Selecting for Excellence
Final Report
Acknowledgements

The Selecting for Excellence Executive Group would like to thank the following people and organisations:

The Office for Fair Access for providing support for the development of *A journey to medicine: Student success guidance* and *A journey to medicine: Outreach guidance* documents.

Health Education England North West for its support with the development of the project and the provision of funding for the research used to develop this final report.

NHS Careers and NHS Medical Careers for their support in developing online content for applicants.

Supporting Professionalism in Admissions (SPA) for its advice and guidance.

Ceri Nursaw of Nursaw Associates for invaluable advice and the development of *A journey to medicine: Student success guidance* and *A journey to medicine: Outreach guidance*.

The Expert Admissions Deans Sub-Group:

**Dr Paul Garrud** Nottingham Medical School (Chair)
**Dr David Mabin** Exeter Medical School
**Dr Gail Nicholls** Leeds School of Medicine
**Professor Sue Smith** Imperial Faculty of Medicine
**Dr Gordon Dent** Keele School of Medicine
**Dr Jane Kidd** Warwick Medical School
**Dr Keith Steel** School of Medicine, Queen’s University Belfast
**Dr Austen Spruce** Birmingham Medical School
**Dr Heidi Phillips** Swansea School of Medicine
**Dr Karen Foster** Aberdeen School of Medicine and Dentistry
**Murat Akyol** Edinburgh Medical School
**Dr Mike Farrell** Health Education England North West (observer)
**Janet Graham** Supporting Professionalism in Admissions (observer)

The Selecting for Excellence project team:

**Dr Katie Petty-Saphon** Chief Executive, MSC
**Clare Owen** Policy Adviser, MSC
**Emily Burn** Policy Officer, MSC
**Edward Knight** Communications and Website Officer, MSC
**Olga Sierocińska King** Senior Policy and Project Officer, MSC
**Thomas Marsh** Team Administrator, MSC

Cover image: Sheffield Outreach and Access to Medicine Scheme
© The University of Sheffield
The Selecting for Excellence project arose from two simultaneous challenges for medical schools. Firstly, the 2012 report from the Social Mobility and Child Poverty Commission noted that, in terms of widening access and thus improving social mobility, ‘medicine lags behind other professions both in the focus and in the priority it accords to these issues. It has a long way to go when it comes to making access fairer, diversifying its workforce and raising social mobility.’

In addition to social mobility, a medical profession with access to the widest possible talent pool is essential for producing the best possible doctors. These criticisms led to a summit convened by Dr Dan Poulter, Under Secretary of State at the Department of Health, who asked what medical schools were going to do in response. Secondly, the General Medical Council had become aware through quality monitoring visits of considerable diversity in the methods used to assess suitability for admission across the UK medical schools and had commissioned a review, published in 2012, documenting best practice in admissions processes. Medical schools were asked to consider their individual procedures in the light of this report.

Of course these two areas have a close relationship – the best admissions processes are also those least likely to bias admission unfairly against any particular group, and making the processes that are used to determine admission crystal clear to applicants will bust the myths which have accumulated about what medical schools are looking for. In considering these two challenges, the heads of UK medical schools determined that an independent project group should be set up to advise on the best approaches to take and recommend specific courses of action.

The project group first met in July 2013 and has gathered information from as wide an array of sources as possible, seeking out best practice and analysing a considerable amount of data to establish what works from access programmes in medicine and elsewhere. We have taken an evidence-based view of policy development, and research has been commissioned to tackle technical issues around selection. We have deliberately focused on measures that can be used to address these issues immediately, such as clarifying what pre-application work experience is for and what core values are needed to study medicine, but we have also set out clear plans for future policy development. Although we hope that the immediate measures we recommend will have a catalytic effect, this is inevitably a long-term piece of work. The reasons why students from a lower socio-economic background do not access medical school courses are complex and will require complex solutions, but our work sets in place a framework to address these issues.

