msc Medical Schools Council

Selection Alliance

Selection Alliance 2018 Report

An update on the Medical Schools Council's work in selection and widening participation

November 2018

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Foreword

Medical schools are making significant progress in social mobility and widening access – something they were severely criticised about, in the past by the Social Mobility Commission. There has been a doubling of medical entrants with disabilities, a substantial increase of places in gateway programmes targeted at young people from educationally and socially disadvantaged backgrounds, and a radical improvement in the amount and availability of guidance for potential medical students. Although much more remains to be done, the direction of travel is clear.

"Although much more remains to be done, the direction of travel is clear"

2018 marks three years since the inception of the MSC Selection Alliance. This is its third annual report and reading these reports together makes clear the progress that has been made: the diversity of the medical student body is increasing and more candidates from disadvantaged backgrounds are accessing an exciting career in medicine.

Not only is there progress in the numbers, there have been major achievements in making the application to medicine more straightforward and transparent. The Selection Alliance developed the first booklet of entry requirements for every medicine course in the UK, allowing applicants to see what every medical school is looking for in their applicants, as well as the initiatives each medical school has to widen access. This year the report has gone interactive with an online tool allowing applicants to filter and compare courses according to the topics most relevant to them.

"the Selection Alliance has produced 22 different pieces of guidance"

In total, the Selection Alliance has produced 22 different pieces of guidance. These are variously aimed at applicants, teachers, parents and careers advisers, and cover issues such as work experience, personal statements and the attributes medical schools look for in applicants. All these documents have been approved by admissions deans from every UK medical school, so applicants can be assured that they provide the most comprehensive and accurate resource on medical

admissions. These documents also support medical schools by giving them access to resources they can use in their outreach activities.

In 2019 the Selection Alliance intends to produce more documents for applicants on issues, such as student finance and applying to medicine with a disability or long-term health condition. There will also be new resources in the form of videos featuring medical school staff and students, and a new website to help applicants prepare for interviews.

The Selection Alliance takes a transparent approach to data monitoring and is committed to publishing, as part of its annual report, a section on the demographics of medical students in the UK. This year it has been possible to report these data on a nation-by-nation basis and to divide the information according to the types of medicine courses.

In future years the Selection Alliance hopes to develop the data on applicants to medicine and use this to inform future work. Following recent agreements with UCAS, it will now be possible for this to begin. It will be key to fully understanding the pathway to medicine.

Dr Paul Garrud
Chair, Medical Schools Council Selection Alliance

1. Introduction

The report provides an overview of the work of the Selection Alliance in the last year as well as setting out proposals for future work.

This chapter will outline some of the context in which the Selection Alliance is working and will identify the key factors influencing its current work.

The data chapter sets out the data available on the current demographics of medical students, such as ethnicity and measures relating to social and educational background. For the first time these data have been split by the type of course the student is studying, for example Graduate Entry Medicine or Medicine with a Gateway Year.

"For the first time these data have been split by the type of course the student is studying"

The following chapters focus on outreach, providing information to applicants, and selection methods.

New medical schools

In 2017 the Department for Health England announced that there would be an expansion of medical school places, with funding being provided for an extra 1,500 places in England. Five hundred places were automatically assigned to existing medical schools to replace numbers that had been cut previously. These extra numbers entered the system for students starting in September 2018.

The remaining 1,000 places were allocated following a competitive process run by Health Education England and the Higher Education Funding Council for England (now Office for Students). Bids were scored against set criteria which included a focus on providing doctors to geographical areas where there is a shortage, addressing the issue of shortage specialties such as general practice, and widening participation.

A significant number of existing medical schools received new places and, while it is not clear what plans every school has for allocating these places, a number

are introducing new schemes for widening participation students or expanding existing schemes.

Places were awarded to five new institutions:

- Anglia Ruskin University School of Medicine
- Edge Hill University Medical School
- Kent and Medway Medical School
- University of Lincoln Medical School
- University of Sunderland School of Medicine

These new medical schools will all have a focus on widening participation and encouraging students from their local area to attend their medical schools. Representatives from these new schools have been invited to join the Selection Alliance and a priority will be supporting these schools as they develop, ensuring that they are able to contribute to the work of the alliance.

The increase in medical student numbers and the focus on widening participation is welcomed by the Selection Alliance and it is hoped that it will increase the amount of data that can be collected about these students, which in turn will help the Selection Alliance develop its work.

Qualification reform

Qualification reform remains a live issue for medical schools with changes being made to both A levels and GCSEs in England, meaning the qualification system across the UK continues to diversify. While at the time of writing it is too early to fully assess the impact that the move to linear A levels has had on the 2017/18 admissions cycle, the Selection Alliance will be seeking to support medical schools as they adapt to the changes.

Office for Students

The establishment of the Office for Students in England marks a change to the regulatory framework for universities and medical schools. The role of regulating access agreements now sits with the Office for Students and they aim to ensure that 'every student, whatever their background has a fulfilling experience of higher education that enriches their lives and careers'. The Selection Alliance looks forward to working with the new Office for Students as it launches new proposals for the regulation of access agreements and adopts a risk-based model of regulation. The Office for Students will also be looking at student success and progression as well as whether institutions have 'gaps' in the numbers of students from different backgrounds in comparison to a relevant comparative population. The Selection Alliance will support medical schools in meeting these new requirements as they apply at the course, rather than institutional level.

UKMED

The UK Medical Education Database (UKMED) provides a platform for collating data on the performance of UK medical students and trainee doctors across their education and future career. These data are used for research purposes and the first set of studies using the database has been published. Thes has included some interesting findings about selection. One study found modest supportive evidence that, when students from independent and state schools enter with similar pre-entry grades, once in medical school, students from state-funded schools are likely to outperform students from independent schools.[1] As more research utilising UKMED is published, the Selection Alliance will facilitate the dissemination of findings to medical schools and will seek to develop evidence-led policy based on research.

"once in medical school, students from state-funded schools are likely to outperform students from independent schools"

1 Kumwenda B, Cleland JA, Walker K, et al The relationship between school type and academic performance at medical school: a national, multi-cohort study BMJ Open 2017;7:e016291. doi: 10.1136/bmjopen-2017-016291

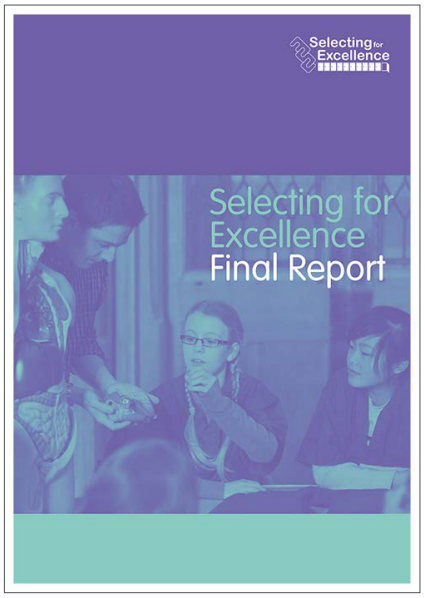
Getting an international perspective

The Medical Schools Council continues to play an active role in organising annual INReSH conferences that bring together academics involved in evaluating and improving selection methods in the healthcare field. A successful conference was held in 2018 in Basel, Switzerland which focused on the influence of politics and culture in shaping selection practices, and how technology might transform selection.

In 2019 INReSH will be supporting an event that aims to bring together a small number of key influencers in selection from across the globe to consider how selection might be radically changed to focus on social accountability and the needs of patients rather than academic ability.

2. Data

This chapter explores the demographic profile of medical students nationally and by constituent countries. This year the inclusion of course-level data provides a more nuanced picture of widening participation in medicine. In addition, the Data Monitoring Group is piloting a report of school-level data, which will allow individual medical schools to compare their data with other medical schools.



Selecting for Excellence Final Report, 2014

In response to the 2014 Selecting for Excellence Final report, and the national agenda in widening participation, the engagement of medical schools in increasing the number and diversity of widening participation programmes is impressive. In 2002 there were two gateway year programmes in the UK; this increased to seven in 2017 and 17 in 2019, alongside three preliminary year (or foundation) programmes and 16 graduate entry programmes, greatly widening access to studying medicine. This is in addition to a number of medical schools employing alternative uses of contextual admissions, which can include inviting candidates for interview with reduced grades and/or aptitude test results.

Data source

UKMED
UK Medical Education Database

The UK Medical Education Database (UKMED) is a collaboration between various data providers in the education and health sectors. It provides a platform for linking undergraduate data with postgraduate data, including admissions and performance data. This makes it an effective tool for monitoring widening participation in medicine.

The UKMED data used in this chapter are provided by:

- The Higher Education Statistics Agency (HESA)
- The General Medical Council

The data that form the foundation of UKMED's undergraduate cohort come from the HESA student

Note

UK Clinical Aptitude Test (UKCAT) data were unavailable at the time of writing.

UCAS has recently signed a data sharing agreement and data checking started in late October. A prototype applicant profile report modelled against the entry profiles report will be developed so that medical schools are able to verify whether all UCAS data are included.

records. These records have been collected since 1994/95, and UKMED holds complete cohort data from 2002/03. This means that medical student entry trend analyses can be achieved. The cohort selected for review in this chapter were all UK-domiciled students who enrolled in one of the medical schools with a membership of the Medical Schools Council between 2007 and 2016.

The following variables were obtained from the UKMED dataset where complete data were available:

- Gender
- Ethnicity
- POLAR 3 – young participation quintile
- School type
- Parental Education (2007–2016)
- Socio-economic classification (SEC)
- Disability (at entry to medical school)
- Index of Multiple Deprivation (IMD)

The statistics provided in this chapter are subject to the HESA statistical disclosure rules for anonymising statistics. This means that counts are rounded to the nearest multiple of five and percentages on small groups of students are suppressed.

Note that the numbers in this year's report may differ slightly from previous reports as the data improve, for example by the inclusion of data from previously missing courses, now provided by HESA.

Applicants to medicine courses (from UCAS)

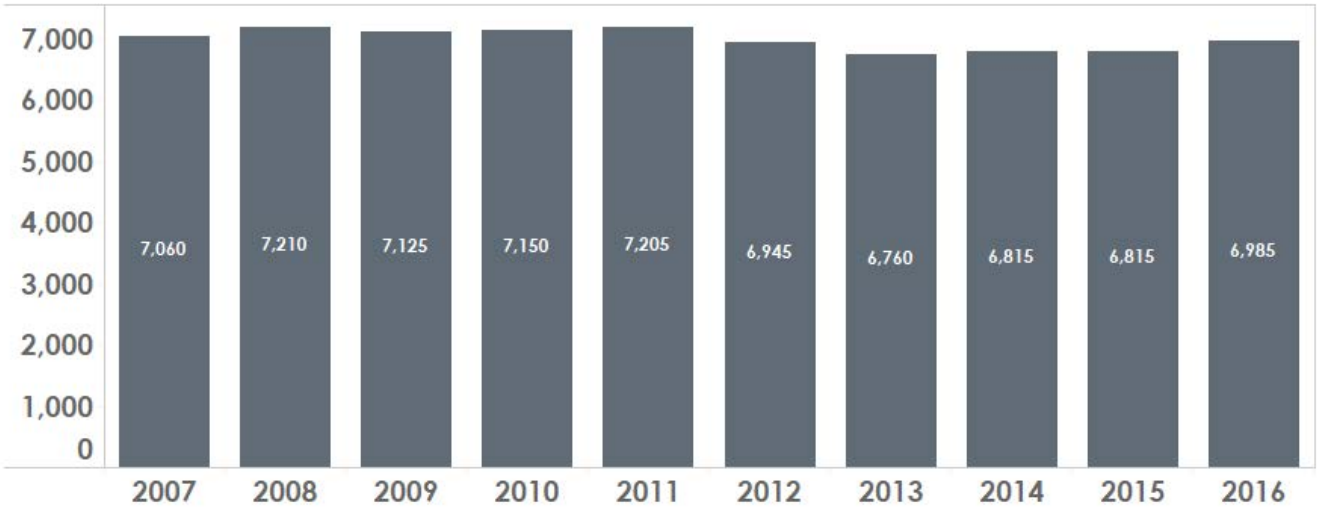
Application year	Number of applications
2014	17,140
2015	15,220
2016	14,820
2017	14,450
2018	15,620

National demographic data of entrants to medicine

This section presents data from entrants to all medical schools across the UK. A comparison with applicants and entrants to higher education is also presented to provide a broader context for these data.

The number of UK-domiciled entrants to medical school has remained reasonably constant since 2012, with 6,985 entrants in 2016. This number will rise in subsequent years due to the increase in medical school places in England.

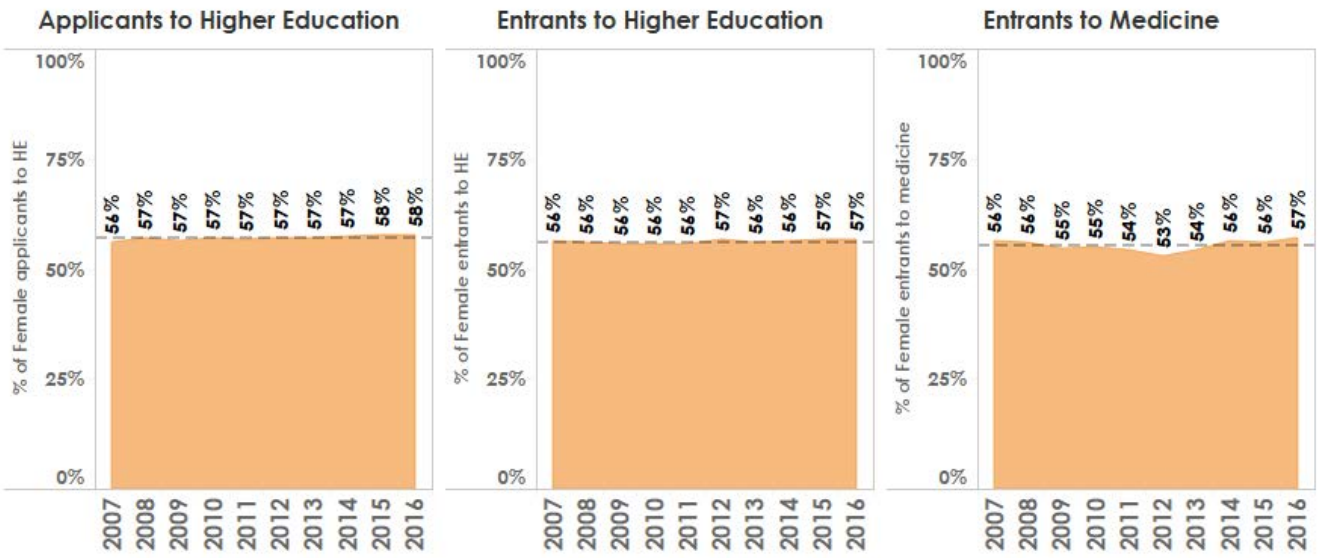
Total number of entrants to medicine



Female entrants

57% of the students entering medical schools are female, which reflects the profile for applicants and entrants to higher education. Although the number of women entering medical school accounts for more than half of the cohort, the 2017 General Medical Council data from The State of Medical Education and Practice in the UK reveal that women currently make up 45% of the medical register. However, 58% of doctors in training are female, which could indicate that the increase in the proportion of women is now filtering through to more senior levels of the profession. The following graphs show the proportion of female applicants and entrants to higher education, and entrants to medicine.

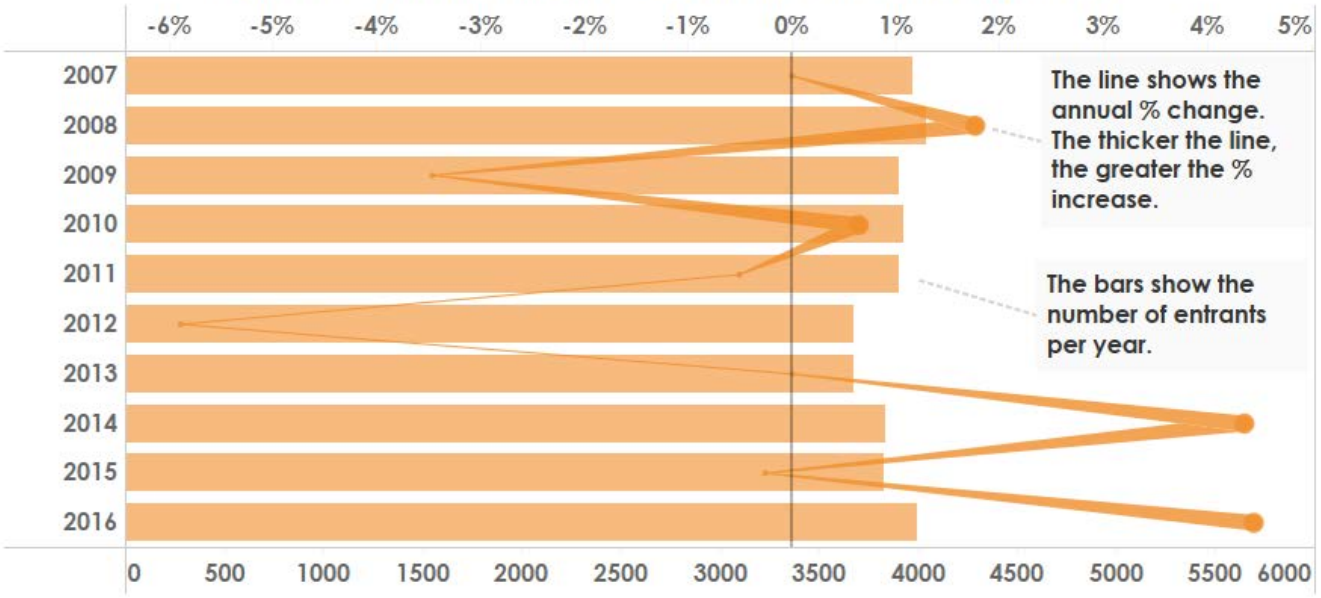
Proportion of female entrants



The dotted line shows the average across the period.

↳ The difference in participation of males and females in medicine remains consistent with applicants and entrants to higher education.

Number of female entrants and annual change



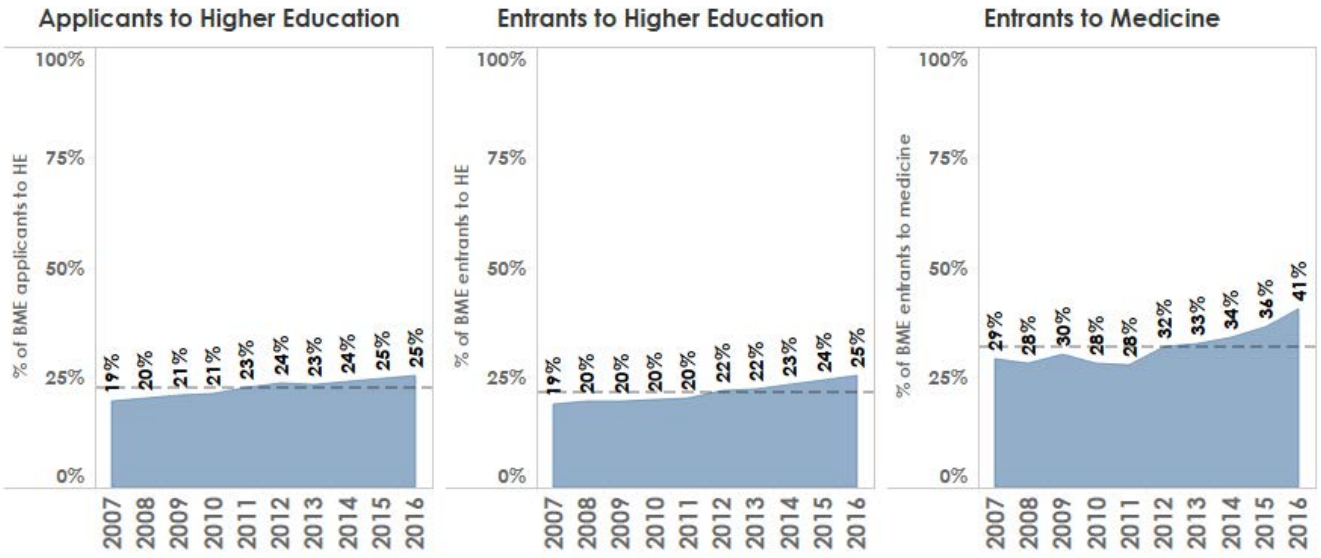
The vertical solid line represents the zero % line.

