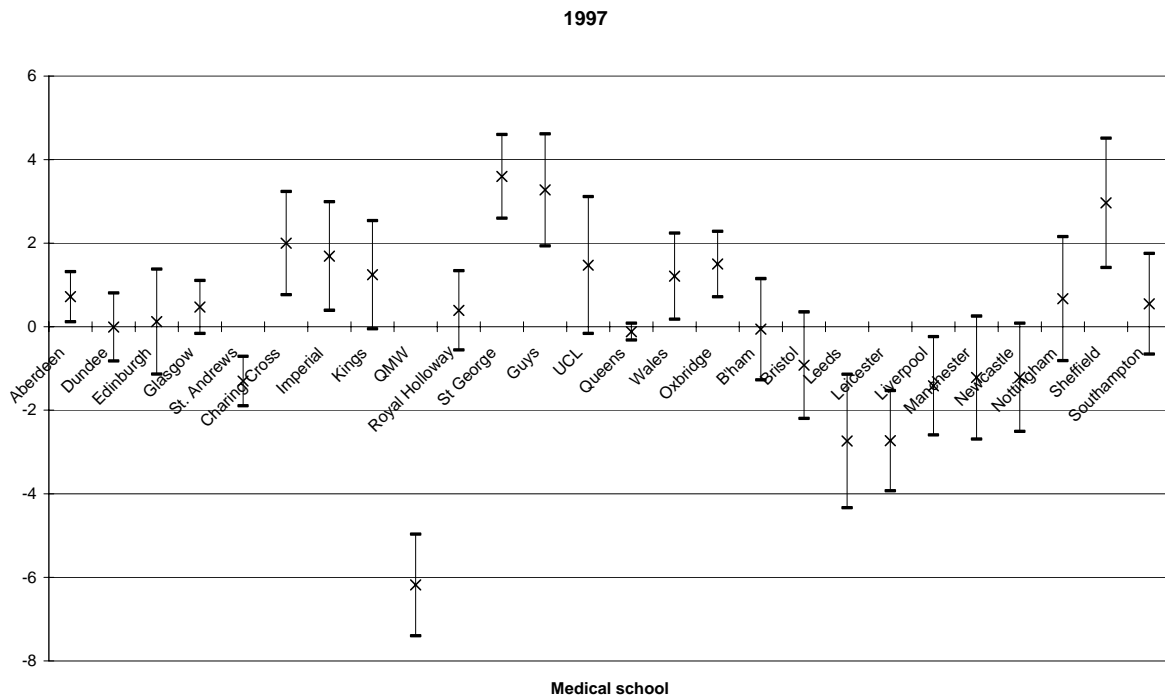


Figure 2b: Marginal Effects ( $\times 100$ ) and 95% confidence intervals

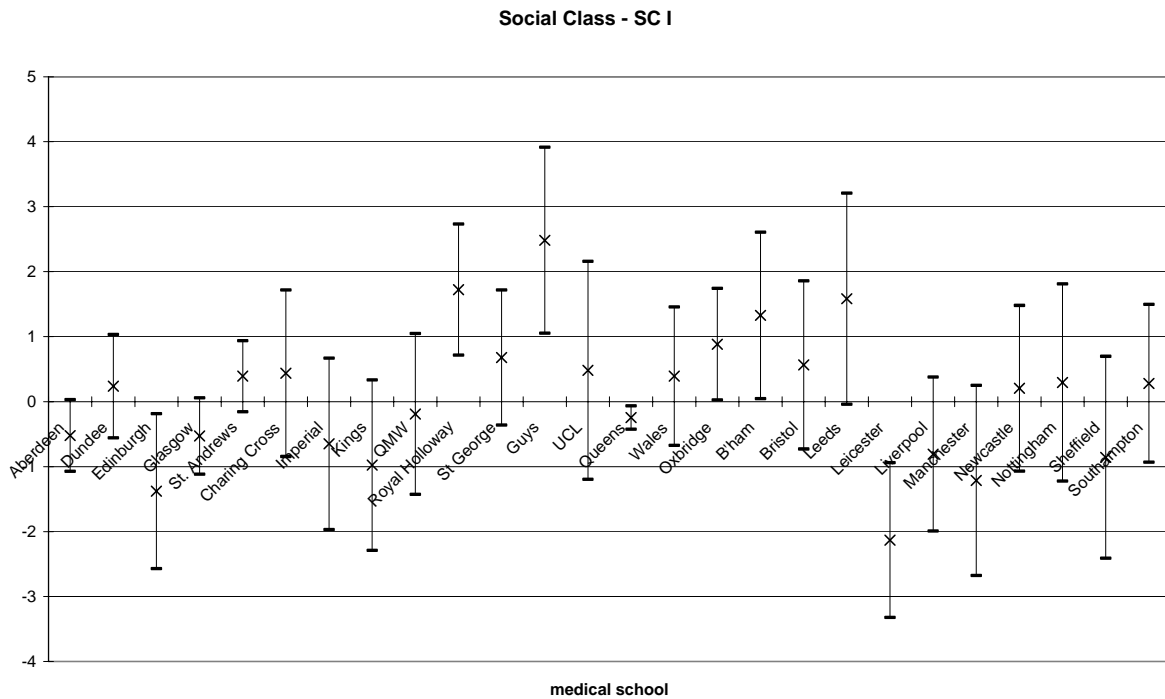
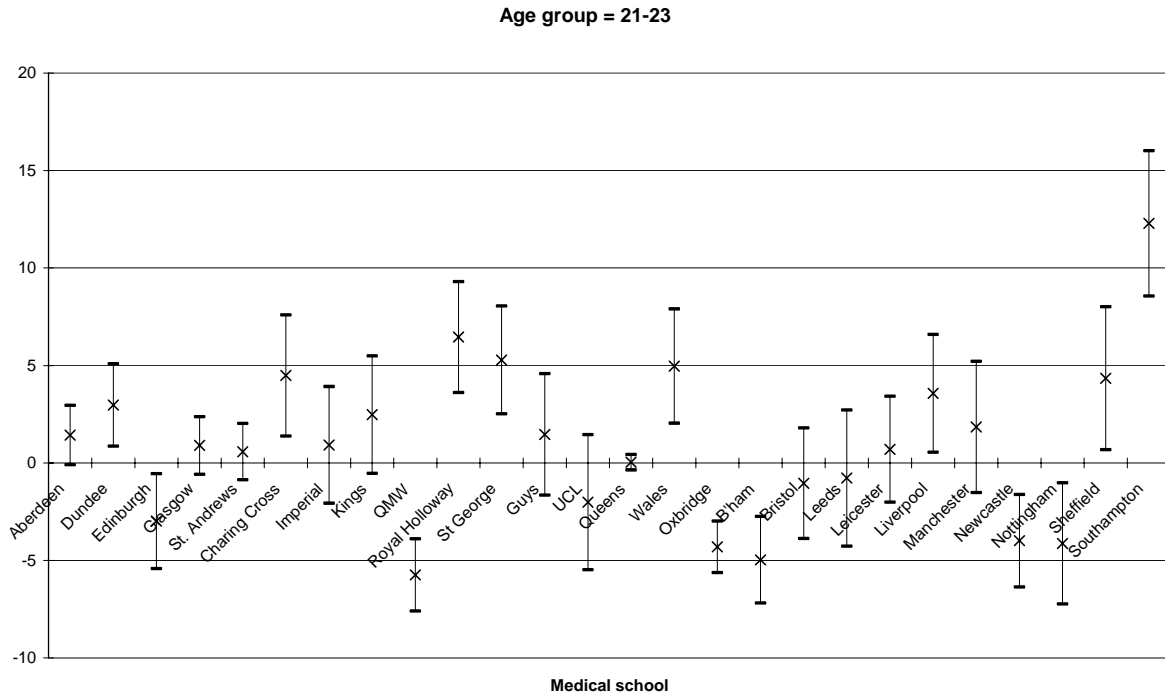