The Selecting for Excellence project has, with this report, completed the significant task it was set up to do, but this is only the start of what will be an ongoing mission for medical schools.
In 1944, the Goodenough Report stated that ‘unsuitability for a medical career should be the sole barrier to admission to a medical school’. This statement was made in relation to the paucity of women entering medicine then, a situation which has now been remedied. I am sure that medical schools can rise equally to the present challenges of ensuring the fairest and most transparent admissions processes that select the best possible candidates from all parts of our society for the benefit of patient care.

Professor Tony Weetman
Chair, Selecting for Excellence Executive Group
Pro-Vice-Chancellor, Faculty of Medicine, Dentistry and Health, University of Sheffield
## Contents

01 Introduction  
03 Contents  
04 Executive summary  
06 Recommendations  
13 1. Evidence base  
35 2. Widening participation  
51 3. Role of the doctor  
57 4. Selection methods  
67 5. Implementation  
71 Appendix A:  
   Supporting widening participation in medical schools: Best practice indicators  
75 Research and engagement  
76 Selecting for Excellence Executive Group  
80 List of acronyms
Executive Summary

The Selecting for Excellence project began in March 2013 and was initiated in response to two main issues. Firstly concerns raised by the Social Mobility and Child Poverty Commission that medicine was not doing enough to increase the numbers of people studying medicine who are from a lower socio-economic background. Secondly, a GMC-commissioned research study which had found that medical schools used a variety of different methods to select students and that there was insufficient evidence to explain this variance.

This summary sets out the main findings and recommendations of the Selecting for Excellence project in respect to these and other issues.

- Available data on the demographics of medical students in the UK confirm that students from a lower socio-economic background are underrepresented in medical schools. The proportion of students from these backgrounds is lower than the equivalent proportion of people from these backgrounds in the UK population as a whole.

- The data available on the socio-economic background of students could be improved, and improving the data set would allow better tracking and monitoring of progress in widening participation.

- All medical schools run outreach programmes but there is scope to improve these programmes. Medical schools should implement the guidance on outreach created as part of the Selecting for Excellence project.

- More work should be done to ensure that outreach projects have a UK-wide reach and that people from across the UK have access to opportunities, rather than only those who live near a medical school.

- Potential applicants to medical school are confused as to what is required in terms of work experience. To address this issue the project team has developed guidelines for applicants on work experience. These guidelines place emphasis on the importance of applicants gaining caring experience whether through volunteering or paid employment.
• Access to opportunities for clinical work experience needs to be improved. MSC should work with HEE and other bodies to increase access to work experience in healthcare settings for those from a lower socio-economic background.

• Contextual admissions are a powerful tool that medical schools can use to widen participation. Research should be carried out to support medical schools in using contextual data in admissions.

• Medical schools need to support students from a widening participation background during the medical course itself. Guidance has been produced to support medical schools to do this.

• Medical schools should use the new statement on the core values, skills and attributes needed to be a doctor in designing and delivering their selection processes. This statement is mapped to Good Medical Practice and the values in the NHS Constitution.

• Research commissioned as part of this project indicates that at present there are not enough data available on the effectiveness of different selection methods to create a national framework for selection. Based on expert opinion, medical schools are advised to move towards a process that makes use of academic attainment with performance in aptitude tests and multiple mini interviews (MMIs).

• Further research into selection methods should be commissioned. This should include further research to develop an evidence base on the effectiveness of MMI as a selection method and the impact that weighting different elements of a selection process has on widening participation.

• Developing a longitudinal evidence base will be essential in testing predicative validity of selection methods.

• This report sets long-term targets for medical schools on increasing the number of students from a lower socio-economic background.

• A selection alliance should be set up to drive the implementation of the recommendations in this report that are aimed at medical schools. This alliance should be made up of the admissions deans from all UK medical schools.

• A group based on the membership of the Selecting for Excellence Executive Group should meet twice a year to monitor medical schools’ progress in implementing this report.
## Recommendations

### Recommendations for the Medical Schools Council (MSC)

#### Data

The Medical Schools Council should explore how to analyse data on those who make unsuccessful applications.

The Medical Schools Council must collate and publish a summary of data on the socio-economic profile of medical students and applicants every year.