↳ A decrease in the number of female applicants is seen in 2012/13. Interestingly, this corresponds to the introduction of increased tuition fees in England in 2012 to £9,250.

Ethnicity

According to the national census in 2011, 81.7% of the population aged 15 to 24 was white, 9.8% Asian, 3.9% Black, 3.4% Mixed and 1.2% Other. The proportion of BME applicants and entrants to higher education is over-represented at 25% compared to the national population at 18.3%.

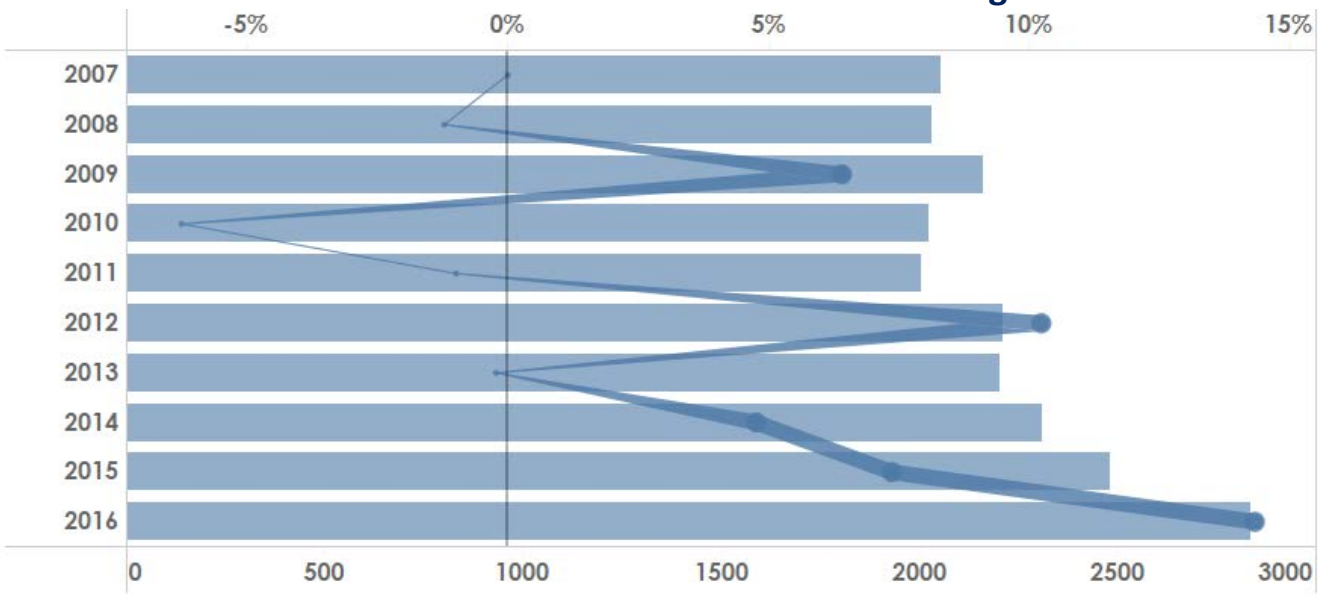
Proportion of BME entrants



The dotted line shows the average across the period.

↳ A greater proportion of entrants to medicine are from BME backgrounds compared to applicants and entrants to higher education generally.

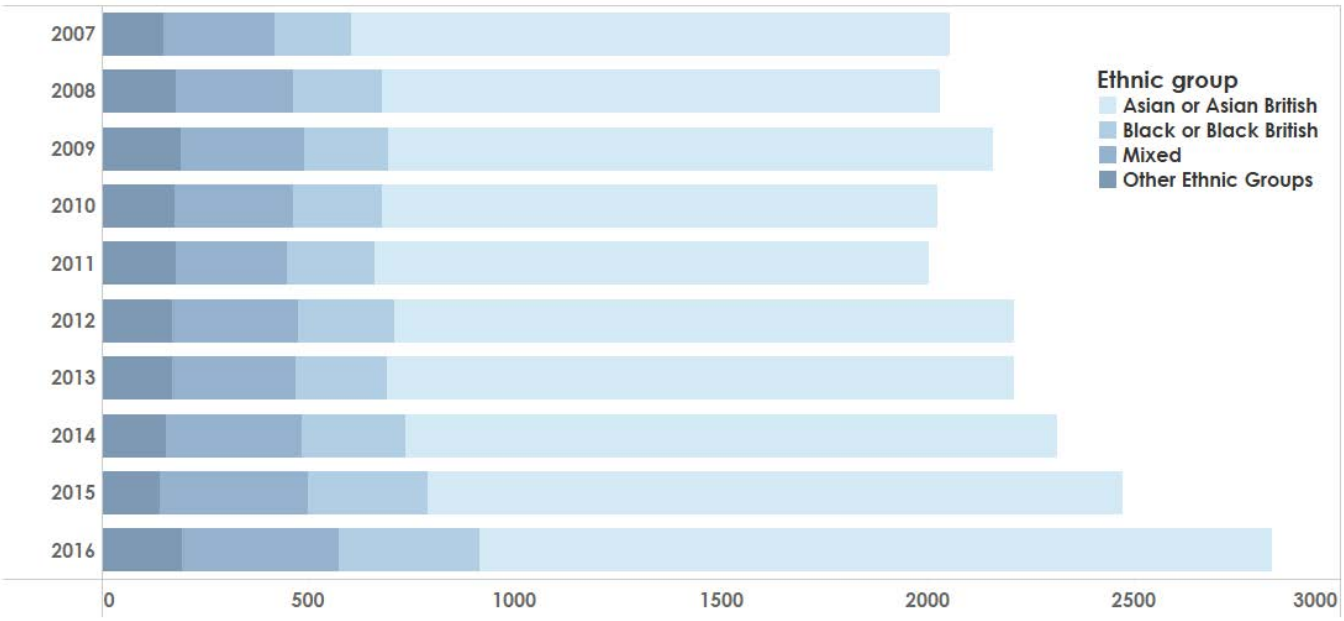
Number of BME entrants and annual change



The vertical solid line represents the zero % line.

↳ An steady increase in BME entrants to medicine is seen after 2013.

Number of BME entrants by ethnic group



↳ This graph provides more detail on the categories of BME entrants to medicine and shows that they have all continued to increase from 2014.

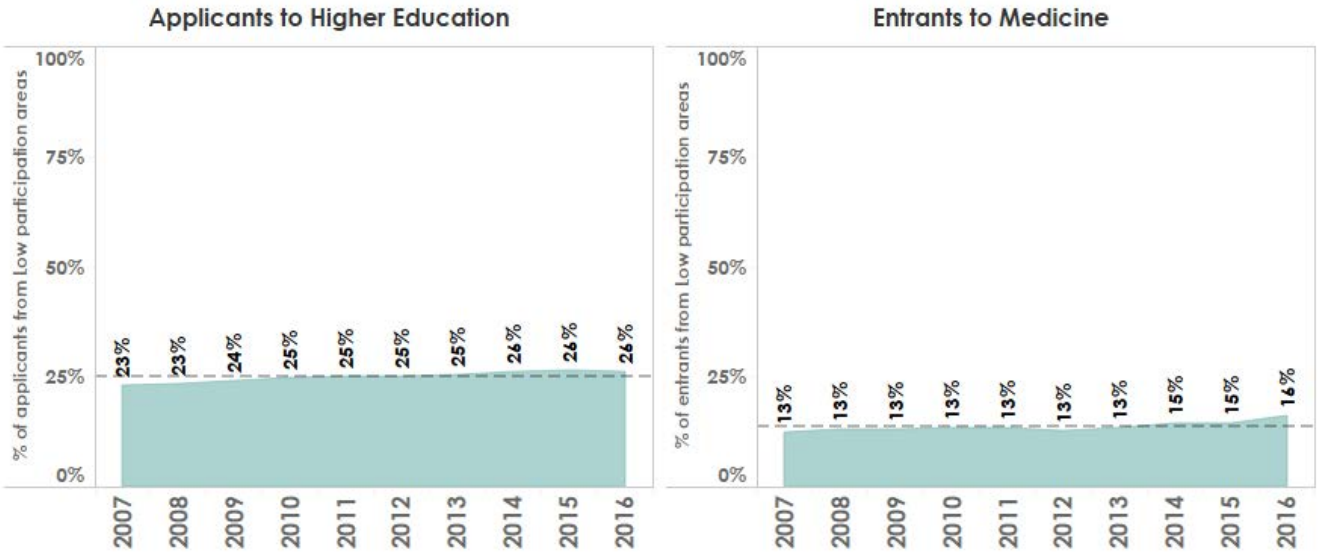
↳ Although the proportion of ethnic minorities as a whole is over-represented as compared to the general population, it should be noted the data are presented in broad categories which mask under-representation of some ethnic groups, for example Bangladeshi or Black Caribbean medical students.

POLAR 3

POLAR 3 is a geographical measure that ascertains how many individuals by the age of 19 participate in higher education within a given postcode area and is reported by quintiles (1–5). The 20% of areas with the lowest proportion of young people entering higher education are called 'low-participation neighbourhoods' with quintiles 1 and 2 being the areas of lowest participation. It should be noted that POLAR 3 is not necessarily a measure of social disadvantage. Postcodes vary in size across the UK and they have varying levels of affluence within them. Therefore using this as a sole measure can lead to false positive identifications of disadvantage.

The following graph presents data from quintiles 1 and 2 for applicants to higher education and entrants to medicine.

Proportion of entrants from low-participation areas (quintiles 1 and 2)

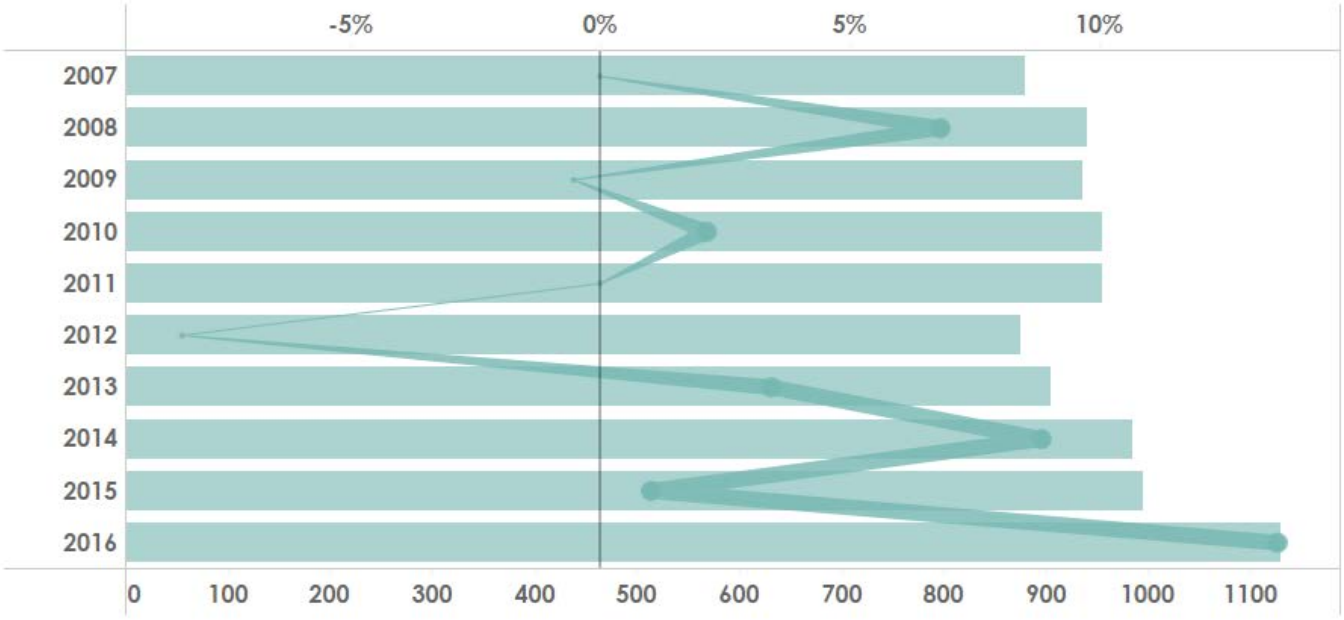


The dotted line shows the average across the period.

↳ Participation for all applicants to higher education from low participation areas has shown a slight increase in the nine years covered by these data.

↳ The proportion of entrants to medicine from quintile 1 and 2 is lower than for applicants and entrants to higher education.

Number of entrants from low-participation areas (quintiles 1 and 2) and annual change



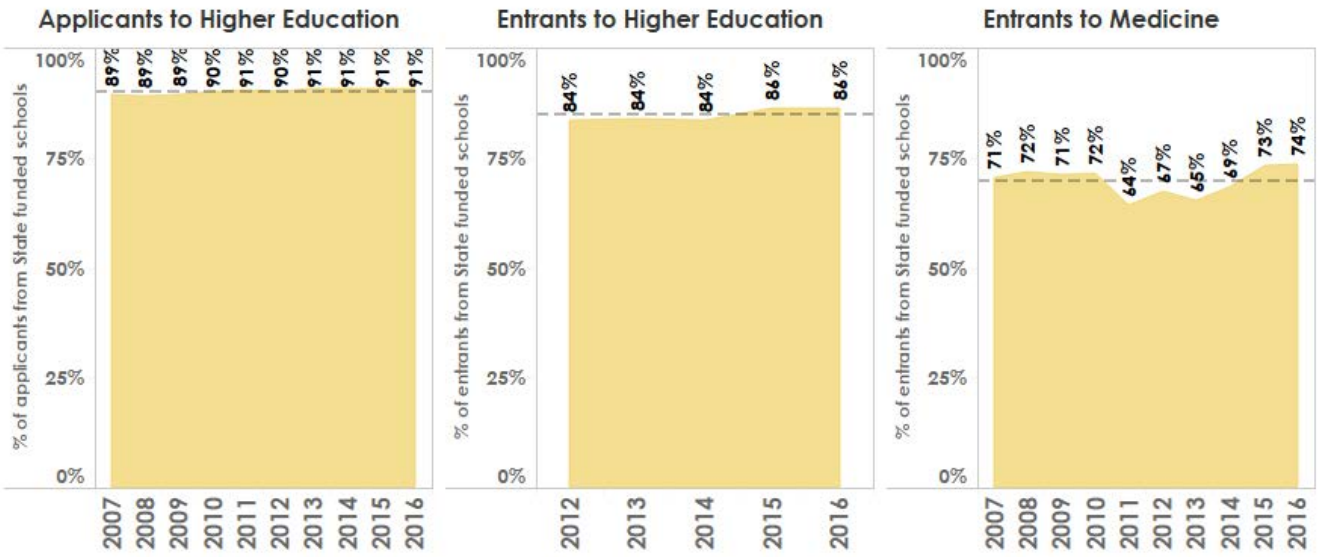
The vertical solid line represents the zero % line.

↳ Entrants to medicine from POLAR quintile 1 has increased by 14% since 2015.

School type

These data present the number of applicants and entrants to higher education and medicine from UK state schools, which includes all state-funded academies and grammar schools. Around 6.5% of school children in the UK attend private schools, and this increases to around 18% for pupils over the age of 16.

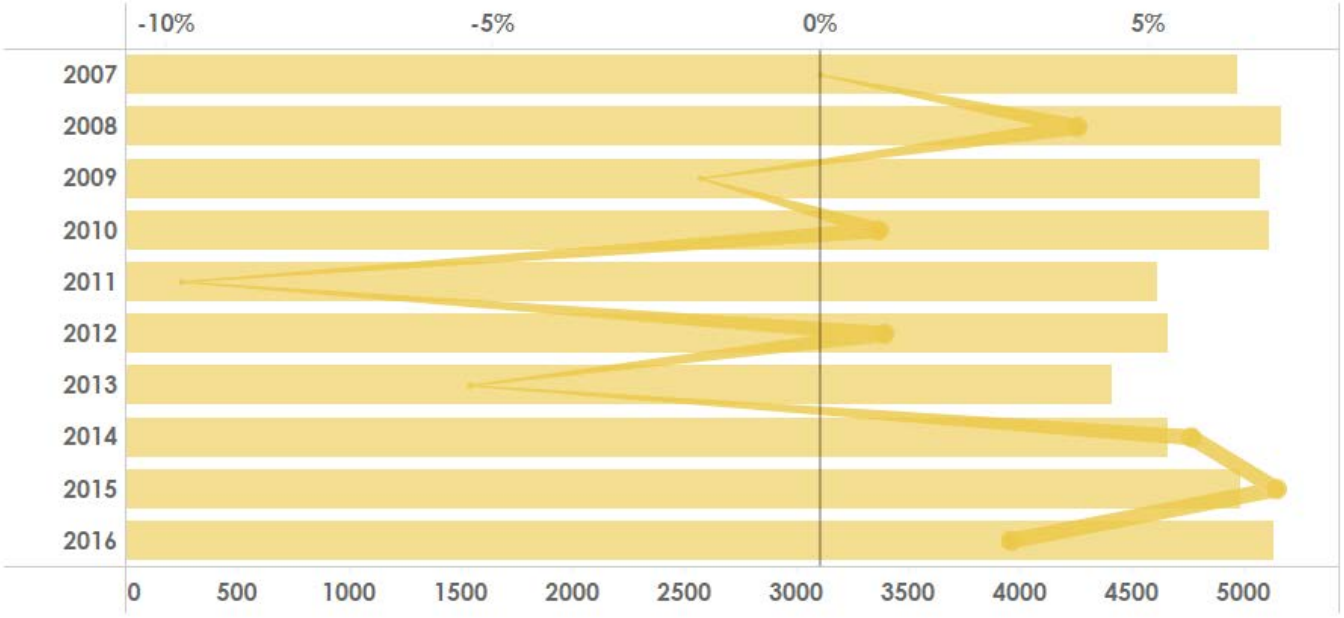
Proportion of entrants from state-funded schools



The dotted line shows the average across the period.

↳ Over 80% of applicants and entrants to higher education attended state schools, however, a notably reduced proportion of state school applicants is seen for medicine.