Figure 2c: Marginal Effects ( $\times 100$ ) and 95% confidence intervals

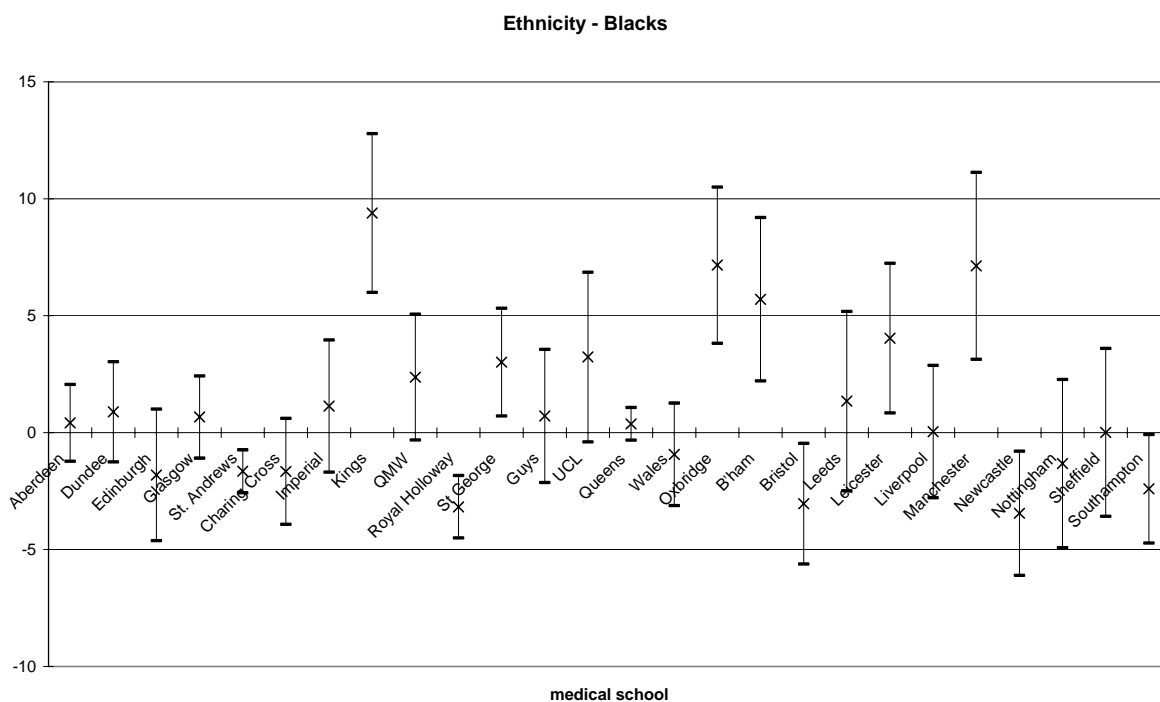
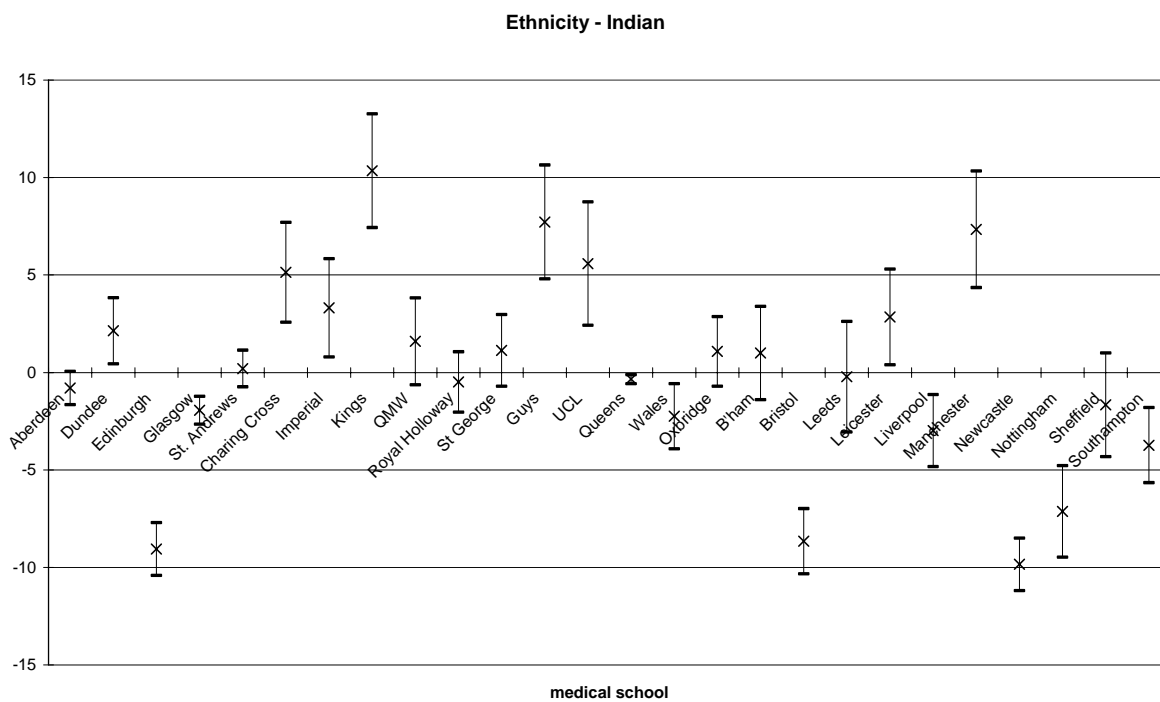