#### Widening participation

The MSC should consider and test potential collaboration between medical schools on outreach programmes.

More work needs to be done to identify geographical areas across the UK where young people do not have access to outreach programmes run by medical schools. MSC should work with Health Education England and other bodies to establish what can be done to provide outreach activities for students living in these areas.

MSC must continue to work with HEE to ensure the best possible information for potential applicants to medicine is provided by NHS Careers and other careers services.

MSC and NHS Careers information provided to potential applicants must be designed to manage expectations of future careers in medicine. Any information must make clear what specialties the NHS will need in the future and highlight the need for more general practice and community-based doctors. It must also highlight the fact that the NHS provides a wide range of other rewarding career opportunities outside medicine.

MSC must produce guidance for careers advisers and teachers on supporting their students through the medical application process.

MSC must work with the devolved administrations to ensure the PRACTISE commitment is adopted across the UK.

The Selecting for Excellence guidelines on work experience must be reviewed in 2017 to ensure that they remain fit for purpose.

MSC must work with Health Education England, the Royal College of General Practitioners and other bodies to ensure that the PRACTISE commitment is extended to GP practices and other primary care providers.

MSC and the Association of UK University Hospitals must work together to facilitate volunteering opportunities for young people within the NHS.

MSC must continue to promote the guidance on access courses to medical schools.

#### Role of the doctor

MSC must provide additional guidance to applicants and careers advisers/teachers based on the statement of the core values, skills and attributes needed to study medicine by March 2015.
MSC must work with medical schools to determine the best ways of testing the values, skills and attributes set out in the common statement.

As part of the implementation of the selecting for excellence project MSC must ensure that medical schools’ selection processes take into account HEE’s work on values based recruitment.

**Selection methods**

Although evidence may not at present be available to enable a national framework for selection to be developed, MSC and medical schools must continue to gather evidence to enable such a framework to be developed in the future.

MSC must work with medical schools to facilitate the sharing of MMI items and the building of an evidence base as to the effectiveness of different forms of MMI items. The impact of MMIs on widening participation must also be evaluated as part of this work.

MSC, in partnership with medical schools, must look into the feasibility of medical schools collaborating on the development of selection centres.

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.

MSC must commission research in 2015 to examine the impact of different weightings of admissions procedures on selection values and widening access.

The General Medical Council and MSC must continue to develop the UK Medical Education Database (UKMED). The development of the project must continue to ensure that in the long term UKMED can be used to evaluate the impact of widening participation initiatives.

MSC must ensure that UK medical schools are aware of the latest thinking internationally on medical selection. To facilitate this, MSC should continue, along with the Association for the Study of Medical Education, to support the International Network of Researchers in Selection into Healthcare (INReSH) conference.

**Implementation**

MSC must work with medical schools to develop additional targets for widening participation that utilise different data sets.

MSC must report annually on medical school progress in meeting these targets.

MSC must undertake a formal review of these targets and progress achieved to date in 2019 to ensure they remain fit for purpose.

MSC must set up a selection alliance to take forward the recommendations in this report that are targeted at medical schools.

MSC must create an oversight group to ensure that widening participation remains at the heart of the work of the selection alliance.
Recommendations for medical schools

Data
Medical schools must consider the potential to make use of data resources that track the progress of students from a widening participation background.

Widening Participation
Medical schools must use the Selecting for Excellence guidance on outreach to consider how they can strengthen the outreach currently provided.

Medical schools must ensure that the details of any widening participation programmes they run are easily accessible on their websites; ideally it should only take ‘three clicks’ for a user to access this information.

Medical schools must review the information on selection available on their websites to ensure it is easy to understand and to locate.

Medical schools must implement the Selecting for Excellence guidelines on work experience and ensure that all aspects of their selection processes fit with the principles laid out in the guidelines. They must also clearly signpost the guidelines on their websites and other published materials aimed at applicants.

Medical schools must consider the impact that their widening participation activities have had and consider whether, based on these outcomes, they should introduce a foundation course or expand the course they currently run. This evaluation should take into account value for money and the impact that interventions have on widening participation.