Number of entrants from state-funded schools and annual change



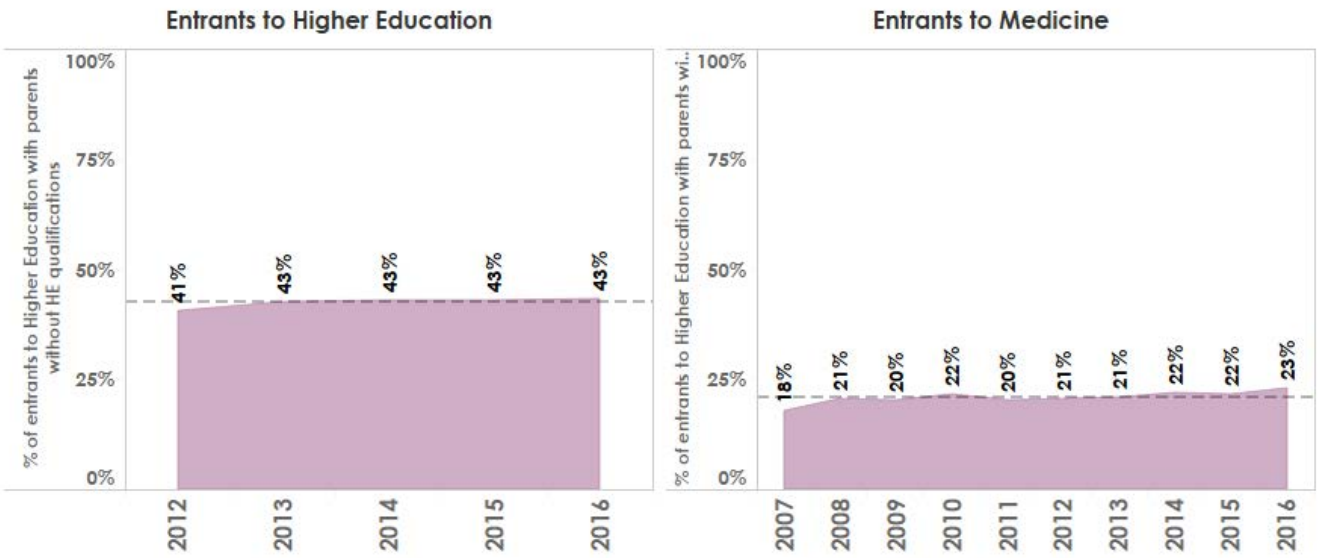
The vertical solid line represents the zero % line.

- Although grammar schools are categorised as state schools, their pupils are normally admitted on selection criteria, frequently academic, as compared to other, non-selective state schools, which accept all pupils regardless of aptitude.
- Nationally, 11% of the 5-to-16-year-old population attends selective schools (grammar and private schools – note that these figures do no take home schooling into account). It has been reported that 80% of applicants to medicine come from 20% of schools in the UK and that 50% of schools have no applicants to medicine.[2]

Parental education

The children of parents with higher educational attainment are more likely to have higher educational aspirations themselves.[3] The percentage of entrants to higher education with parents who do not have higher education qualifications has shown an increase since 2013 and has remained static since then. However, applicants to medicine have shown an increase during that period.

Proportion of entrants with parents without higher education qualifications



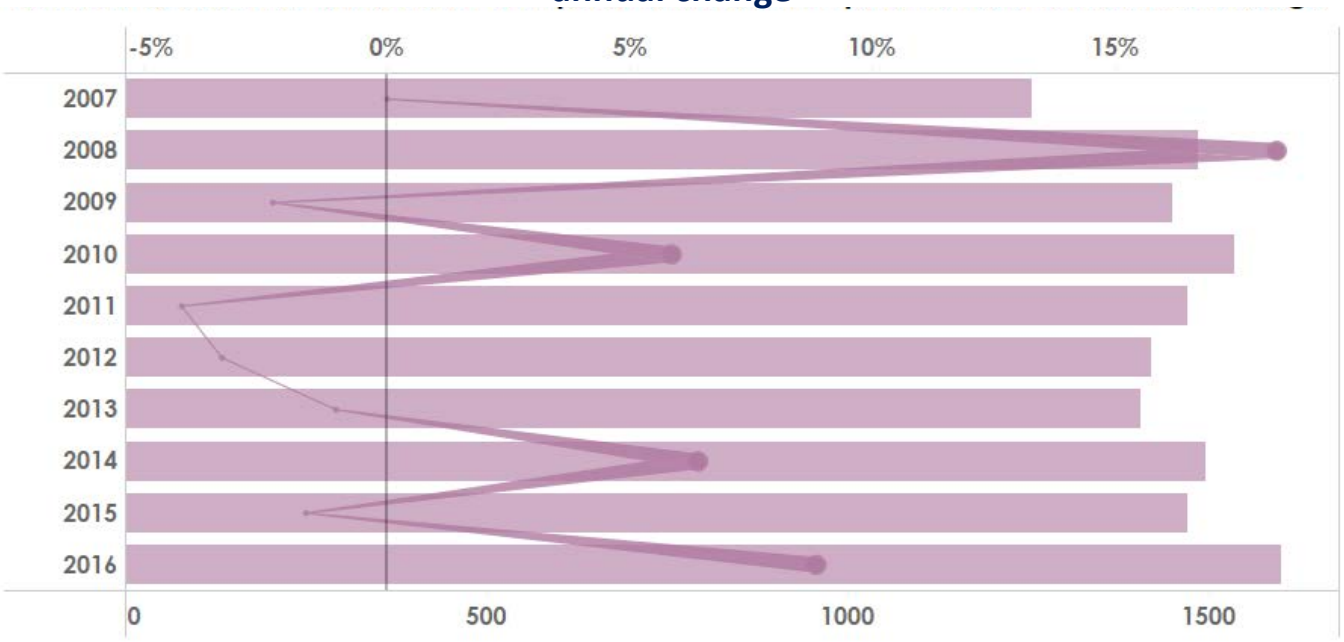
The dotted line shows the average across the period.

- Entrants to medicine with parents without higher education qualifications are increasing.
- The proportion of entrants to medicine with parents without higher education qualifications is much lower than entrants to higher education.

2. Garrud P. (2014) Help and hindrance in widening participation. Commissioned research, Medical Schools Council.

3. Dubow EF, Boxer P, and Huesmann LR. Long-term Effects of Parents' Education on Children's Educational and Occupational Success: Mediation by Family Interactions, Child Aggression, and Teenage Aspirations. Merrill Palmer Q (Wayne State University Press). 2009 Jul; 55(3): 224–249

Number of entrants with parents without higher education qualifications and annual change



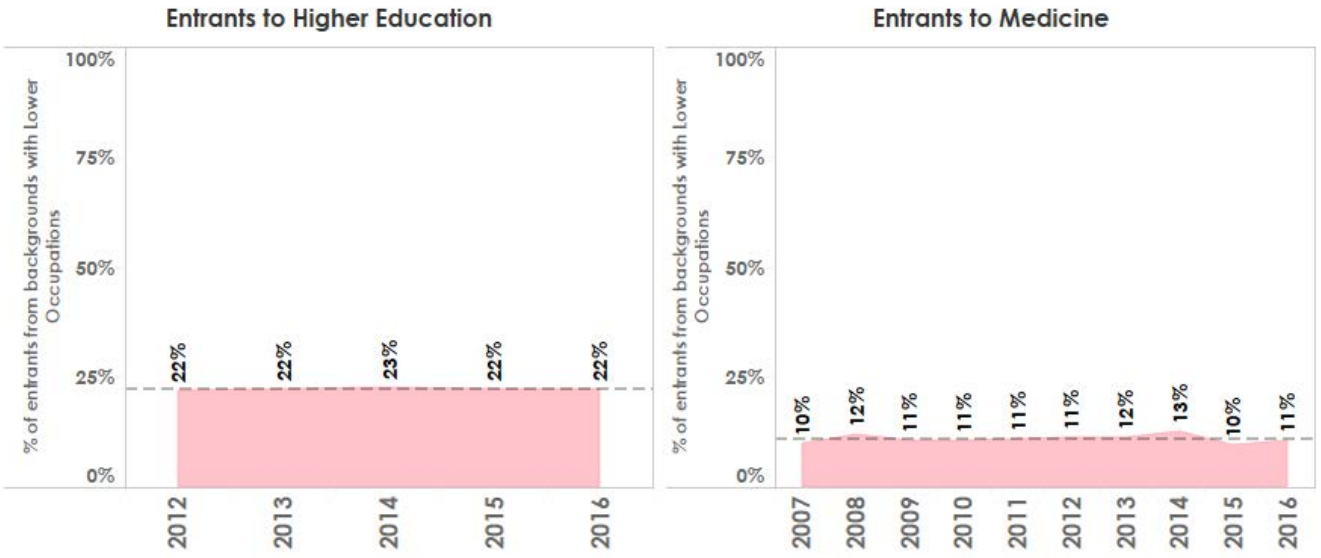
The vertical solid line represents the zero % line.

↳ Despite annual fluctuations, there is an overall relative increase of 28% in first generation higher education entrants to medicine since 2007.

Socio-economic classification

Socio-economic classification (SEC) is a non-linear scale of socio-economic status as determined by the economic and social status of an individual or family based on education, income and occupation. The higher SECs include higher managerial and professional occupations and lower managerial and professional occupations. The lower SECs (or lower occupations) are defined as those in lower supervisory and technical occupations, semi-routine occupations, routine occupations and those who have never worked and long-term unemployed.

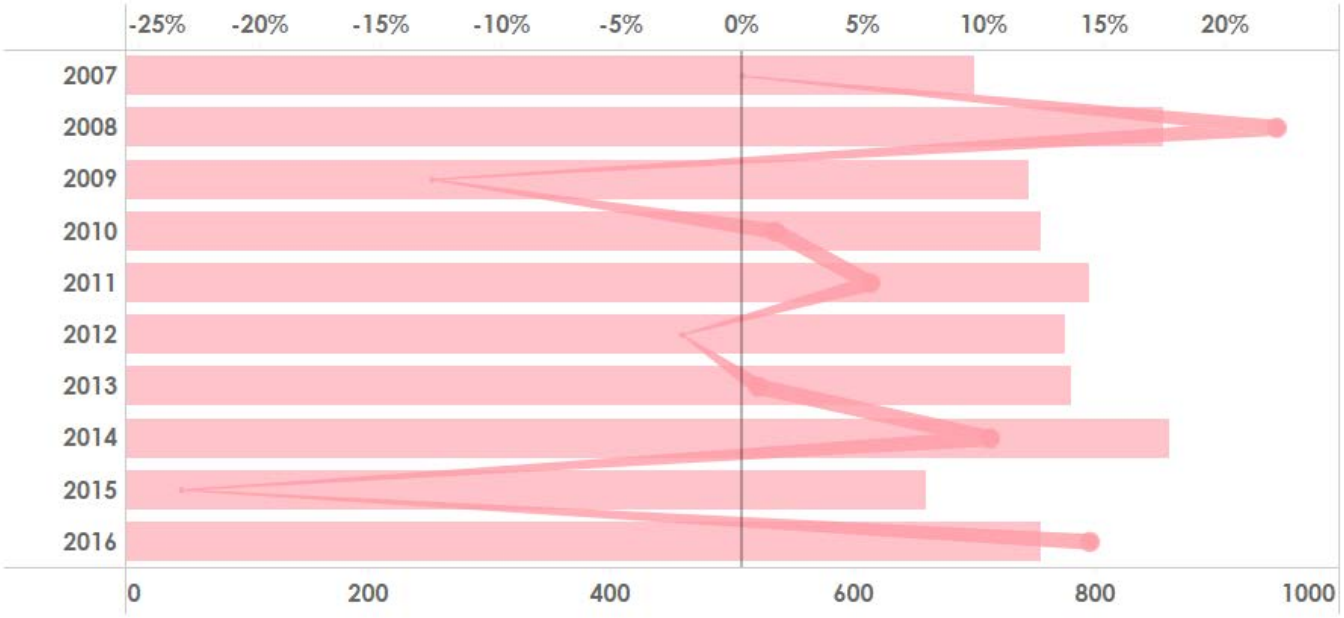
Proportion of entrants from backgrounds with lower occupations



The dotted line shows the average across the period.

- Entrants to higher education and to medicine from the lower occupation classifications have remained static.
- There are 50% fewer entrants to medicine from lower occupations classifications than entrants to higher education.

Number of entrants from backgrounds with lower occupations and annual change



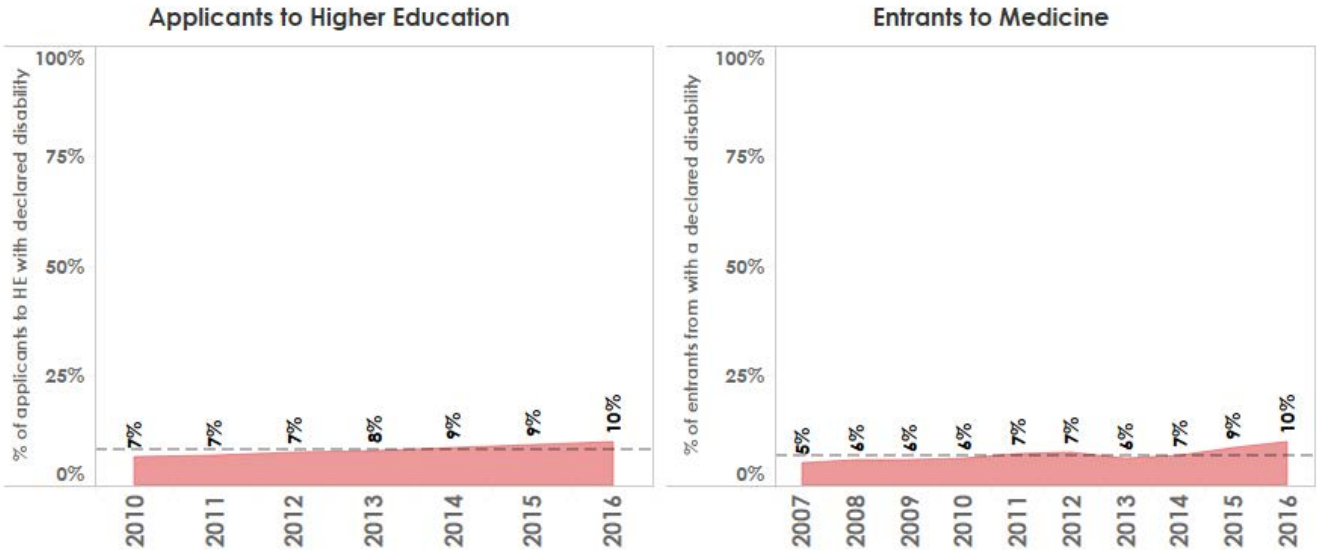
The vertical solid line represents the zero % line.

- There is little overall difference in the number of entrants to medicine from lower occupations since 2007.

Disability

Under the Equality Act 2010, a person has a disability 'if they have a physical or mental impairment, and the impairment has a substantial and long-term adverse effect on a person's ability to carry out normal daily activities'. 'Substantial' and 'long-term' is defined by the Act as 'more than minor or trivial' and are conditions that last 12 months or longer. Disability for some individuals can get better and their status can change over time.

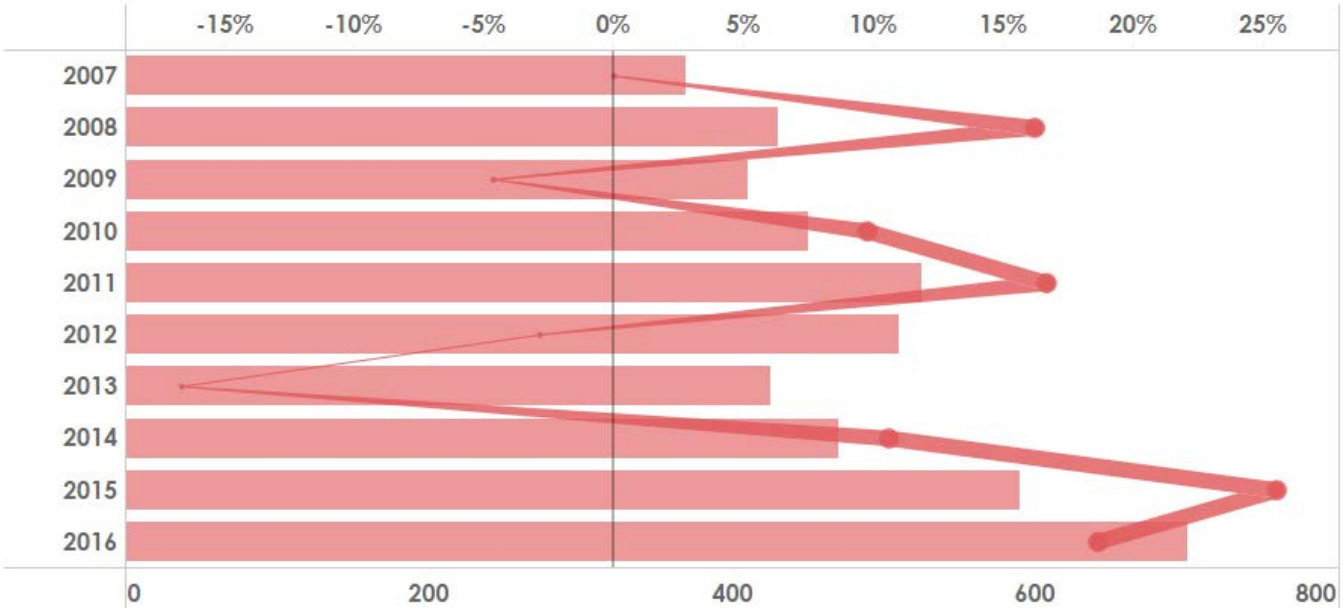
Proportion of entrants to medicine with a declared disability



The dotted line shows the average across the period.

↳ The proportion of students entering medical school who have a declared disability has been increasing. This closely mirrors the proportion of applicants to higher education with a declared disability.

Number of entrants to medicine with a declared disability and annual change



The vertical solid line represents the zero % line.
There are no comparable data for higher education applicants of entrants.

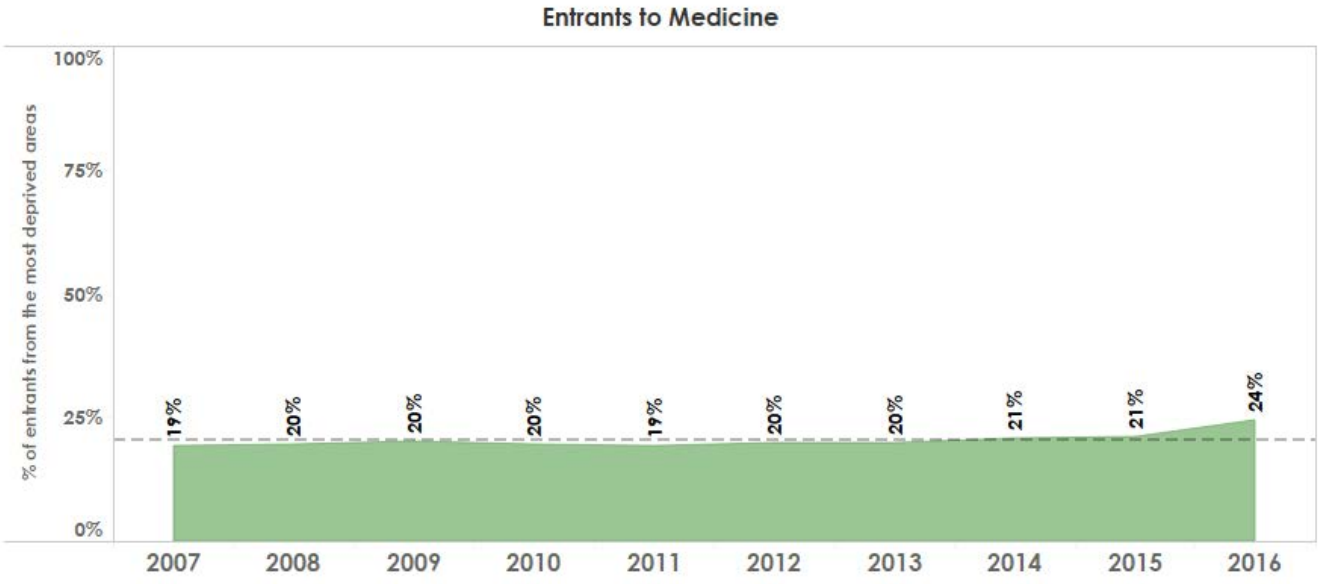
↳ The number of entrants to medicine with a disability has increased since 2013.

↳ Since the General Medical Council's publication of Gateways to the professions and the UK's Equality Act 2010, the awareness and disclosure of disability has been increasing generally.