Figure 2d: Marginal Effects ( $\times 100$ ) and 95% confidence intervals

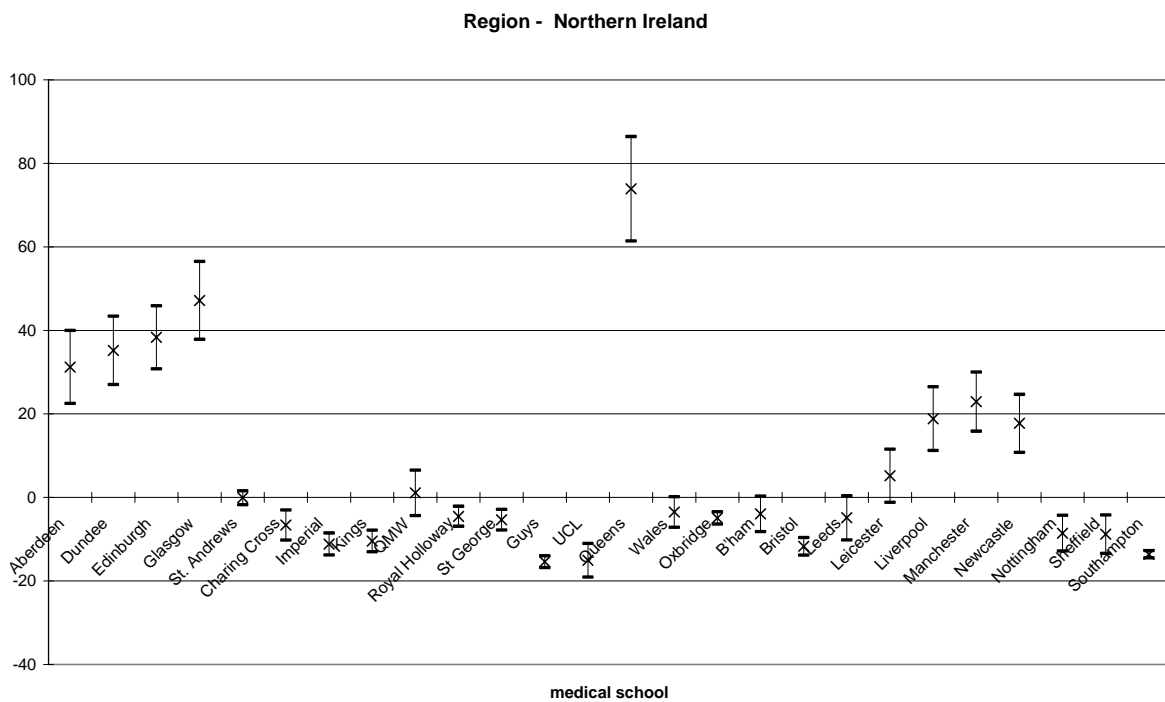
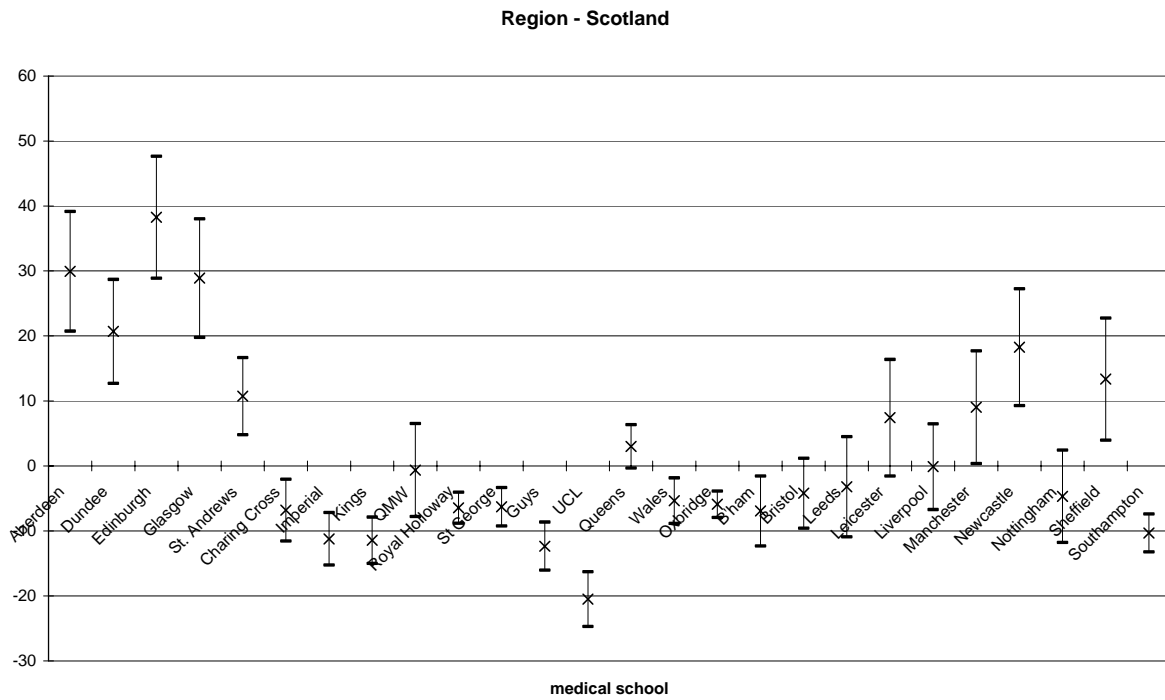


Figure 2e: Marginal Effects ( $\times 100$ ) and 95% confidence intervals

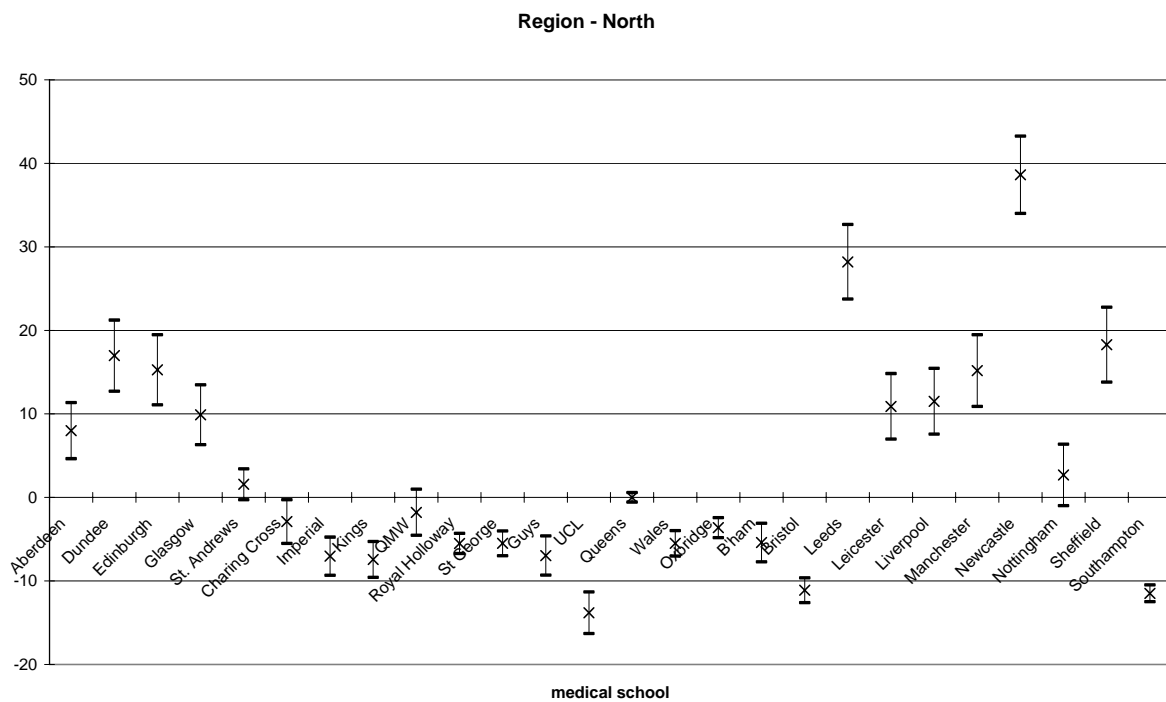
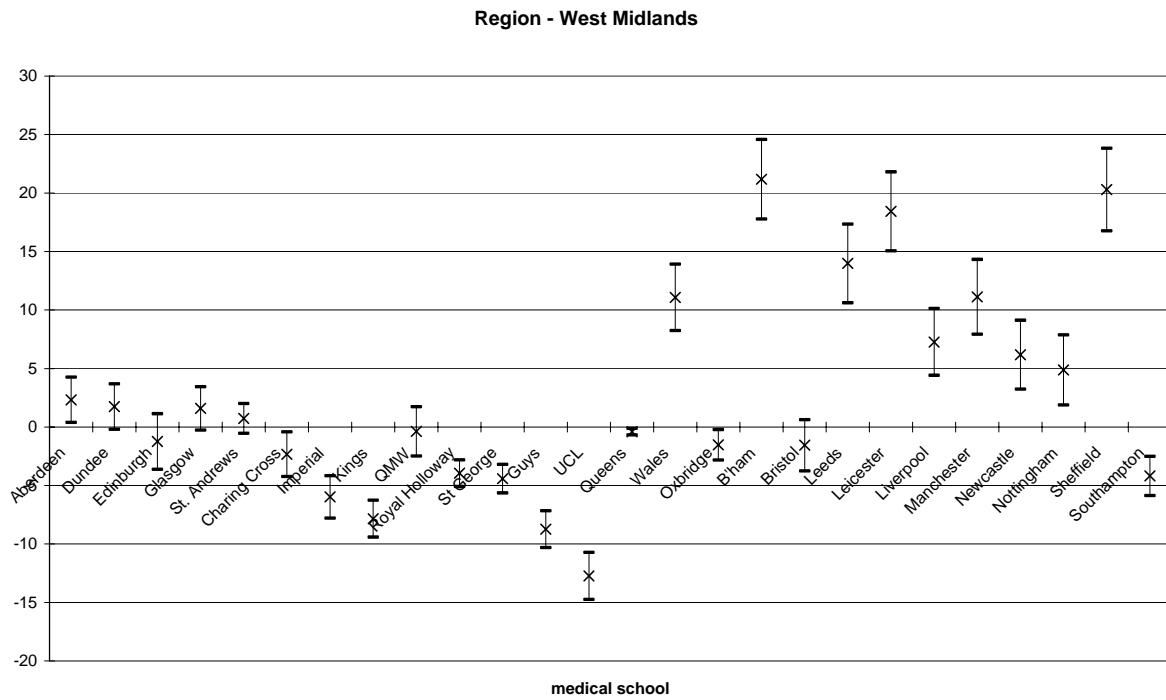