Index of Multiple Deprivation (IMD)

The Index of Multiple Deprivation measures relative levels of deprivation in small areas. There are separate IMDs for England, Scotland, Northern Ireland and Wales. The levels of deprivation are presented in quintiles, collated for the four countries. Those students from the most deprived areas, quintile 4 and 5, are presented in the graph. There are no equivalent data on higher education applicants or entrants.

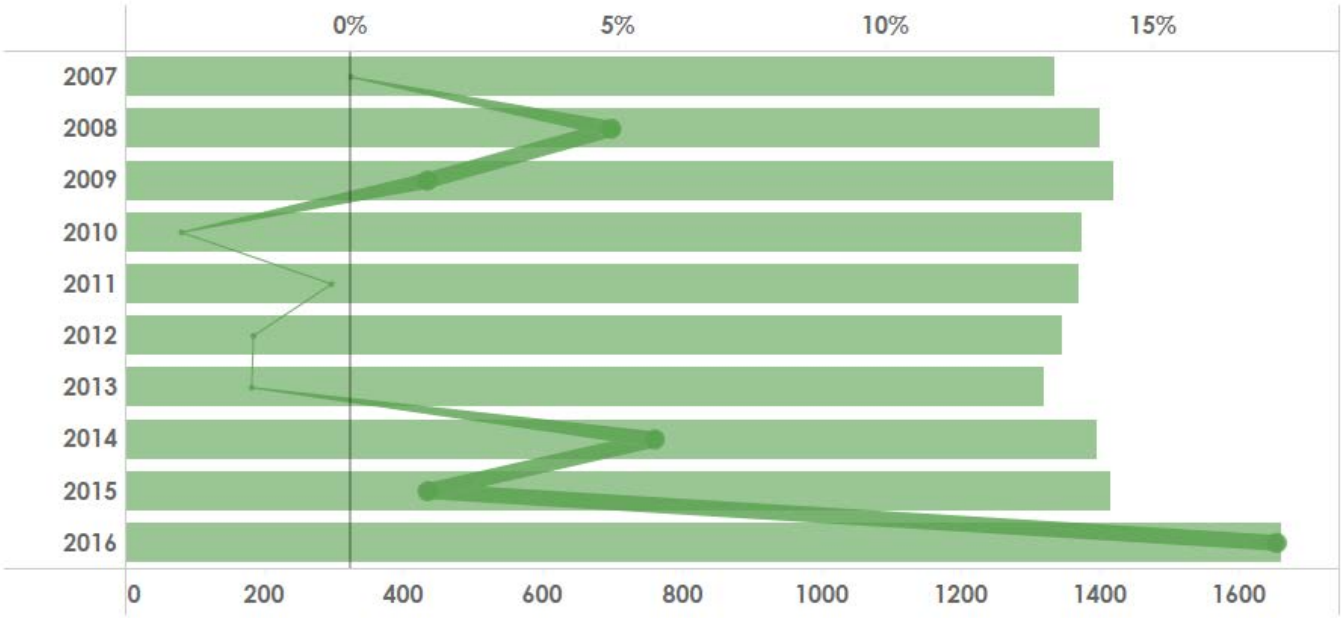
Proportion of entrants from the most deprived areas



The dotted line shows the average across the period.

↳ Entrants to medicine from the most deprived areas (quintile 4 and 5) have only shown a 5% increase in the last 10 years.

Number of entrants from the most deprived areas and annual change



The vertical solid line represents the zero % line.

↳ A notable recent increase in entrants to medicine can be seen in 2016.

Summary of national data

To summarise the data presented in this section, when comparing medical school entrants to higher education applicants and entrants:

- The same proportion of entrants to medicine are female.
- A greater proportion of entrants to medicine come from BME backgrounds.
- A smaller proportion of entrants to medicine have parents with no higher education qualifications.
- A smaller proportion of entrants to medicine come from low-participation areas.
- A smaller proportion of entrants to medicine come from state-funded schools.
- A smaller proportion of entrants to medicine come from the lower occupations.

National demographic data of entrants to medicine by country

This section further explores the demographic variables for entrants to medical school presented in the previous section, by country. It should be noted that the population characteristics of England, Scotland, Wales and Northern Ireland vary and this may impact the data presented in this section.

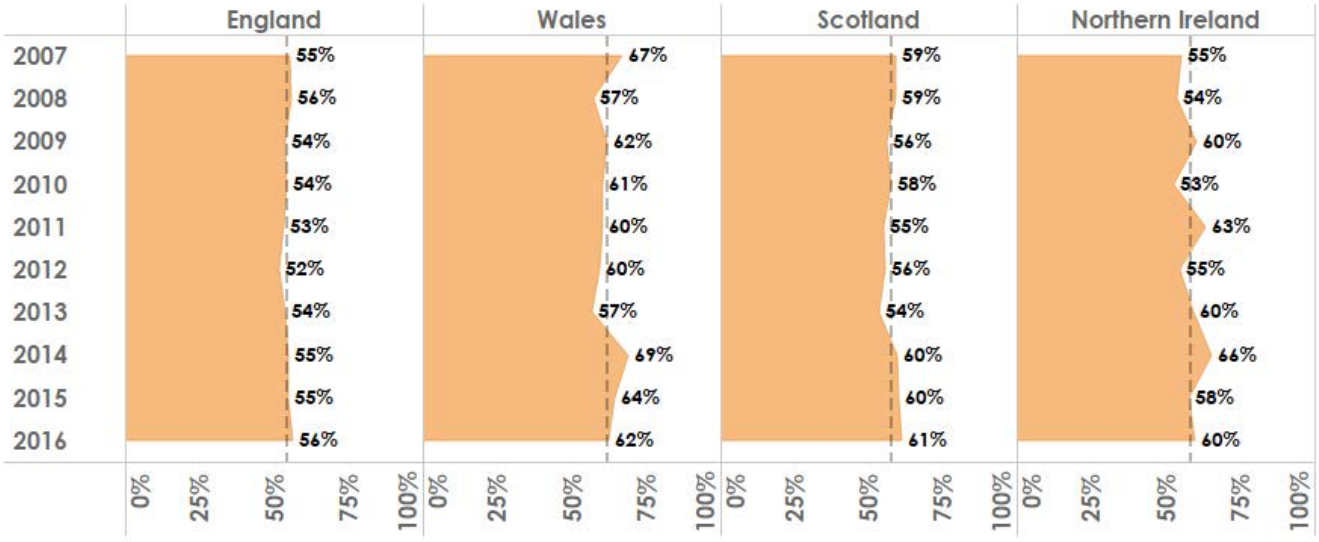
Applicants for medicine courses by country (from UCAS)

Country	2014	2015	2016	2017	2018
England	14,670	12,930	12,620	12,320	13,480
Northern Ireland	590	570	580	540	490
Scotland	1,170	1,060	1,050	1,030	1,070
Wales	710	660	570	570	580

Entrants to medicine by country

Female entrants by country

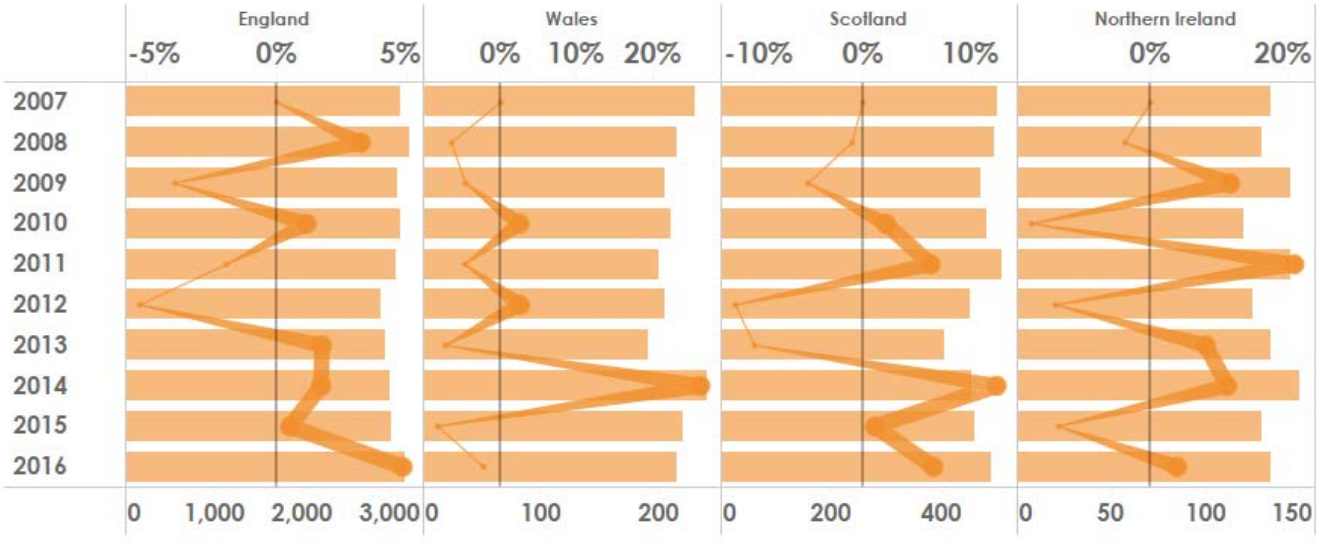
Proportion of female entrants by country



The dotted line shows the average across the period.

↳ From 2011, Wales, Scotland and Northern Ireland consistently show increased proportions of female medical students compared with England.

Number of female entrants by country and annual change



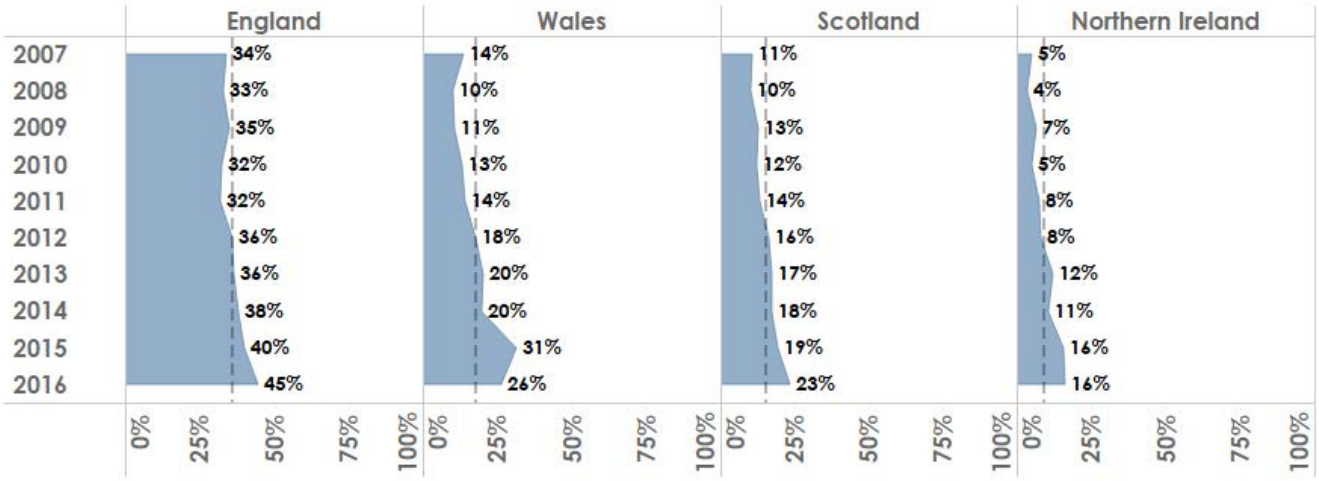
Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ Northern Ireland and Wales show the greatest fluctuations in percentage annual change. However, as these are smaller cohorts, the total number of entrants remains stable.

Ethnicity by country

Ethnicity in medicine is represented as the broad category of BME entrants. Detail that is more granular would provide a more accurate reflection of the patterns and trends of the changing ethnic profile entrants to medicine.

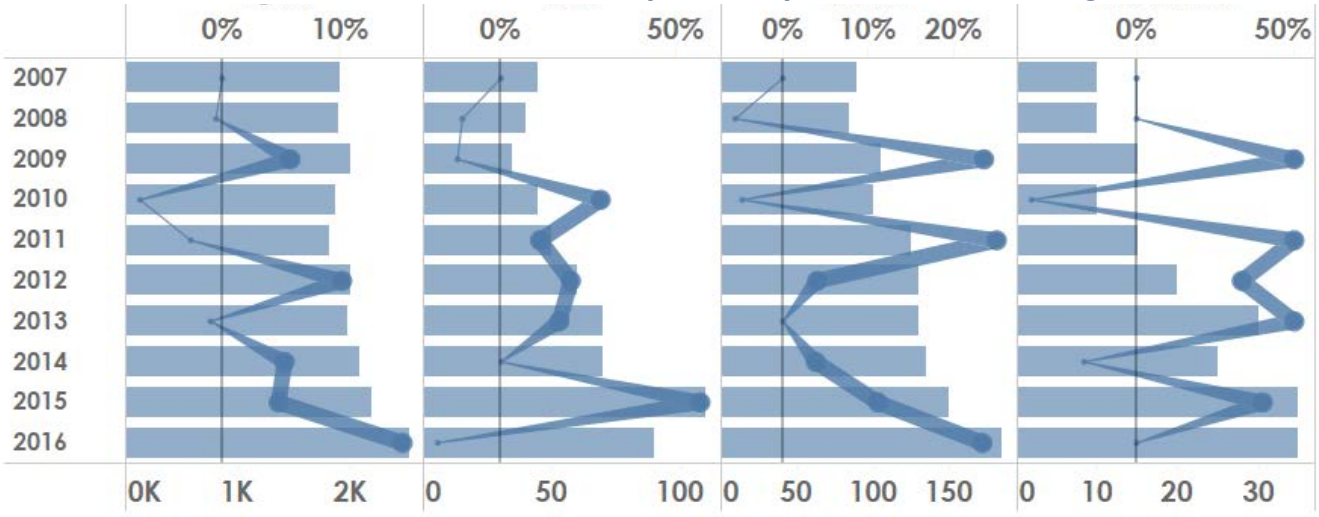
Proportion of BME entrants by country



The dotted line shows the average across the period.

↳ England has the highest overall proportion of BME students. However, it should be noted that BME populations in Wales, Scotland and Northern Ireland are significantly lower than in England

Number of BME entrants by country and annual change



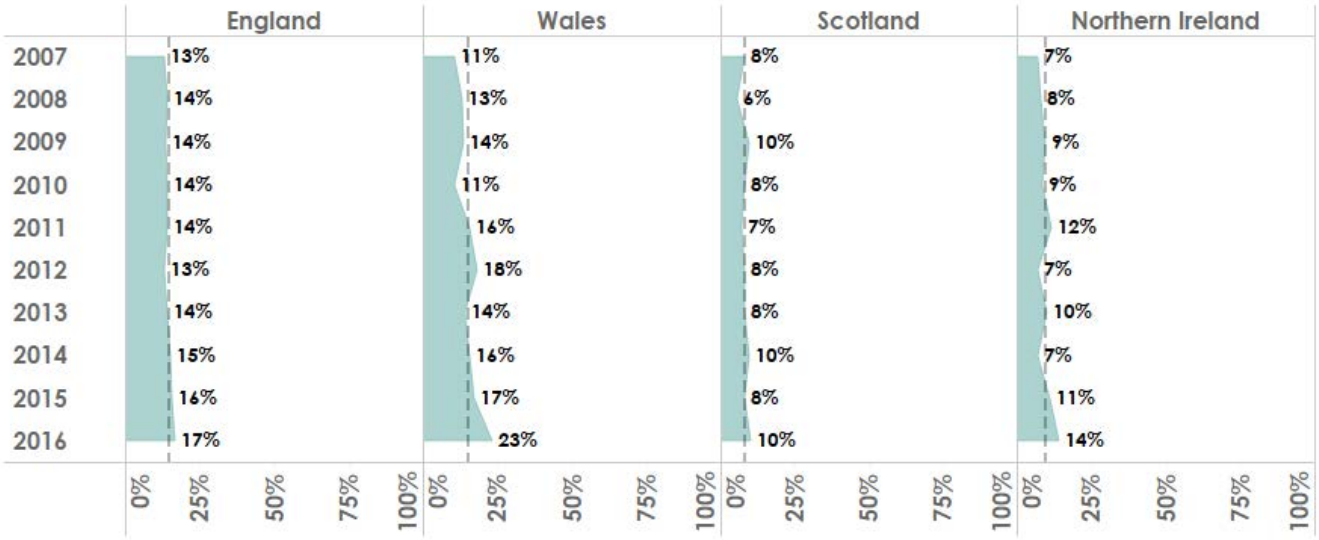
Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ There is an overall increase in BME entrants for all countries since 2007.

POLAR 3 by country

Note that differences in the Scottish context mean that POLAR is not widely used as a metric of widening participation by Scottish medical schools. However, POLAR data from Scotland has here been used for the purpose of building a UK-wide picture.

Proportion of entrants from low-participation areas (quintiles 1 and 2) by country



The dotted line shows the average across the period.

↳ Since 2007, Wales has shown the greatest increase in entrants from POLAR quintiles 1 and 2.

Number of entrants from low-participation areas (quintiles 1 and 2) by country and annual change

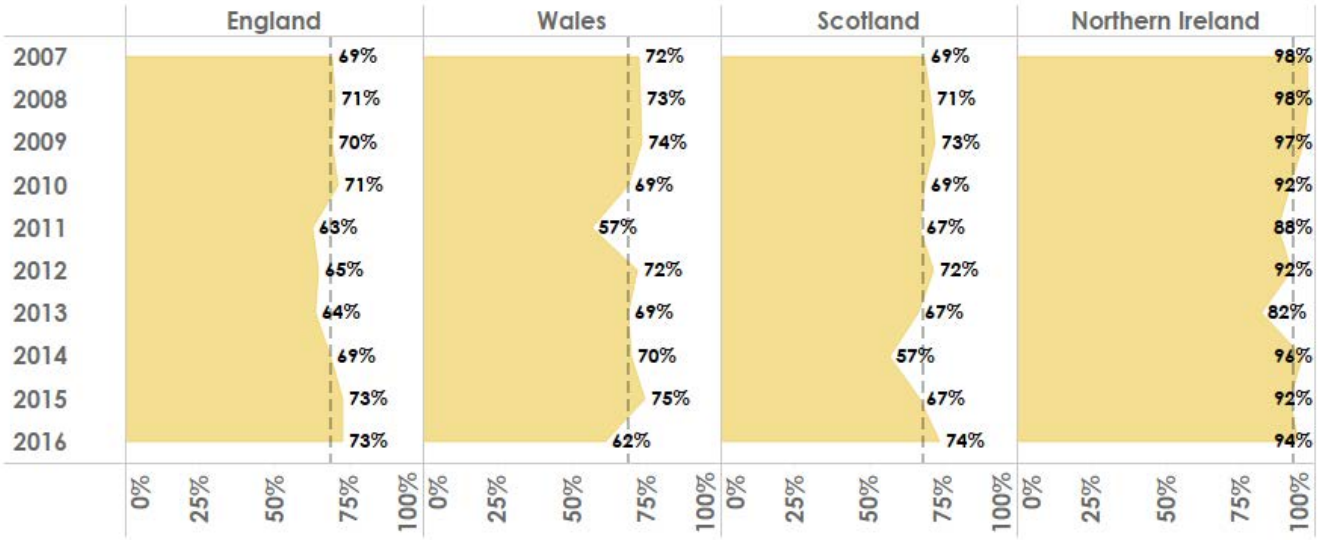
Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ Although there is a general increase in entrants from low-participation areas, the overall number is still low. This may reflect problems in using participation indicators in rural areas, which may lead to false positives or false negatives.

School type by country

Entrants to medicine who attended state school are represented in the graphs below. State schools in England and Northern Ireland include a number of grammar schools. There are no grammar schools in Scotland and Wales.