Figure 2f: Marginal Effects ( $\times 100$ ) and 95% confidence intervals

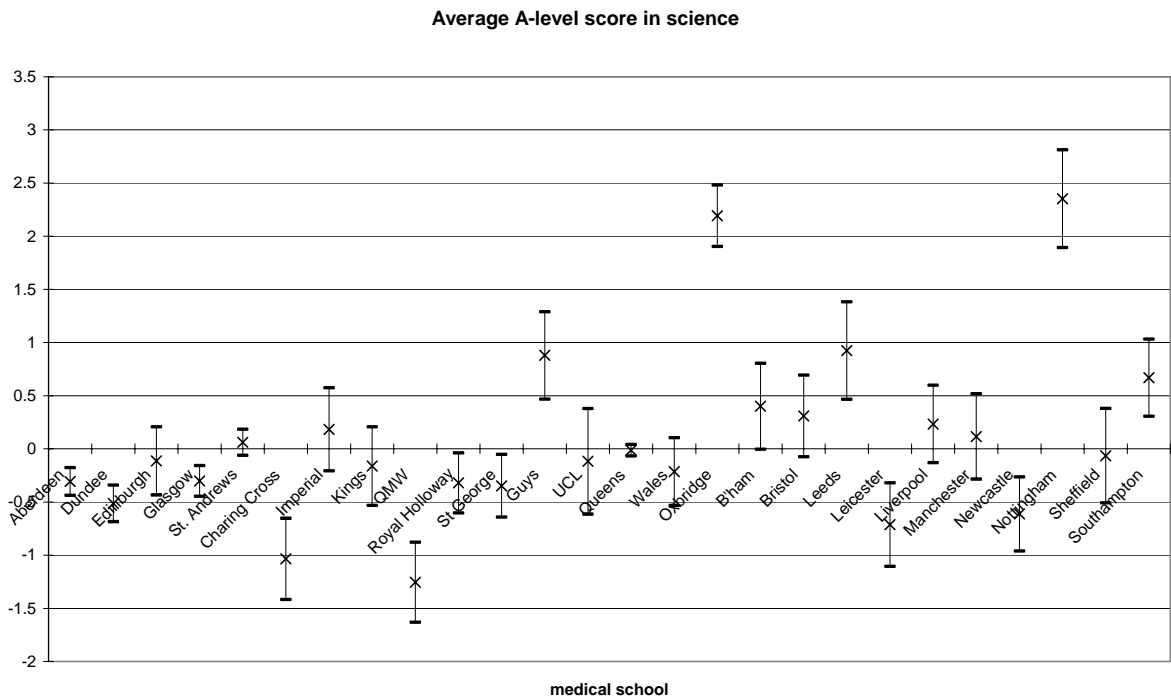
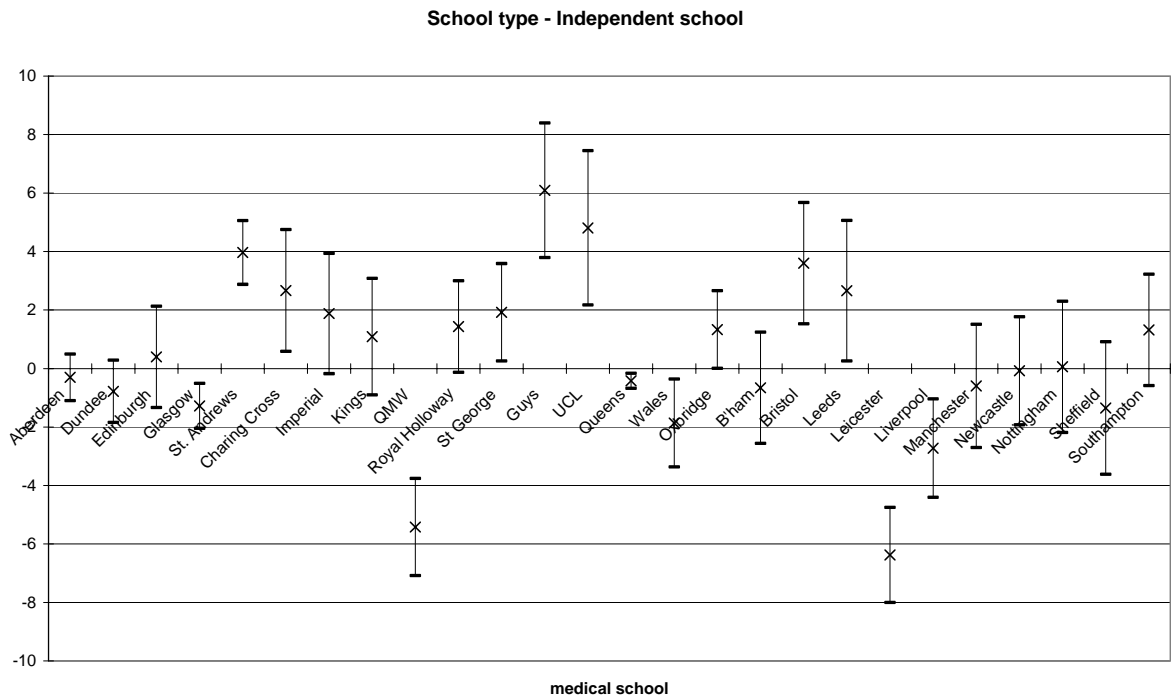


Figure 2g: Marginal Effects ( $\times 100$ ) and 95% confidence intervals

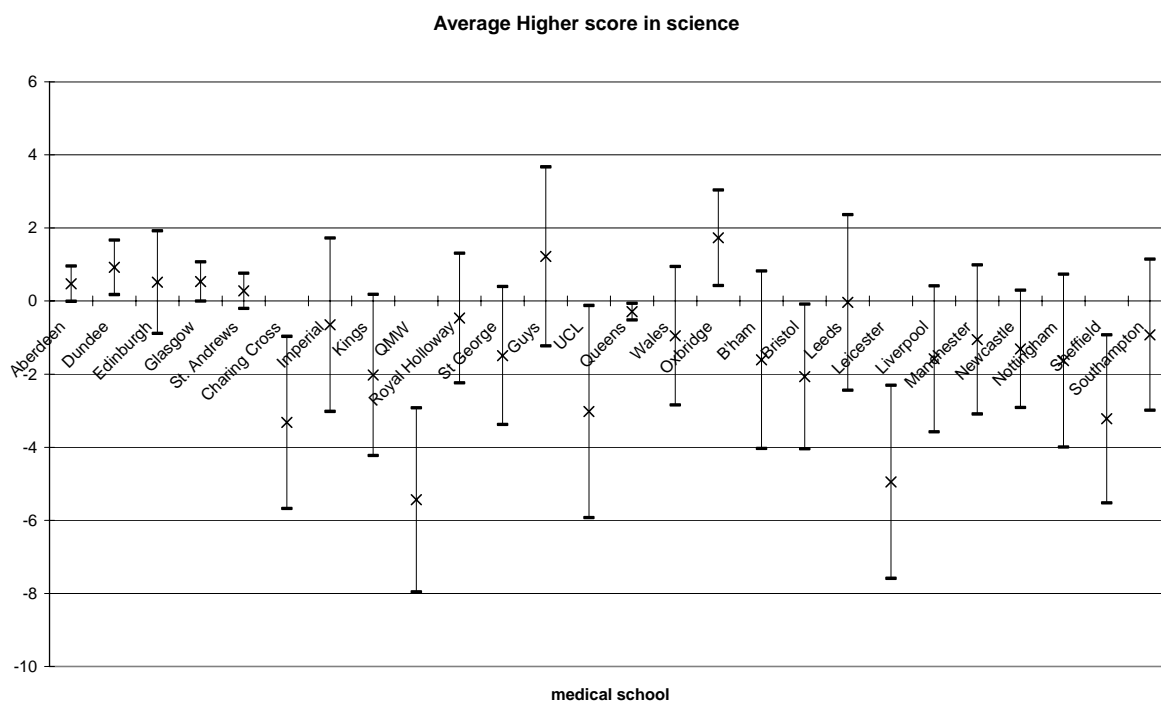
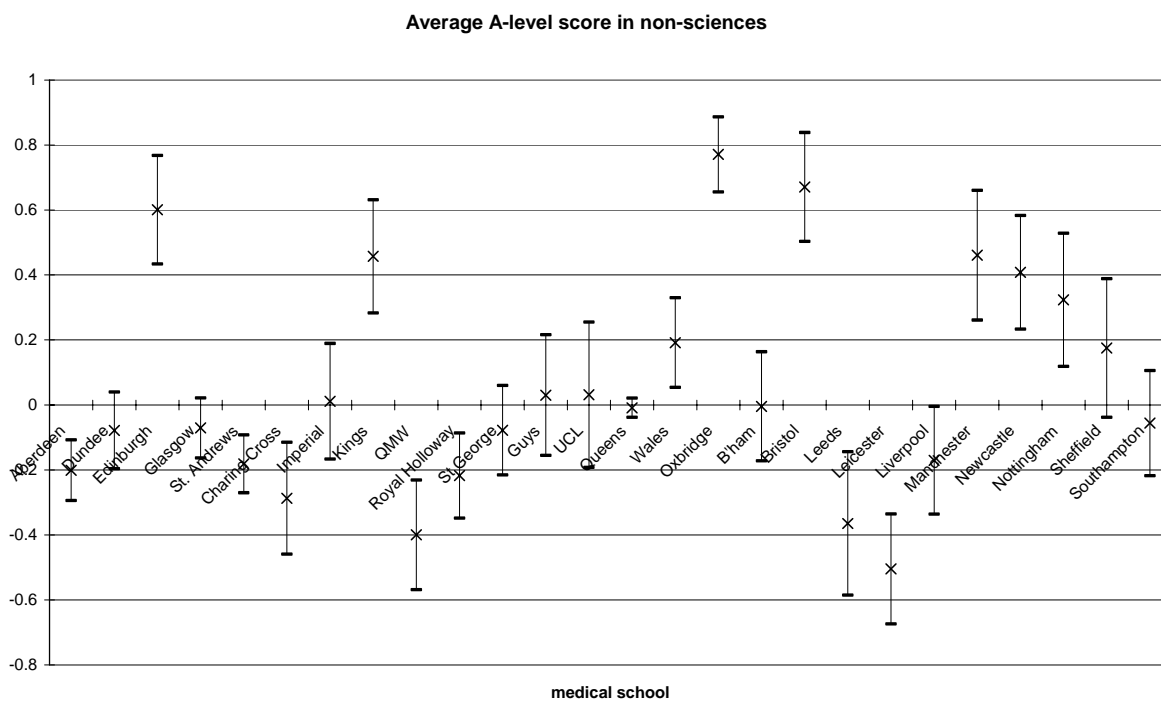