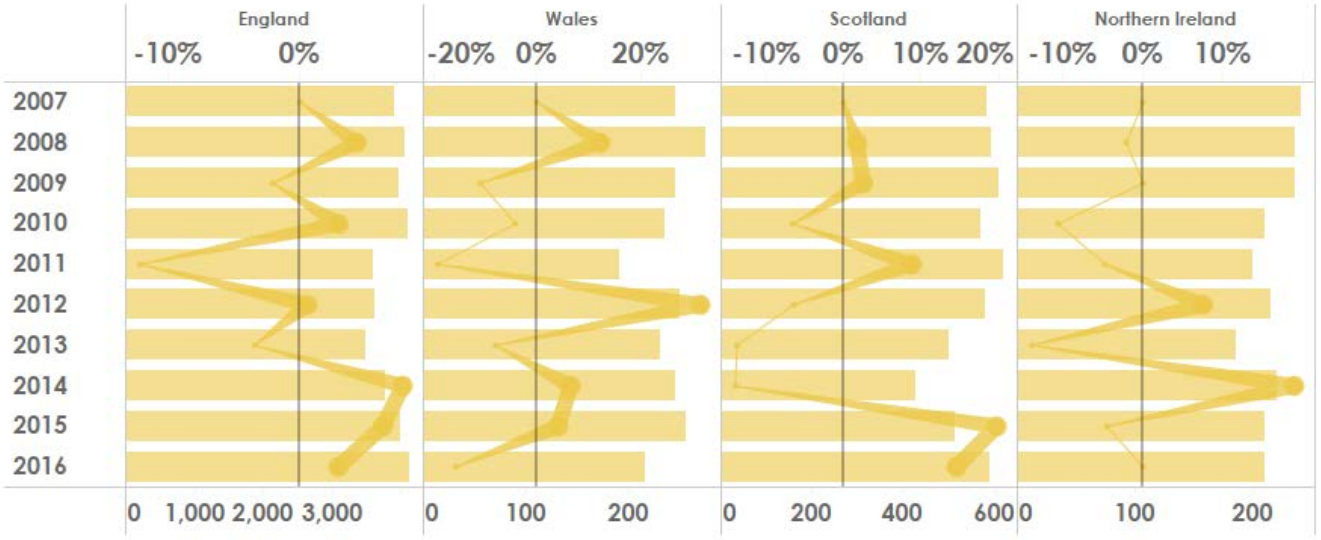
Proportion of entrants who attended state school by country



The dotted line shows the average across the period.

↳ There are very few independent schools in Northern Ireland. This is reflected by the high number of entrants from state schools.

Number of entrants who attended state school by country and annual change

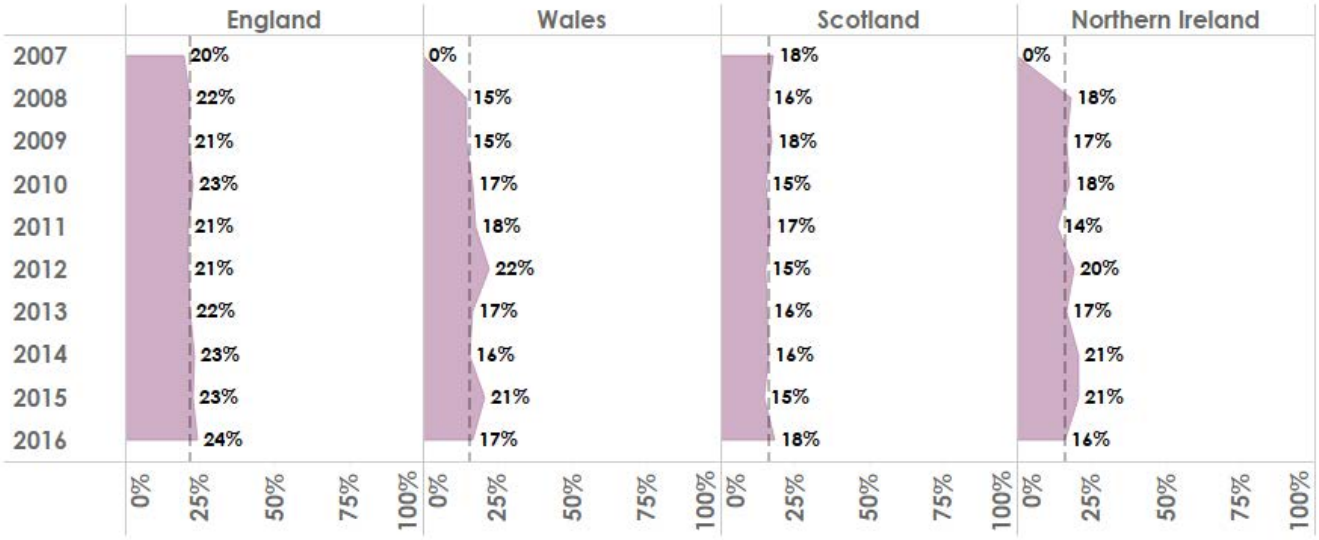


Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ There is little change in the numbers of entrants to medicine from state schools. Students from independent schools remain over-represented in medicine.

Parental education by country

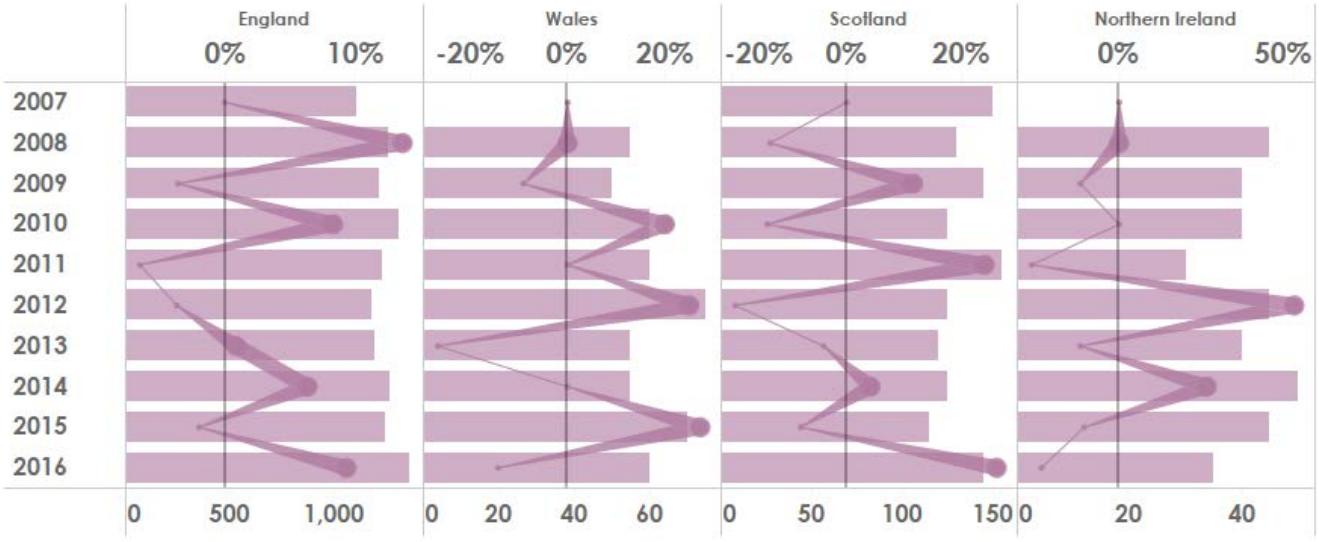
Proportion of entrants whose parents do not have a higher education qualification by country



The dotted line shows the average across the period.
Parental education data not recorded for Wales or Northern Ireland in 2007.

↳ In all countries, there has been very little change in the percentage of medical school entrants whose parents who do not have an higher education qualification.

Number of entrants whose parents do not have a higher education qualification by country and annual change



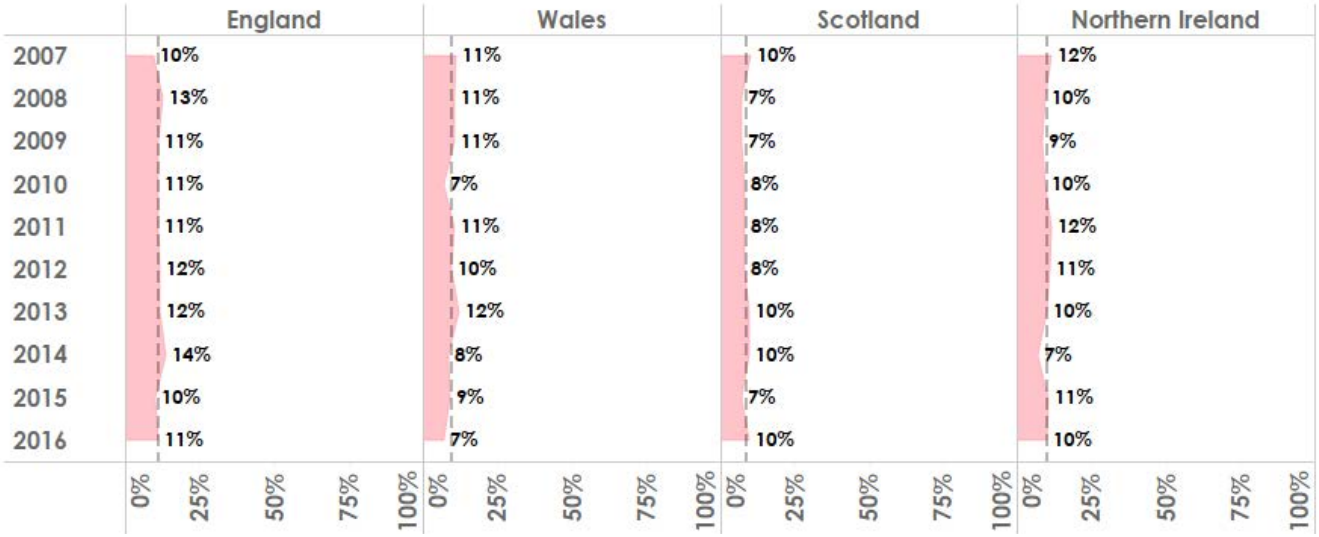
Note the differing scales for the total number of entrants at the bottom of the annual change graphs.
Parental education data not recorded for Wales or Northern Ireland in 2007.

↳ The number of entrants to medicine whose parents do not have an higher education qualification remains low across all countries compared to entrants to higher education.

Socioeconomic classification by country

The number of entrants coming the lower occupations (or lower SECs), defined as those in lower supervisory and technical occupations, semi-routine occupations, routine occupations and those who have never worked and long-term unemployed, are represented below.

Proportion of entrants from backgrounds with lower occupations by country



The dotted line shows the average across the period.

↳ In all countries, there has been very little change in the percentage of entrants to medical school coming from low SEC backgrounds.

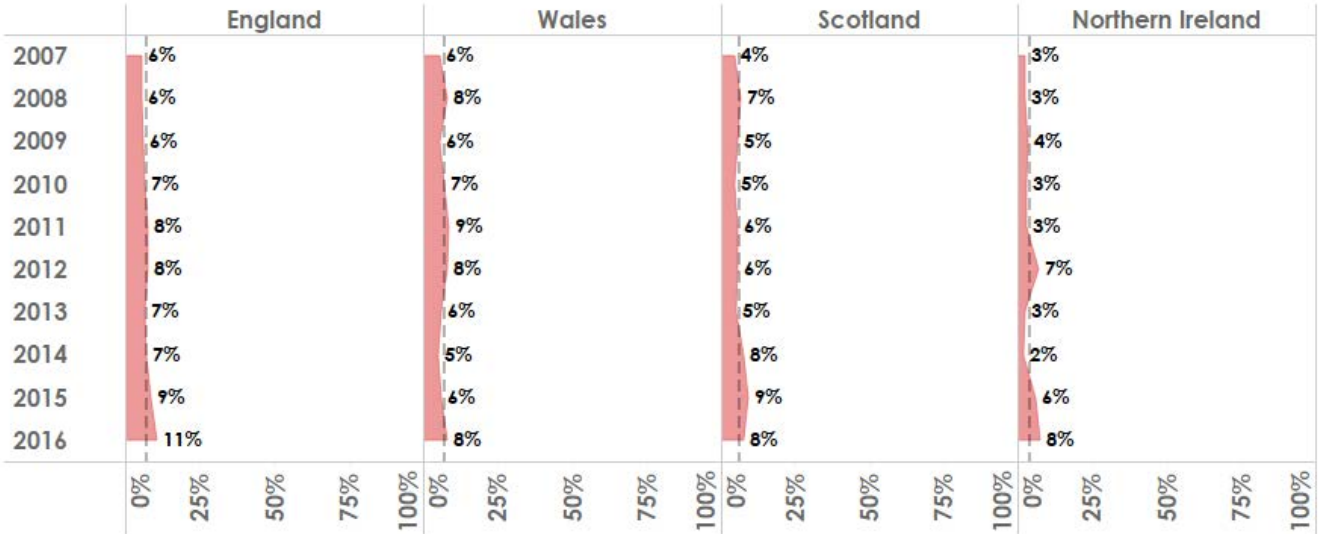
Number of entrants from backgrounds with lower occupations by country and annual change

Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ The number of entrants to medicine who have low SEC backgrounds remains low across all countries compared to all entrants to higher education.

Disability by country

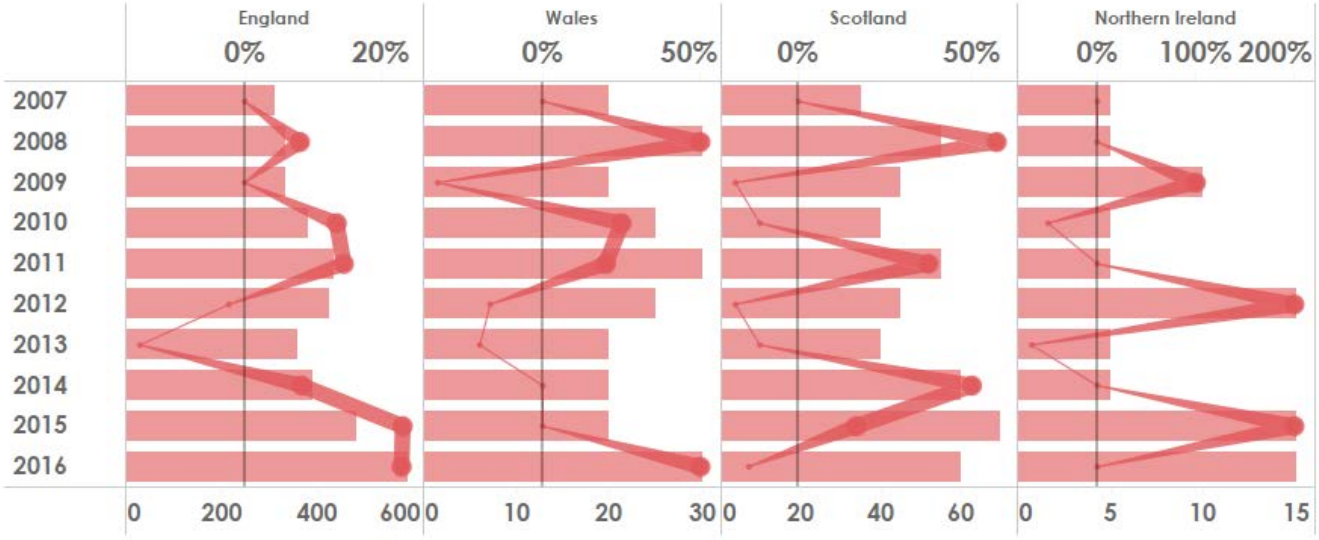
Proportion of entrants with a declared disability by country



The dotted line shows the average across the period.

↳ All countries are showing a slight increase in the number of entrants with a declared disability.

Number of entrants with a declared disability by country and annual change



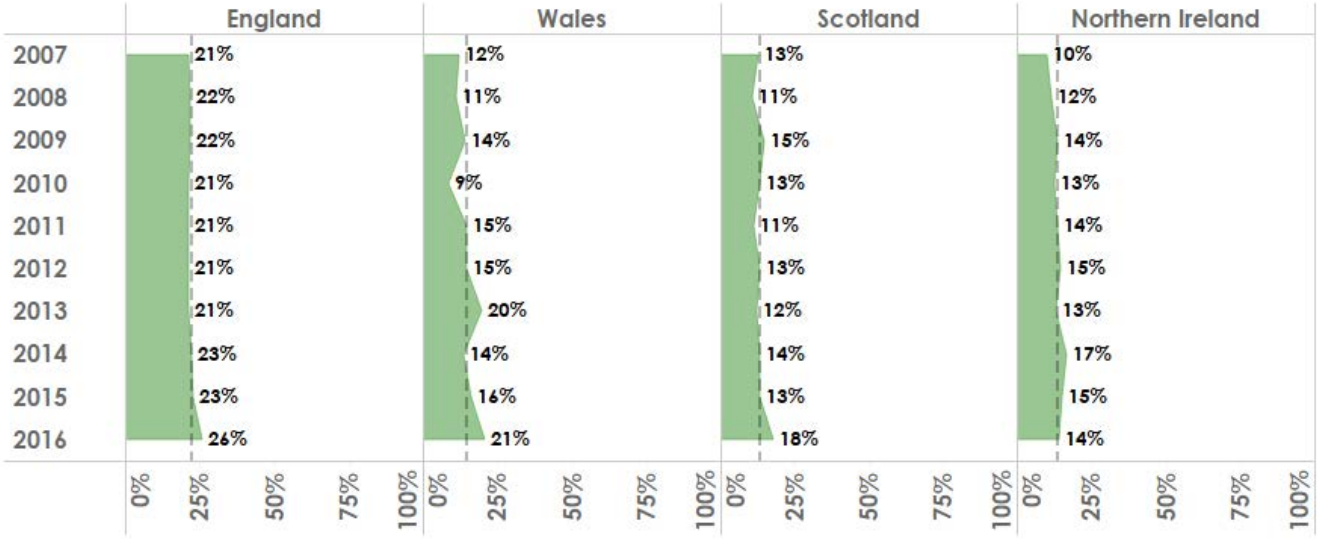
Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ There are noticeable fluctuations in the annual change, although the overall number of students with a declared disability remains low.

Index of Multiple Deprivation (IMD) by country

Separate indices are used for England (IMD), Wales (WIMD), Scotland (SIMD) and Northern Ireland (NIMD).

Proportion of entrants from the most deprived areas by country



The dotted line shows the average across the period.

↳ England shows the largest proportion of entrants from IMD quintiles 4 and 5. It should be noted that IMD as a measure varies between countries, making direct comparisons difficult.

Number of of entrants from the most deprived areas by country and annual change

Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ An increase in entrants from the most deprived areas can be seen in all countries.

Summary of regional data

To summarise the data presented in this section, for medical school entrants from England Northern Ireland, Scotland and Wales:

- It is not always easy or appropriate to draw direct comparisons of data due to differing populations and measures used.
- Overall we are seeing some regional increases in entrants from BME backgrounds, low-participation areas and deprived areas.
- Little regional change is seen for entrants whose parents have no higher education qualifications, those from state-funded schools and from low SEC families.

National demographic data of entrants to medicine by course type

There are four main course types offered by medical schools.

1. **Standard Entry Medicine**
   This is usually five years long, but in some institutions it is six.

2. **Graduate Entry Medicine**
   This is open to application from those who already have a bachelor's degree. Many universities accept a degree in any subject, but some require the previous degree to be science- or health-related. It is a four-year accelerated course in most cases, but in some universities it is a five-year course.

3. **Medicine with a Preliminary Year**
   This course takes the form of a five-year Standard Entry Medicine with an additional year at the start, making a six-year course. This course is designed for those who achieved highly at A level, or equivalent, but who did not take the required science subjects. This extra year gives students the necessary science training to catch up.

4. **Medicine with a Gateway Year**
   These medical degrees are designed for those who are of high ability but who may be coming from situations where they have had barriers to their learning. The courses can take this into account in different ways, for instance by using adjusted criteria to change the entry requirements for applicants from low-participation areas. Often these are six-year courses, with the first year being a foundation year.

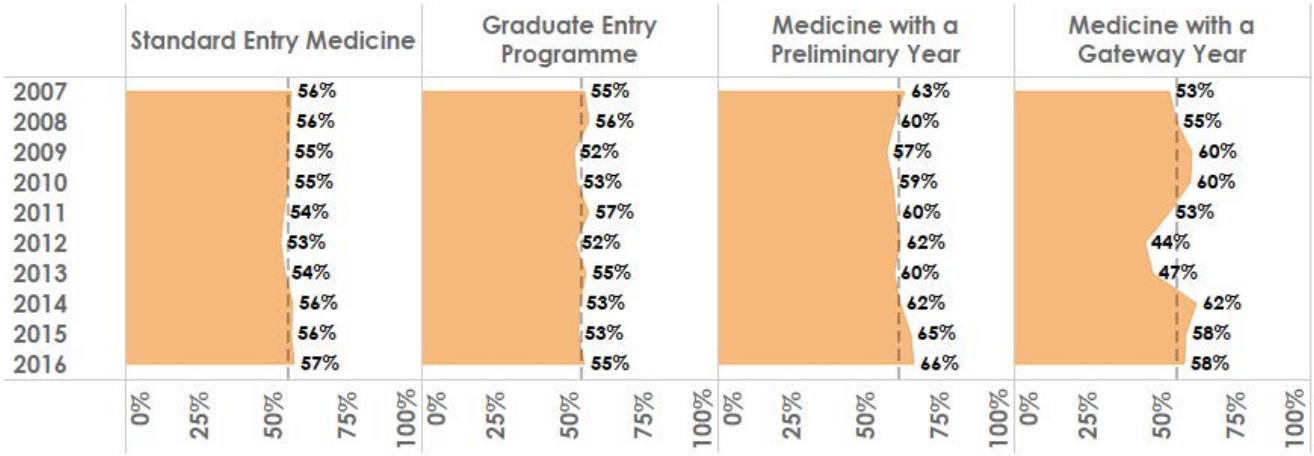
The number of entrants to medical school for each course type is displayed below.

Please note the decrease in applicants to Medicine with a Preliminary Year and corresponding increase in applicants to Medicine with a Gateway Year. This is largely due to the change in coding status of the programme at Bradford from Medicine with a Preliminary Year to Medicine with a Gateway Year.

Entrants to medicine by course type

Female entrants by course type

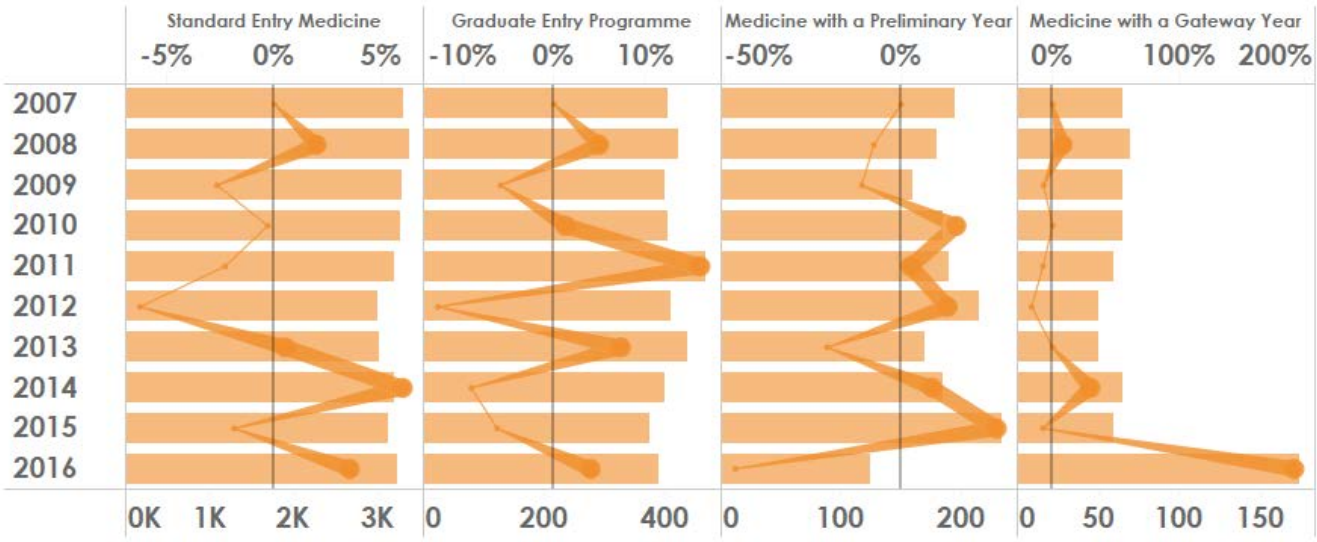
Proportion of female entrants by course type



The dotted line shows the average across the period.

↳ Gender representation across the courses is similar with gateway programmes showing the greatest variation.

Number of female entrants by course type and annual change



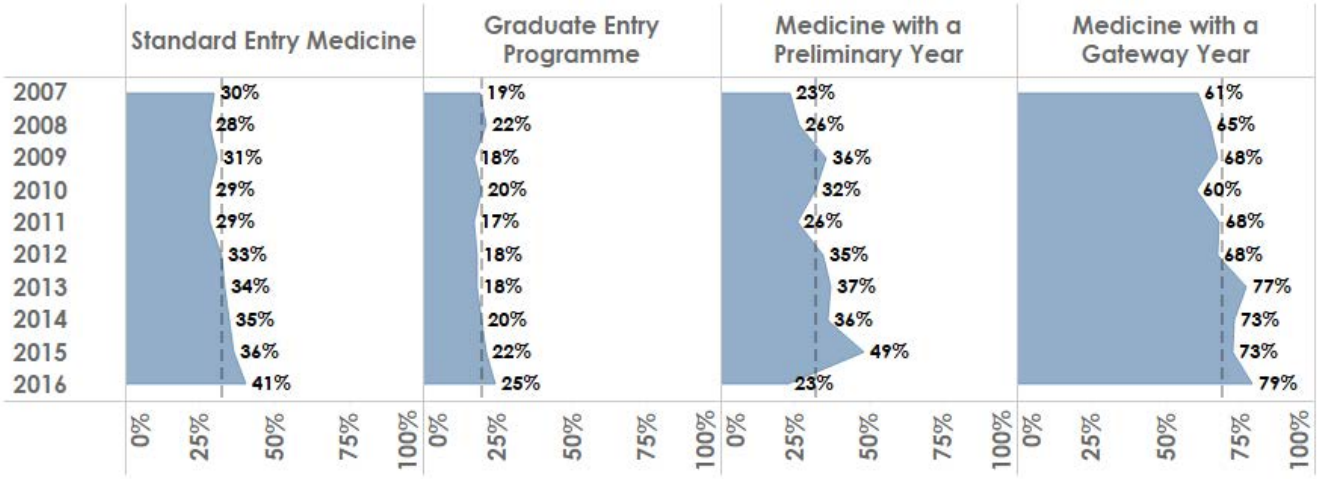
Please note the differing scales for the total number of entrants at the bottom of the annual change graphs

↳ Although the proportion of females across all courses remains steady, there was a big increase in 2016 for the gateway course.

Ethnicity by course type

Ethnicity in medicine is represented as the broad category of BME entrants. Detail that is more granular would provide a more accurate reflection of the patterns and trends of the changing ethnic profile entrants to medicine across the course types.

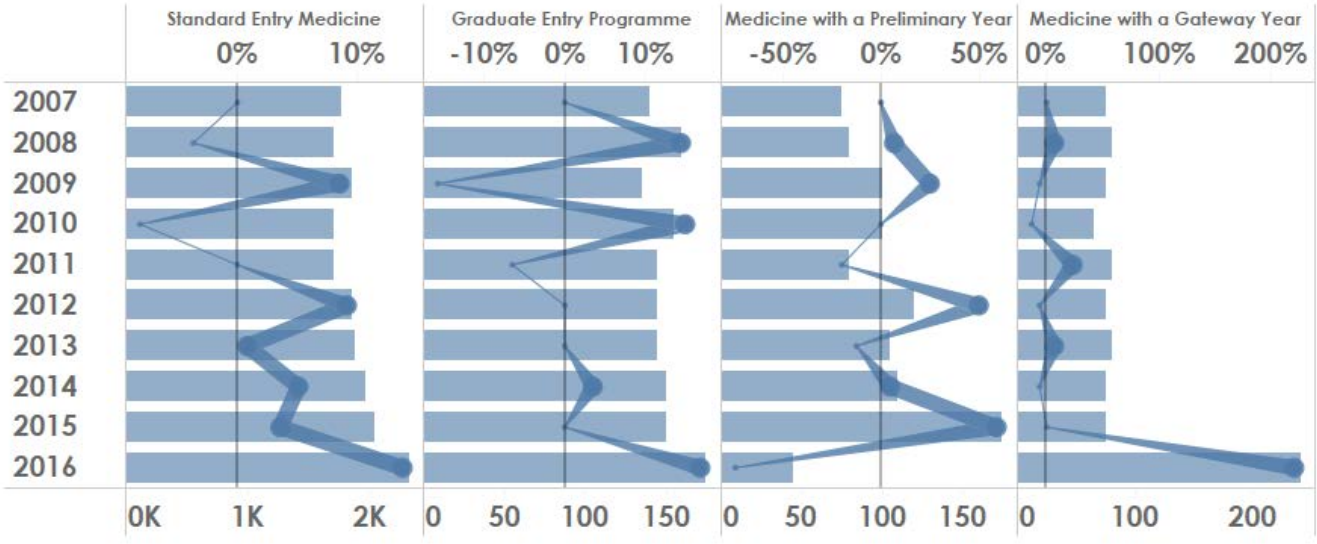
Proportion of BME entrants by course type



The dotted line shows the average across the period.

↳ A much higher proportion of gateway students are from BME backgrounds, with the lowest proportion seen in Graduate Entry Medicine.

Number of BME entrants by course type and annual change

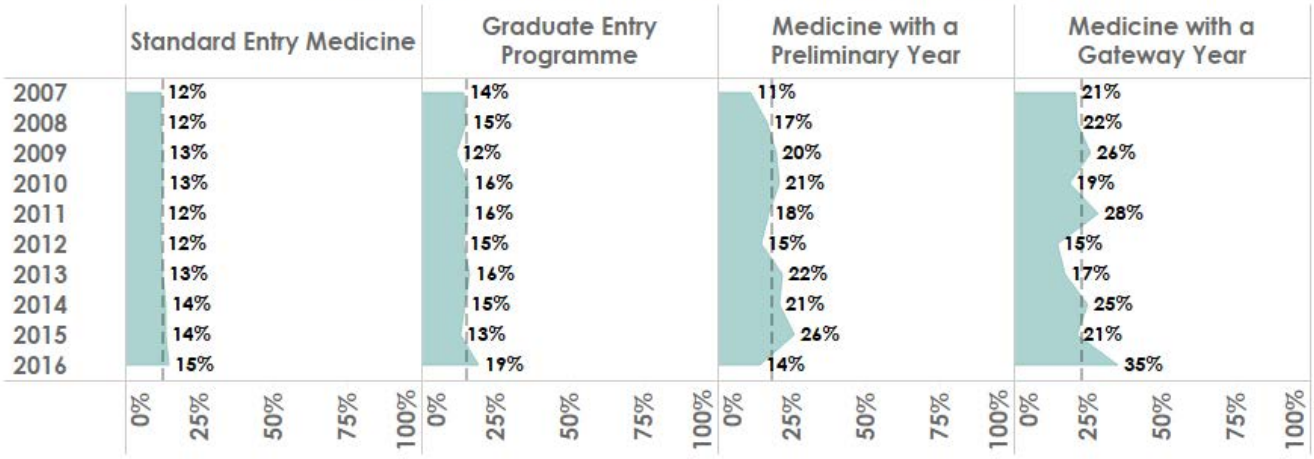


Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ BME entrants to medicine have grown steadily over time, across all course types.

POLAR 3 by course type

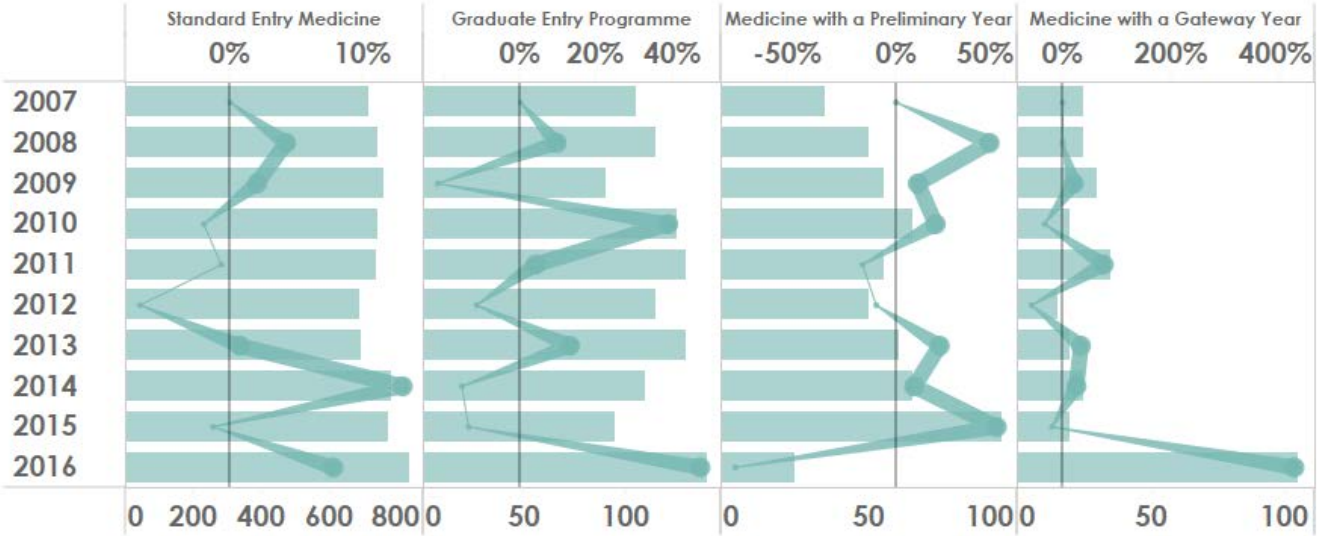
Proportion of entrants from low-participation areas (quintiles 1 and 2) by course type



The dotted line shows the average across the period.

↳ Entrants from low participation areas remain low across all courses.

Number of entrants from low-participation areas (quintiles 1 and 2) by course type and annual change

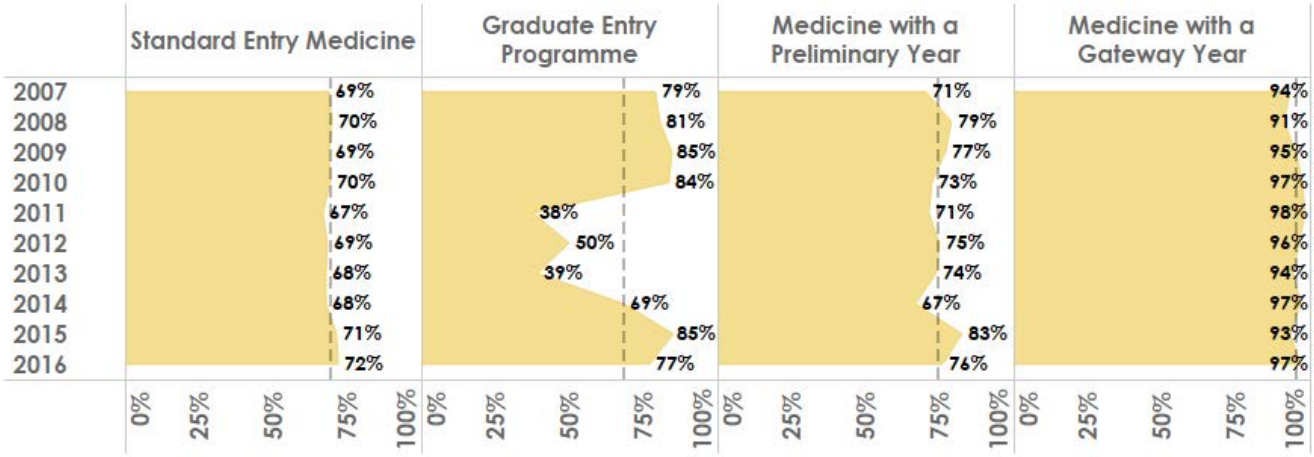


Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ Despite some annual changes there has been little increase in entrants from low-participation areas except on gateway courses.

School type by course type

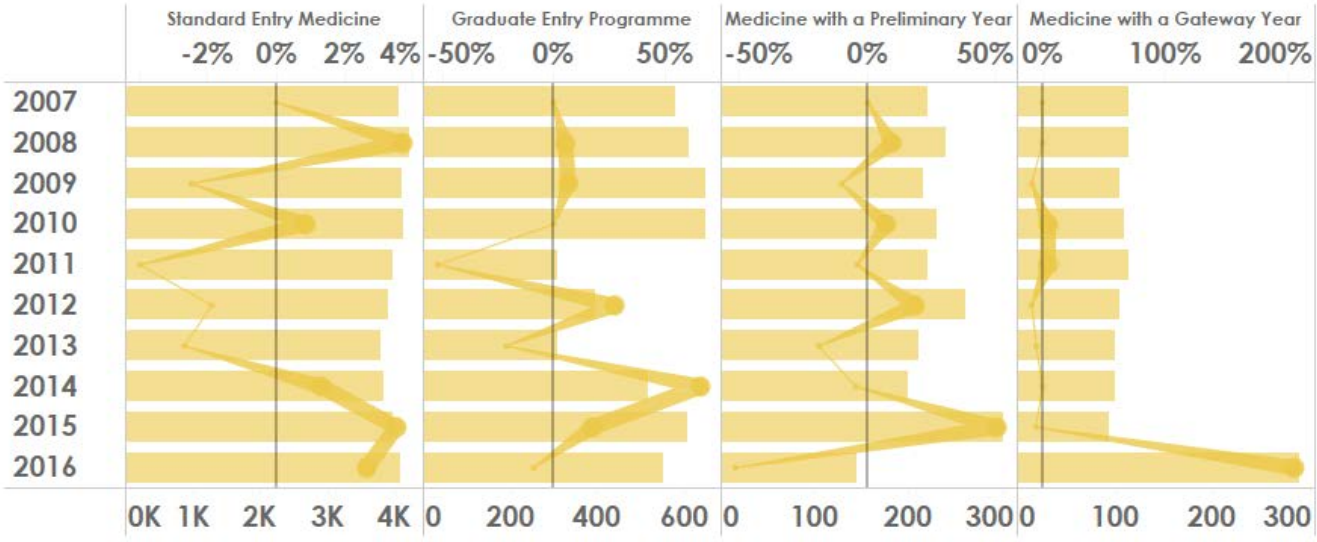
Proportion of entrants from state-funded schools by course type



The dotted line shows the average across the period.

- Almost all the gateway entrants are from state-funded schools.
- Entrants to graduate entry programme show the greatest variation. This could be the result of the difficulties of accurately recording previous education for graduates applying through UCAS.