Figure 2h: Marginal Effects ( $\times 100$ ) and 95% confidence intervals

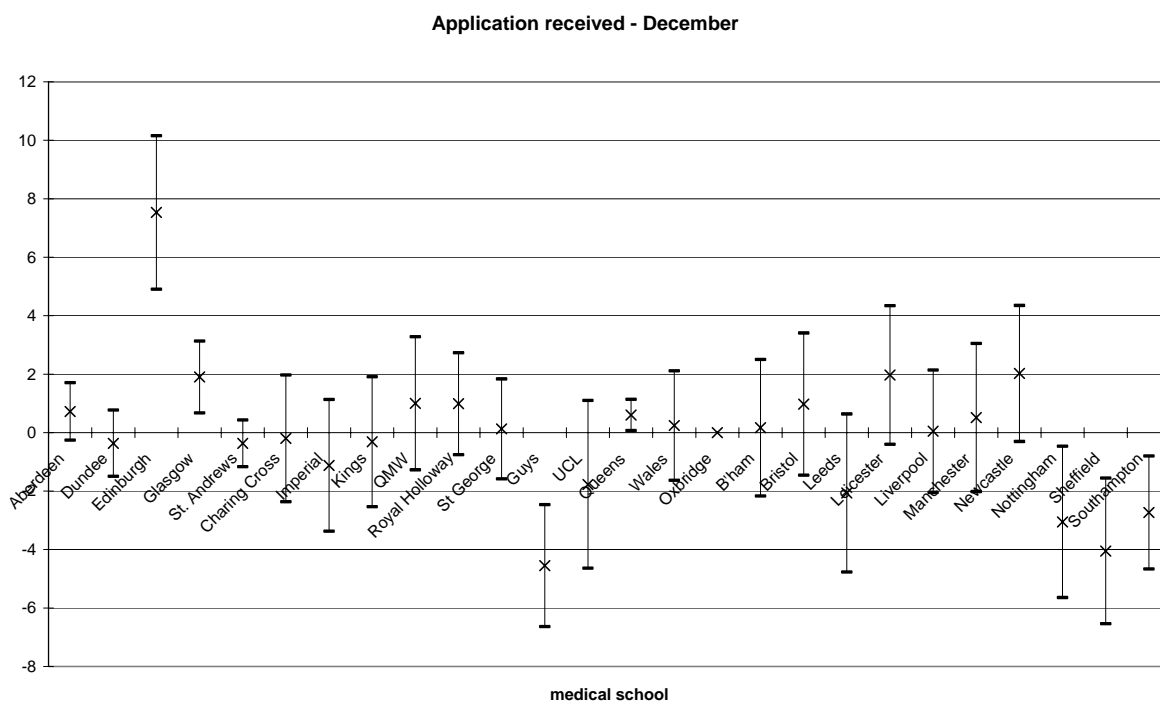
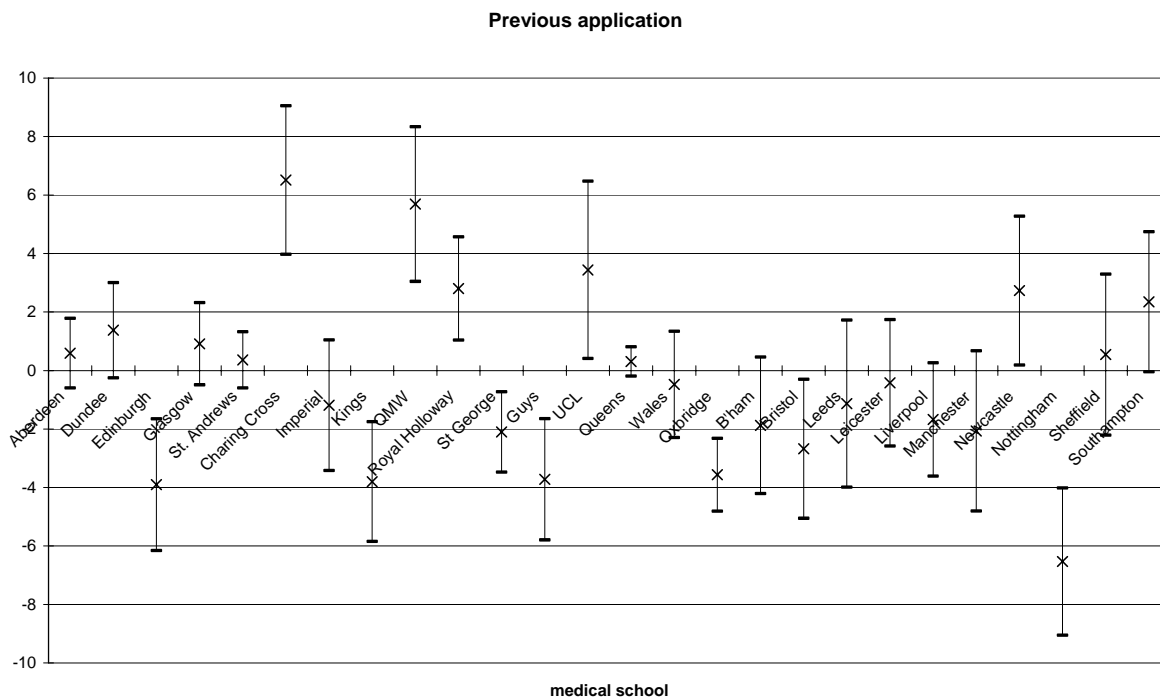