Number of entrants from from state-funded schools by course type and annual change

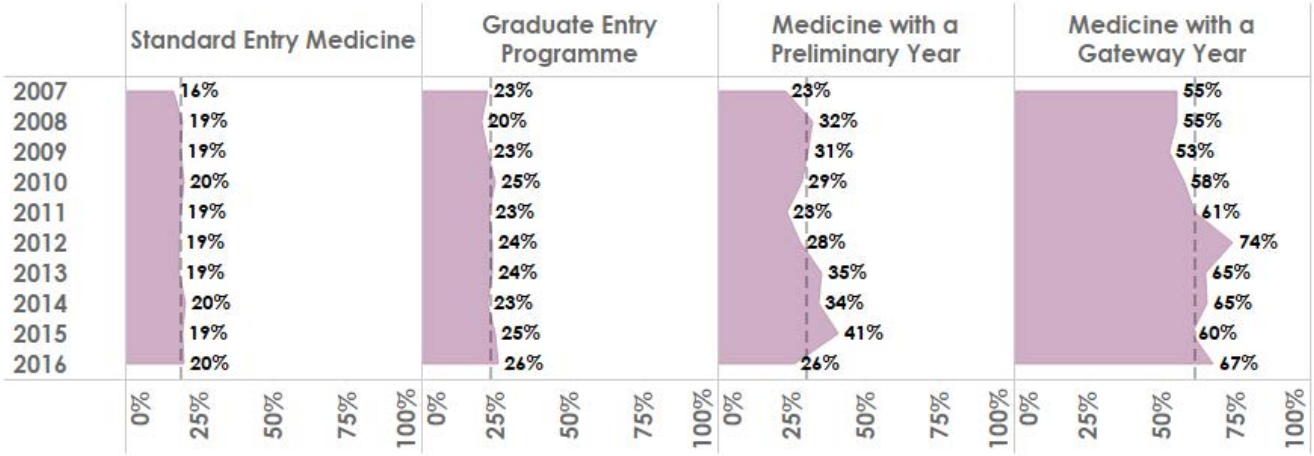


Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

- Gateway programmes show the greatest increase in the proportion of entrants from state schools.

Parental education by course type

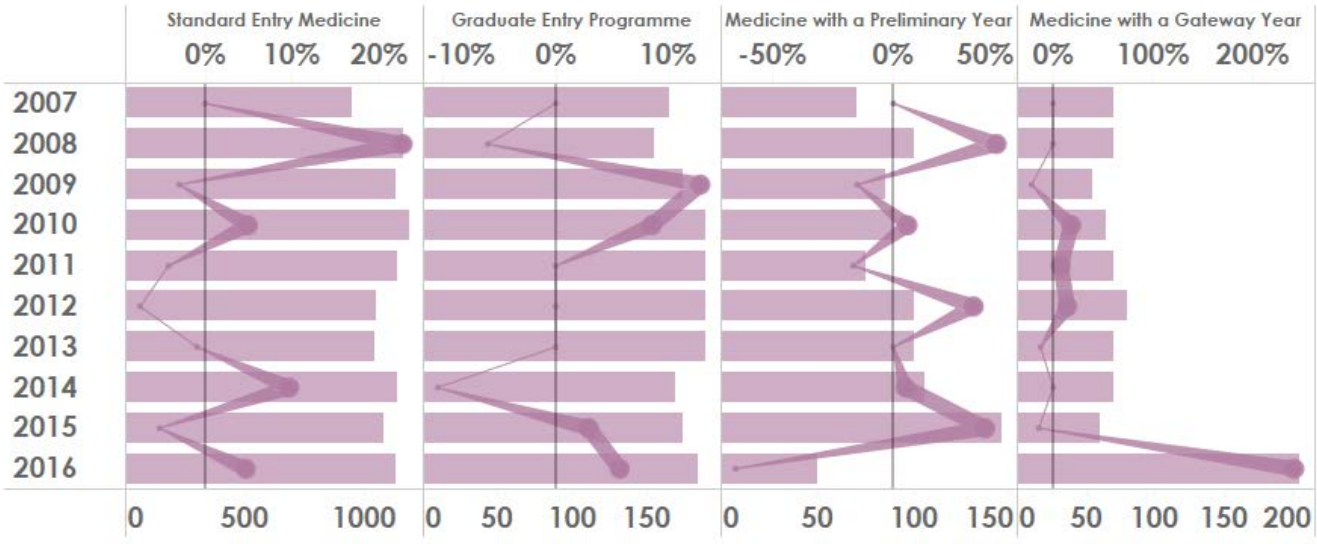
Proportion of entrants whose parent do not have a higher education qualification by course type



The dotted line shows the average across the period.

↳ A higher proportion of gateway students have parents who do not hold a higher education qualification.

Number of entrants whose parent do not have a higher education qualification by course type and annual change



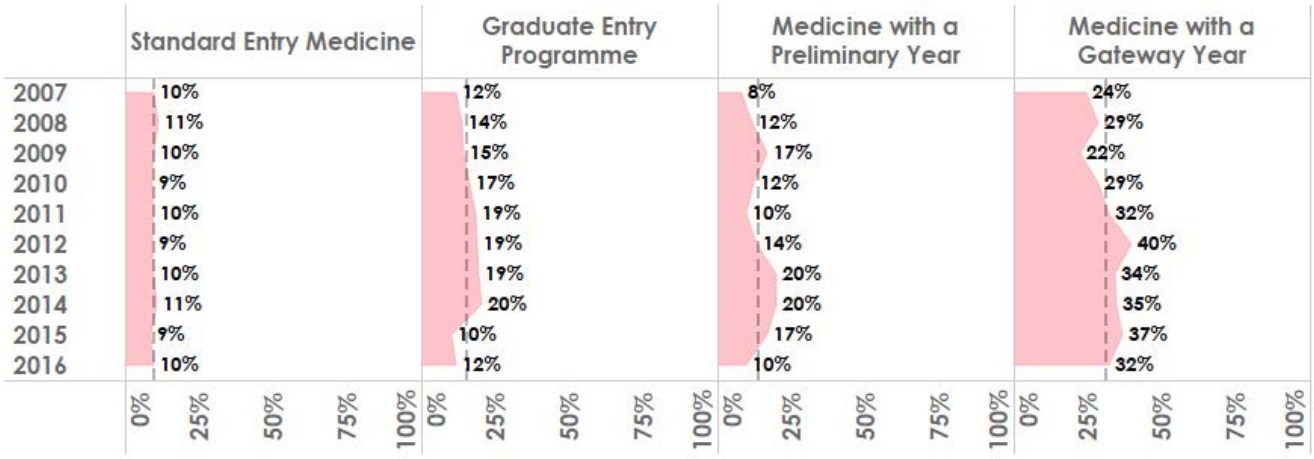
Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ Gateway programmes show the greatest increase in the proportion of entrants whose parents do not hold a higher education qualification.

Socioeconomic classification by course type

The number of entrants coming the lower occupations (or SECs), defined as those in lower supervisory and technical occupations, semi-routine occupations, routine occupations and those who have never worked and long-term unemployed, are represented below according to course type.

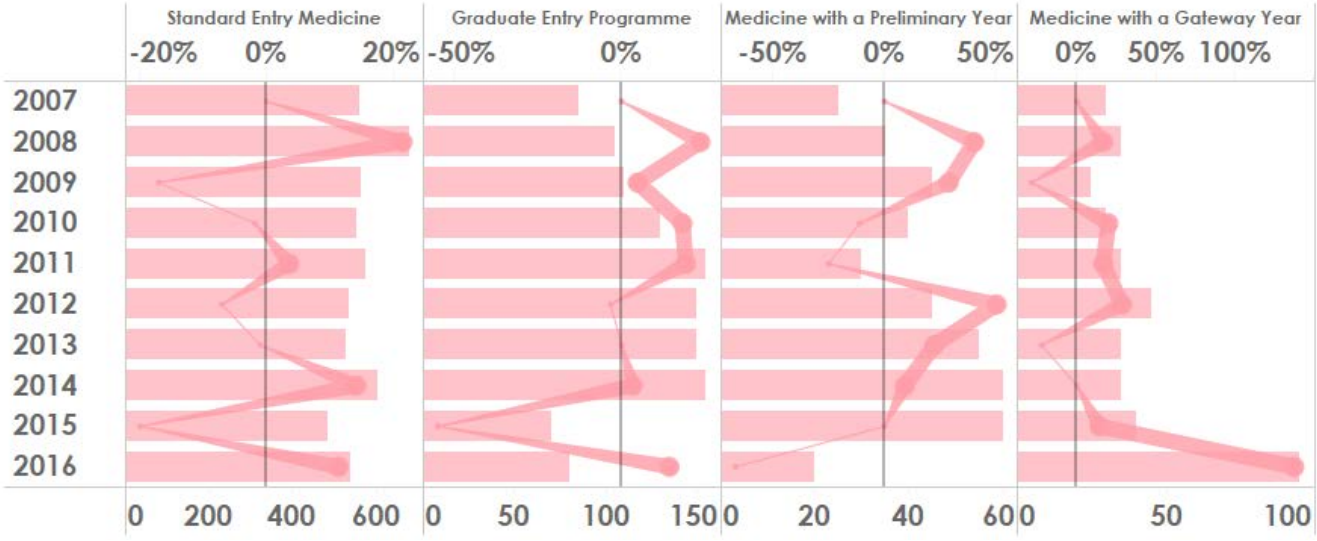
Proportion of entrants from backgrounds with lower occupations by course type



The dotted line shows the average across the period.

↳ A higher proportion of gateway students come from backgrounds with lower occupations.

Number of entrants from backgrounds with lower occupations by course type and annual change

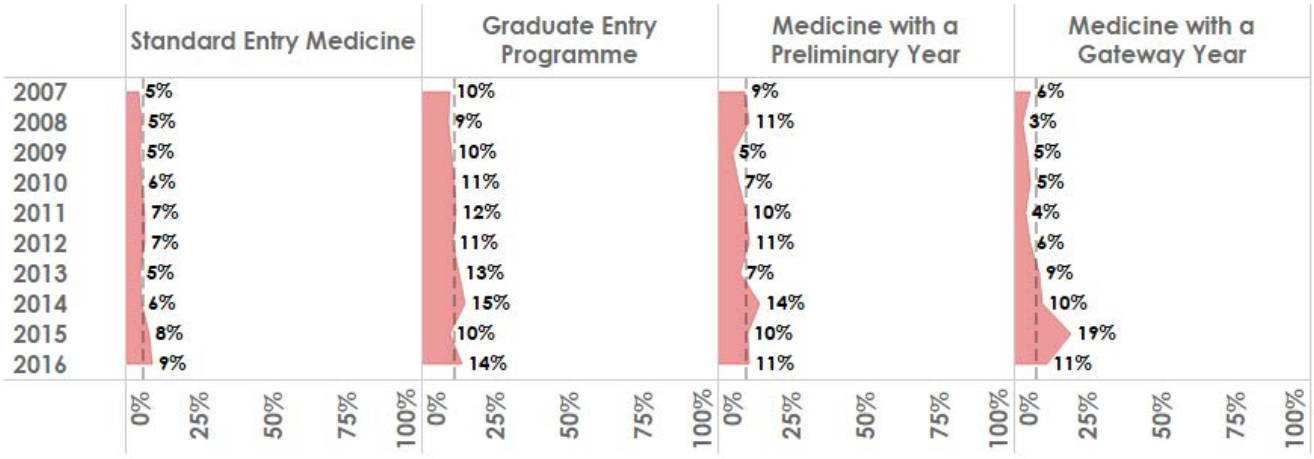


Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ Gateway programmes show the greatest increase in the proportion of entrants from backgrounds with lower occupations.

Disability by course type

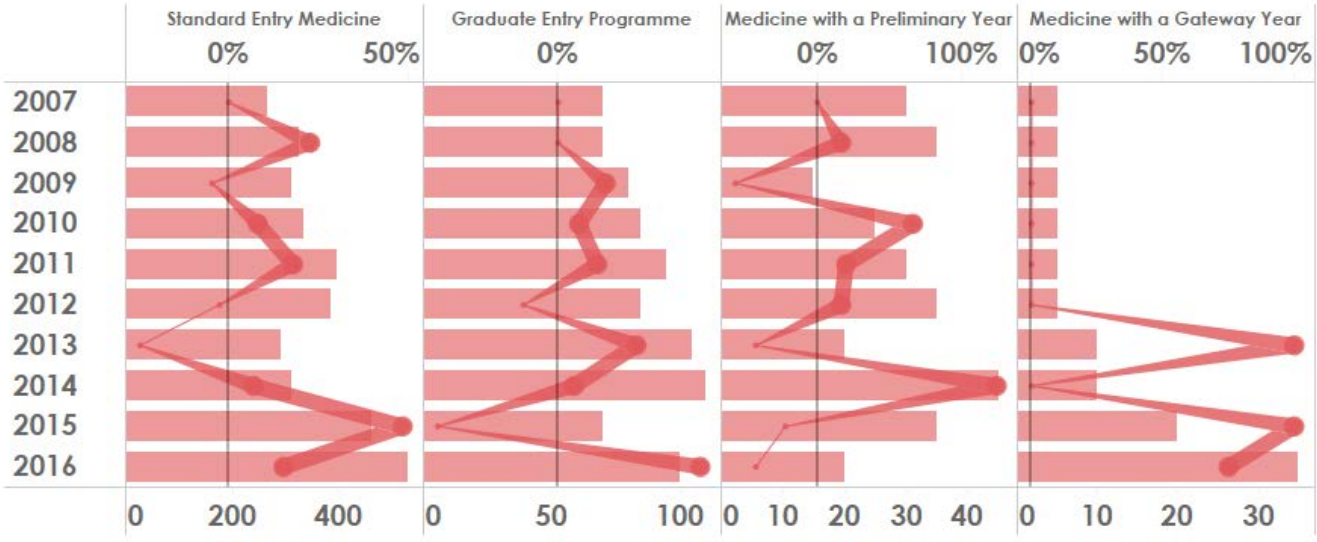
Proportion of entrants with a declared disability by course type



The dotted line shows the average across the period.

↳ There is a greater proportion of students with a declared disability on graduate entry programmes with small increases seen for the other three course types

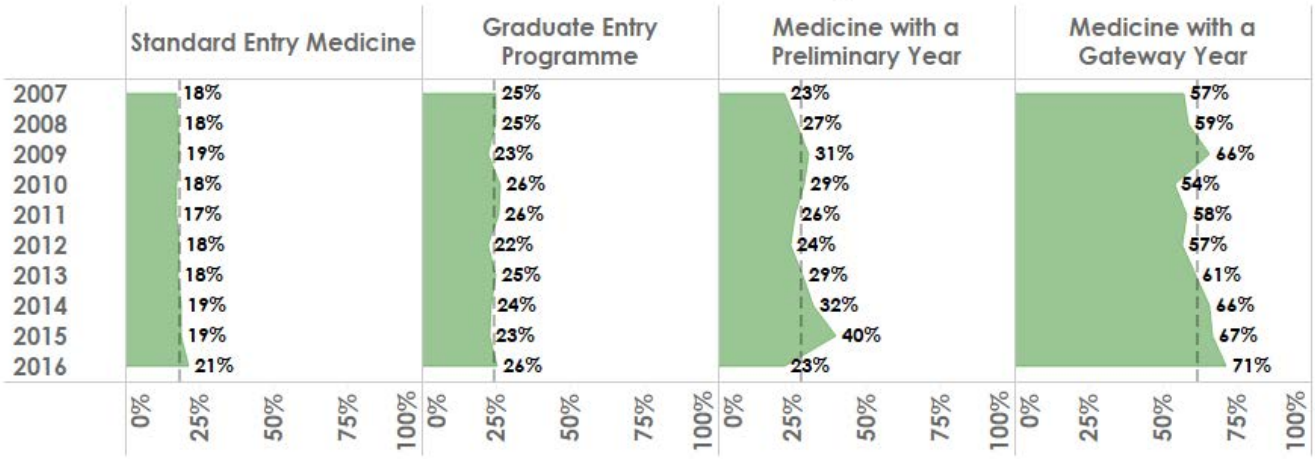
Number of entrants with a declared disability by course type and annual change



Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

Index of Multiple Deprivation (IMD) by course type

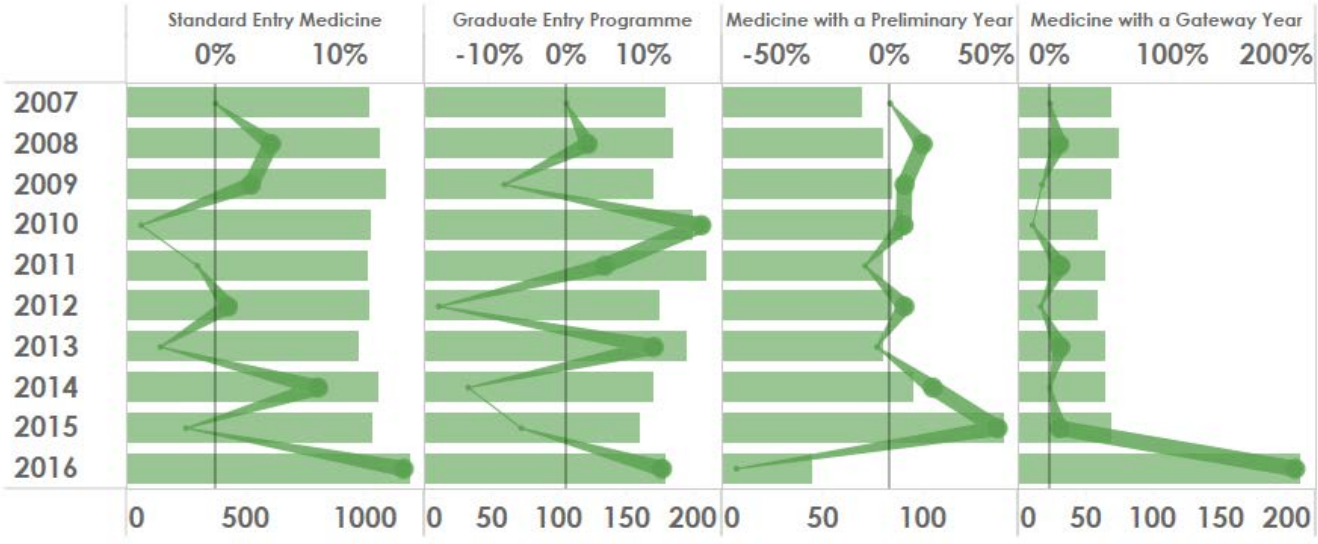
Proportion of entrants from the most deprived areas by course type



The dotted line shows the average across the period.

↳ Gateway courses have the greatest proportion of entrants from the most deprived areas.

Number of entrants from the most deprived areas by course type and annual change



Note the differing scales for the total number of entrants at the bottom of the annual change graphs.

↳ Gateway programmes show the greatest increase in the proportion of entrants from the most deprived areas.

Summary of course type data

To summarise the data presented in this section, when comparing medical school course types, the entrants to gateway programmes show noticeably greater proportions of entrants:

- From BME backgrounds
- With parents who have no higher education qualifications
- From deprived areas
- From state schools
- From low SEC backgrounds

There is a significant increase in 2016 for the gateway course type. This could again be due to better course data mapping as well as an increase in the number of gateway courses available.

The lack of discrimination seen in the POLAR data between course types does raise questions about its suitability as a measure for widening participation.

Review of findings

The national demographic data show very good progress for equality of the sexes and for increasing ethnic diversity. While some ethnicities are now over-represented it is important to note that some are still under-represented. The number of entrants with a declared disability is increasing nationally, by country and by course type, which is very positive. It is clear that more progress is needed for other demographic variables associated with social and educational disadvantage. Despite modest changes in some variables there is little significant improvement seen either nationally or by country.

"it is clear that gateway courses are achieving their aims of increasing entry to students from backgrounds traditionally under-represented in medicine"

From this report it is clear that gateway courses are achieving their aims of increasing entry to students from backgrounds traditionally under-represented in medicine. Most gateway programmes and programmes with a preliminary year use contextual admissions to identify students' low socioeconomic backgrounds, and this is clearly working, with nearly all demographic variables presented. With a continued increase in the number of gateway programmes, from two in 2002 to seven in 2017 and increasing further to seventeen in 2019, the representation for students from low socioeconomic backgrounds is set to increase further

It is important for the GMC to report postgraduate outcomes by course type too, allowing ongoing evaluation of the course outcomes.