Figure 2i: Marginal Effects ( $\times 100$ ) and 95% confidence intervals

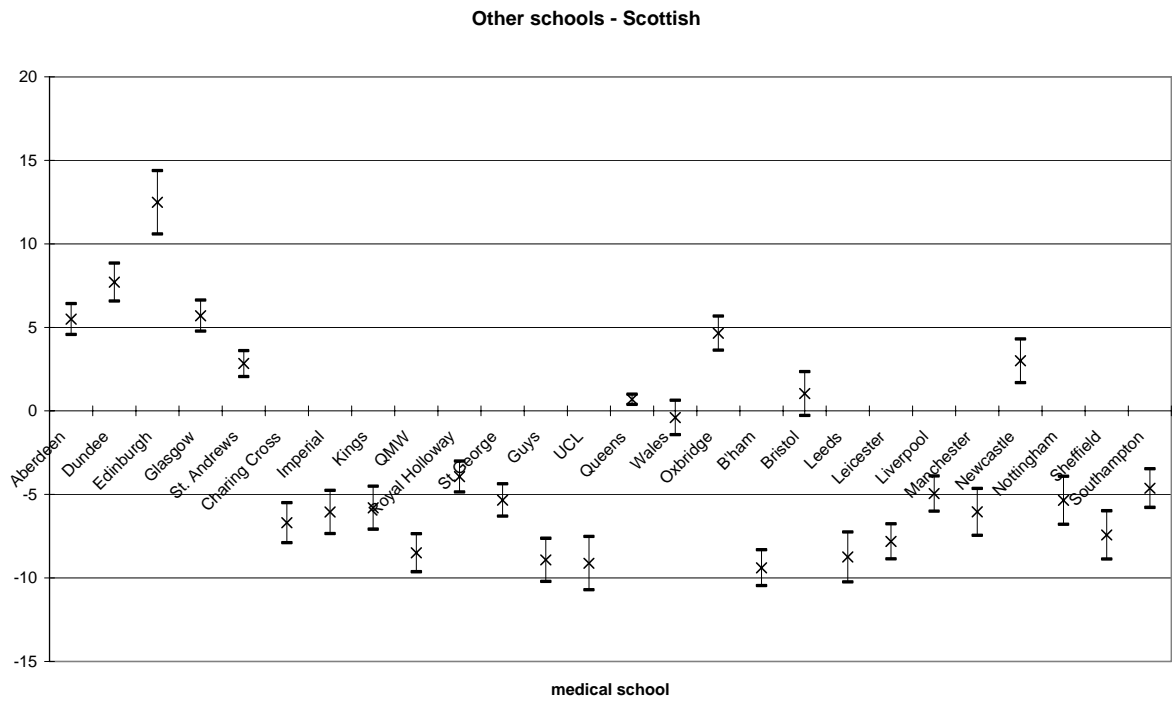
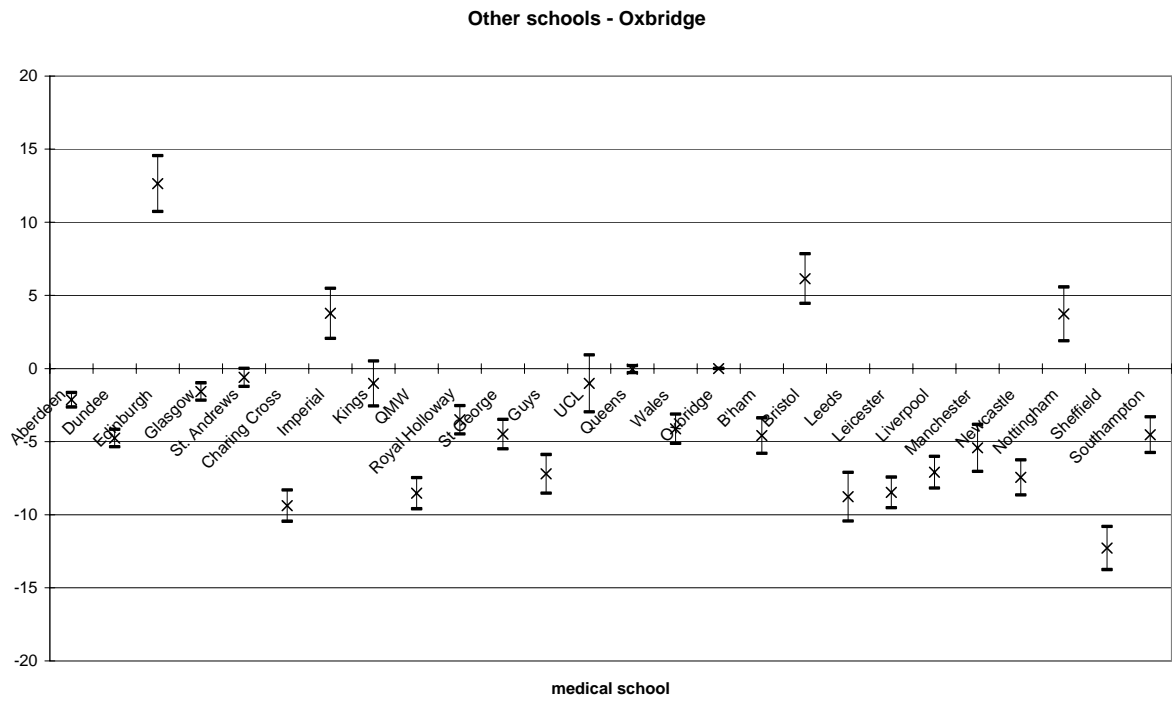


Figure 2i: Marginal Effects ( $\times 100$ ) and 95% confidence intervals