The achievement of gateway programmes is commendable but the numbers of students on these programmes remains small, which means the impact on the national data is also small. Medical schools should be encouraged to increase the use of contextual admissions across all programmes, widening access to greater numbers of students.

Data monitoring activities

The Selection Alliance set up the Data Monitoring Group to explore the data available for monitoring widening participation in medicine. The group is working with external agencies to increase the available data and the accuracy of those data. Medical schools currently have access to demographic data by medical school and course type. This year a pilot report of comparable medical school-level data will help to increase the relevant information available to individual medical schools.

Research into widening participation

Members of the Data Monitoring Group have been taking advantage of the UKMED database to perform research into widening participation. A number of research projects are due to be completed soon:

- **How the professional outcomes of medical graduates from gateway courses compare to graduates from standard entry medicine courses?**

  The project explores how professional outcomes of medical graduates from gateway courses compare to graduates from Standard Entry Medicine courses. The postgraduate outcomes of those on a six-year medicine with a gateway courses will be compared to those on the five-year standard entry courses. UKMED holds data for the three medical schools that offer the two courses. By using the postgraduate data available in UKMED, outcomes will be measured in terms of progression through training as captured by the Annual Review of Competency Progression (an annual review of training progress carried out by the Local Education Training Boards and deaneries), performance in royal college medical exams, and the specialty training programmes applied to and offered after the Foundation Programme.

- **Development of a UKMED multidimensional measure of widening access status**

  An Index of Widening Participation Status derived from weighted scores on multiple types of contextual indicator of disadvantage identified students from lower socioeconomic class backgrounds with a high level of accuracy

- **How do the undergraduate outcomes of students from gateway courses compare to those from Standard Entry Medicine courses at the same medical schools?**

  There is an increasing number of gateway programmes being offered to widen participation at medical schools across the UK. Gateway programmes provide entry to medical schools, which is not normally accessible without the highest A level grades, and aim to support students realise their academic potential. However, there is little evidence demonstrating performance and improvement of performance of students on gateway programmes and whether they do support students achieve their academic potential. This study presents data comparing the performance on entry to and exit from medical school of students on standard entry and established gateway programmes at three UK medical schools.

Notes on the data

Disclaimer

This report uses data from UKMED, which uses data from the Higher Education Statistics Agency Limited Source: HESA Student Record 2002/03 to 2016/17 Copyright Higher Education Statistics Agency Limited. Neither the General Medical Council (the data controller for UKMED) nor the Higher Education Statistics Agency Limited can accept responsibility for any inferences or conclusions derived by third parties from data or other information supplied by them.

Entrants to medicine data

The scope of this report's data only includes UK-domiciled students. Only the following cases in UKMED's 'HESA_DOMICILE_REGION' field were included in the analyses:

- England
- Guernsey and Jersey
- Isle of Man
- Northern Ireland
- Scotland
- UK region unknown
- Wales

Applicants to higher education data

UCAS data for UK-domiciled 2018/19 year old applicants.

Entrants to higher education data

HESA data for UK-domiciled first-year students:

- First degrees
- Full-time and part-time (ethnicity, gender and disability only)

3. Outreach

The Selection Alliance's outreach work has focused on two groups:

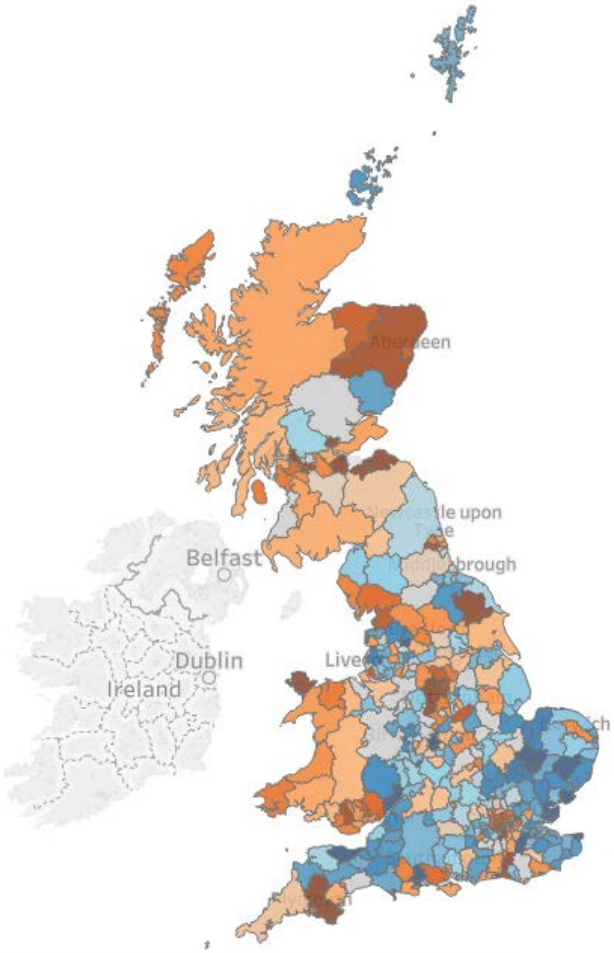
- Young people from disadvantaged backgrounds who have the aptitude to apply to medicine.
- Teachers, advisers and higher education outreach staff working in schools and colleges which serve under-represented communities, and/or are located in cold spots.

Mapping

The Selection Alliance has mapped data from its outreach survey to inform the targeting of its own work as well as the work of individual medical schools. The survey also provides a useful view of how engagement by medical schools has changed over time, now that the survey is in its second iteration.

Map 1 shows the change in engagement since the last survey (held in 2015). Map 2 shows the map of engagement, with each dot representing a school. It showed:

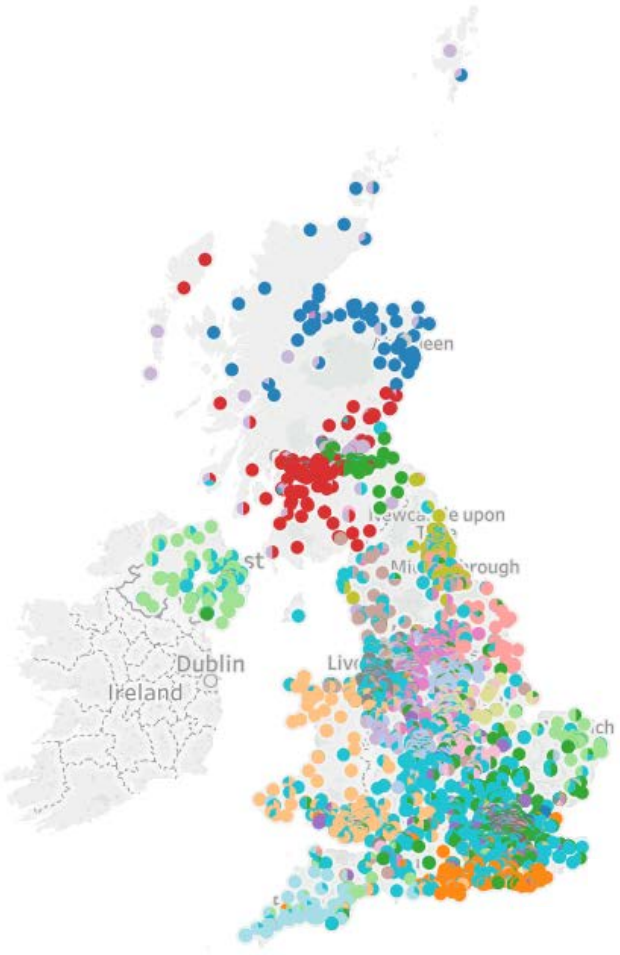
- 2,290 more engagements between medical schools and secondary schools.
- The number of secondary schools engaging with medical school outreach increased by 5%.
- England and Wales have seen an approximate 30% increase in the number of engagements, Northern Ireland a 428% increase and Scotland a 100% increase.
- 2,554 secondary schools (45% of the total) remain unengaged and there are significant cold spots in the South East, South West, the borderlands with Wales and the North West.



Map 1: Change in engagement since 2015

2017 proportion of engagement

Map 2: Outreach in 2017 by medical school



The database includes information about each:

- Outreach intervention including the type and number of students involved.
- School and college including free school meal percentage, higher education destination of its students, POLAR classification and GCSE/A level pass rates.

The database has informed the Medical Schools Council's work, in particular in addressing the cold spots.

Work with young people

Our work for young people has taken three forms:

- Summer schools for 350 young people to take place in 2019, focusing on the cold spots.
- Information sheets: bite-sized information about key aspects students should consider if interested in applying to medicine.
- Development of e-packages of information (see below), produced by current medical students.

Summer schools

The Medical Schools Council was awarded funding from Health Education England to establish a series of summer schools in England for 350 young people (targeted at the cold spots). These summer schools will help young people from disadvantaged backgrounds explore whether medicine is the right choice for them, giving them the information, skills and above all the confidence they need to submit a strong application to medicine.

Our objectives are to:

- Deliver a high-quality summer school programme which provides accurate, up-to-date advice on medicine and healthcare across England.

- Work with young people from geographical areas that have limited access to medicine-related outreach (the 'cold spots').
- Offer an England-wide approach with accessible summer school provision across the country.
- Develop a sustainable programme that will continue beyond this funding period by supporting individual medical schools to co-create and adopt best practice.

"The summer schools will ensure that young people with the potential to study medicine are given the opportunity to consider it"

The summer schools will ensure that young people with the potential to study medicine are given the opportunity to consider it, in an inclusive and supportive environment with like-minded students and undergraduates. The summer schools will provide:

- Activities designed to build participants' confidence, with a focus on showing them that people from a range of backgrounds have successful careers in medicine.
- An understanding of what being a doctor and studying medicine is like (including the variety of courses and teaching styles available).
- An experience of all aspects of university life.
- Opportunities to explore other healthcare study and career options that are available.

The Selection Alliance has commissioned four summer schools across England. Three of the four medical schools do not currently run medicine residential summer schools (Keele, Exeter and Manchester). They are located near to cold spots or with good transport links that make them accessible to a range of cold spots. The fourth summer school is at Imperial College London, providing a good location for students from a wide range of cold spots across the south coast, South East and Kent.

The four summer schools will take place in summer 2019. They will have a common framework established by the Medical Schools Council that will allow for local flexibility, ensuring that the programme can respond to the needs of the particular students they are targeting.

The common framework, toolkit and policies and procedures (for example, safeguarding) will provide students with a consistent and high-quality experience.

In addition to the four commissioned summer schools, the Selection Alliance will 'buy' places at seven existing medical summer schools for students from the cold spots. This will give us greater coverage of the cold spots in a cost-effective way. One has already taken place at Hull York Medical School. The remaining six are yet to be commissioned.

e-packages

The Selection Alliance has piloted with Cardiff Medical School the development of resources by current medical students for young people. The first e-package was created to explain intercalation, what it means and the options for students. This resource is yet to be finalised but will be published on the Medical Schools Council's website.

Work with teachers, advisers and higher education outreach staff

For teachers and advisers, the Selection Alliance has:

- Produced a series of booklets enabling them to support their students through the application process. These were refreshed in May 2018.
- Run regional conferences in Sheffield, Birmingham, Liverpool and Lincolnshire. These are to be repeated every two years.

In September 2018 the Selection Alliance for the first time ran a conference for outreach practitioners who were not medicine specialists. The aims of the day were to give them up-to-date information so they can appropriately support students with whom they come into contact.

Over 80 people attended the day-long event. It included:

- Keynotes from David Barrett (Fair Access and Participation Directorate, Office for Students), Fiona Watson (Liverpool Medical School) and Sally Curtis (Southampton Medical School).
- A student panel consisting of five current medical students.
- A choice of five different workshops covering interviews, admissions tests, work experience, differences between medical schools and alternative entry routes. All sessions were given by medical school staff representing medical schools across the UK. UKCAT and BMAT also contributed to the admissions tests workshop.
- Feedback from the event was very positive:
- 88% of respondents reported that they ‘are now better equipped to support students’.
- 98% (all bar one of the respondents) saying it was ‘likely' that they would ‘use the resources provided by the Medical Schools Council to support students.
- 85% of respondents said they would attend a similar event in the future.

Student-led widening participation activity

In November 2018 the Selection Alliance ran a second conference for medical students who undertake outreach activities on behalf of their medical schools. This year the conference was run in association with the National Medical Schools Widening Participation Forum, a group that facilitats the sharing of good practice on widening participation. The forum has a student group and it is this group, with support from medical school staff, that led the organisation of this conference. The Selection Alliance felt this to be very positive as the

event was for students, organised by students.

Two students from every medical school in the UK were funded by the Selection Alliance to attend the event. The aim of the day was to improve widening participation strategies among medical students in medical schools. There was a poster competition and presentations from medical school staff and students, as well as workshops designed and run by students.

4. Selection methods

In 2018 the Selection Alliance's main focus has been the development of multiple-mini interview (MMI) stations that can be used by all medical schools, as well as the provision of advice on the use of contextual admissions.

MMI item development

In October 2017 the Selection Alliance held an MMI item-writing workshop. Medical school admissions staff came together with patients, service users and students, including students from a widening participation background, to develop items. Fifteen items were created at the event. They are all interview-type stations where the candidate is asked an initial question followed by probing questions to look at the first answer in more detail. The items seek to measure the following attributes:

- Commitment to a career in healthcare
- Empathy
- Resilience

Stations were then piloted at five medical schools across the UK. The pilots were mainly tested with current medical students. Care was taken to ensure that students from different backgrounds, including overseas students and graduates as well as students with protected characteristics, were used in the pilot. The purpose of the pilot was to get feedback from experienced interviewers and students as to whether the items were pitched at an appropriate level and easy for candidates to understand. Both students and interviewers were asked for an opinion on whether the items would adversely impact students from a particular background. After the pilots the items were reviewed in light of the feedback and 12 items were prepared for use by medical schools in their MMIs.

It was not possible to test the discrimination of the items as the majority of the them were tested with

current students who had all performed well at interview to get their place. At one medical school five items were tested with potential applicants from a widening participation background and it was encouraging that a variety of scores were given in this context, in marked contrast to the pilots with current students. This suggests the items will discriminate between stronger and weaker candidates.

The items will now be used by medical schools in their MMIs during the 2018/19 admissions cycle. The Selection Alliance will collect the performance data of the items to assess whether they discriminate between candidates effectively. Applicants to medical schools using the items will also be asked to opt-in to complete a survey which will allow the Selection Alliance to collect some demographic data. This will allow analysis to be undertaken to ensure that the items do not disadvantage applicants from different groups.

In October 2018 the Selection Alliance will hold another item-writing event to develop roleplay MMI stations.

5. Contextual admissions

The Selecting for Excellence Final Report made a series of recommendations to promote the use of contextual admissions in medical school selection processes:

“All medical schools must consider and evaluate their approach to the use of contextual data.”

“The MSC must commission research in 2015 on contextual data and medical admissions processes and this research should be used to develop guidance for medical schools on the use of contextual data.”

The Selection Alliance has sought to implement these recommendations. Research completed in 2017 and described in the Selection Alliance 2017 Report found that there was insufficient evidence to produce guidance on the use of contextual measures. Another key finding of this research was that the most effective contextual measure was individual performance at secondary school compared to the average performance of all pupils attending that school. Research from the University of York has confirmed that identifying students from poorly performing schools would allow entry criteria to be dropped by two grades with no impact on subsequent performance on the medical degree course.

"the most effective contextual measure was individual performance at secondary school compared to the average performance of all pupils attending that school"

However, many medical schools do still triangulate different sources and it has not yet been possible to do work to examine whether individuals from poorly performing schools are widening participation students although the likelihood is that they are. In this context the Selection Alliance decided that although there is not enough evidence to produce definitive guidance for medical schools on the use of contextual admissions there is enough to produce good practice indicators on the use of contextual measures. In 2018 the Selection Alliance published Indicators of good practice in contextual admissions.

The good practice indicators suggest that triangulation is an appropriate way of using different measures to

identify widening participation candidates. It suggests that using a combination of geographical, education and personal or household measures is the most effective way of avoiding false positives.

The document goes through the different measures available at the point of selection and highlights their strengths and weaknesses. It also splits measures into ones that are available through UCAS such as postcode-related measures, ones that medical schools can obtain from third parties such as eligibility for the UKCAT Bursary, and measures they can obtain directly from applicants such as eligibility for free school meals.

Providing clarity to schools about the measures available and how to access them will help them to identify appropriate frameworks for the use of contextual measures for their individual programmes. It could be argued that this is a better approach than providing definitive guidance that all schools use, as some variance allows them to react to their local circumstances. This means that a wider number of applicants from different backgrounds can benefit from contextual admissions.

6. Better information for applicants

The Selection Alliance remains committed to providing high-quality advice that is freely available to all applicants. Because all medical schools are represented on the Selection Alliance it is able to provide definitive guidance to applicants.

As well as new developments, this chapter will go through a number of existing documents that were refreshed and updated in 2018, including the guidance provided to teachers and careers advisers.

Entry requirements

The Entry requirements to UK medical schools document is now in its fourth year of publication. It remains a popular document that is of great interest to applicants.

This year the document is available not just as a digital booklet but as an interactive webpage. This allows an applicant to pick the course type they are interested in, for example Graduate Entry Medicine, then compare their desired information across all such courses. It allows an applicant to quickly find out which courses require, for example, UKCAT rather than GAMSAT or which use MMIs as an interview method.

Interview preparation website

The interview preparation website is designed to help applicants familiarise themselves with the interview process. It contains videos of both structured panel interviews and MMIs so applicants can see what the process entails. This is especially important for MMIs as it is unlikely an applicant will have been through this process before. As well as videos it contains advice on how to prepare for interviews and tips on what to do on the day.

The site was piloted in 2017 with a small number of medical schools sending the link to the website with their interview invitations. Around 400 applicants registered with the website in the last admissions cycle. A small number of those gave detailed feedback through functionality built into the site. The majority of the feedback was positive with most agreeing or strongly agreeing that the site was helpful. In qualitative feedback most flagged the videos as being very useful.

The website will be fully launched ahead of this year's interview cycle and all medical schools will have the option of sending a link along with invitations to interview. Once the website has been used through a complete admissions cycle, further feedback will be incorporated into its design.

Guidance for disabled applicants

In 2018 the Selection Alliance has developed guidance for disabled applicants. This will be launched in early 2019 so that it can follow the late 2018 release of the GMC's Welcomed and valued guidance, which will provide advice to medical schools and postgraduate training bodies on supporting disabled students and doctors. The Selection Alliance needs to check that any changes made to the Welcomed and valued will not impact the advice it has drafted for disabled applicants.

The guidance will be called 'Can you go to medical school if you have…' as this was the question the disabled medical students reported in General Medical Council focus groups that they had in relation to their condition before they started medical school. The guidance goes through the whole selection processes and gives examples of the types of support and adjustments available to disabled applicants at different stages of the process including interviews and selection tests. The guidance will also make clear that medical schools consider the impact of applicants' disabilities on their capacity to study medicine and meet the outcomes set by the General Medical Council.

Plans for 2019

In 2019 the Selection Alliance will develop videos to support the short infosheets provided to applicants. The videos will cover a range of subjects such as UKCAT, interviews and personal statements, and will feature admissions deans and current medical students offering their tips and advice.

The Selection Alliance will also produce a new resource on student finance in partnership with the Student Loans Company. The Medical Schools Council receives a lot of questions about student finance, especially from overseas students, so this document will help address these. It is also hoped that the Selection Alliance will produce advice for refugee applicants wishing to study medicine, as the rules around finance and eligibility for loans are complex for these individuals.