Medical schools must keep up to date with HEE’s (and relevant Devolved Administrations bodies’) work to encourage those in other health professions to consider other NHS careers/courses and assist where appropriate.

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

Medical schools must recognise that all students are individuals and may need support arising from their individual circumstances. This includes widening participation students whom medical schools should support to ensure they are able to progress and reach their maximum potential.

Medical schools must implement the Selecting for Excellence project’s A journey to medicine: Student success guidance.

Attrition rates and benchmarks drawn from the higher education sector as a whole must be used to evaluate the success of medical schools in supporting students from widening participation backgrounds.

Role of the doctor
Medical schools must utilise the common statement on the core values skills and attributes needed to study medicine in designing and developing their selection processes.

All medical school selection processes must involve evidence based assessment of core values.
Recommendations

**Selection methods**

Medical schools must evaluate whether they should develop selection processes that includes elements of academic attainment, aptitude tests and multiple mini interviews (MMIs).

Medical schools must use more than one source and different types of contextualised data in their admissions processes. They must triangulate data to ensure the individuals they identify are truly from a widening participation background.

Medical schools must work towards meeting the targets for increasing the numbers of students from a lower socio-economic background.

Medical schools must consider how they can implement the best practice indicators set out in Appendix A.

**Recommendations for Health Education England (HEE) and equivalent bodies in the devolved administrations**

**Widening participation**

More work needs to be done to identify geographical areas across the UK where young people do not have access to outreach programmes run by medical schools. MSC should work with HEE and other bodies to establish what can be done to provide outreach activities to students living in these areas.

MSC must continue to work with HEE to ensure the best possible information for potential applicants to medicine is provided by NHS Careers and other careers services.

HEE and others must consider how careers advice and information on the breadth of available healthcare careers can be promoted to teachers and careers advisers within primary and secondary schools.

HEE, through its LETBs and NHS partners, must use its influence to promote and support the adoption of the PRACTISE Commitment by healthcare organisations and review the level of its adoption by December 2015.

Placement providers, HEE and others must develop and put in place monitoring and evaluation mechanisms to assess the uptake and impact of work experience programmes by participants from a widening participation background.

MSC must work with HEE, the RCGP and other bodies to ensure that the PRACTISE commitment is extended to GP practices and other primary care providers.

HEE and others should develop or sponsor an award recognising and celebrating excellence in widening participation by medical schools, and other institutions providing healthcare education.
**Recommendations for Government**  
**Data**  
There should be stronger linkage between Department for Education data such as ‘EduBase’ and higher education data-sets.  
Easier access to and more detailed ‘postcode’/geographic data than those currently available through POLAR and the Index of Multiple Deprivation should be developed.  
Opportunities to use the Unique Learner Number as a means to track the educational progress of individual young people should be explored.  
**Widening Participation**  
Any future changes to the NHS Bursary should protect graduate-entry medical students who are from under-represented groups.  
University Vice Chancellors, the Department of Health (England) and those responsible for health and education in the devolved administrations should publicly endorse the principle of contextualised admissions for medicine.

---

**Recommendations for the Association of UK University Hospitals (AUKUH)**  
**Widening participation**  
MSC and AUKUH must work together to facilitate volunteering opportunities for young people within the NHS.
Recommendations for the General Medical Council (GMC)

Selection Methods
The long-term impact of the use of contextualised admissions should be tracked as part of the UKMED project.

The GMC should encourage adherence with evidence-based best practice through its quality assurance of medical schools.

The GMC and MSC must continue to develop the UK Medical Education Database. The development of the project must continue to ensure that in the long term UKMED can be used to evaluate the impact of widening participation initiatives.

Recommendations for Royal Colleges

Widening participation
Trained and motivated doctors must be encouraged to support outreach and activities designed to raise aspirations to study medicine. Royal Colleges and employers should consider how doctors might be recognised, through organised CPD, for their contribution to widening participation activity.

MSC must work with Health Education England, the Royal College of General Practitioners and other bodies to ensure that the PRACTISE commitment is extended to GP practices and other primary care providers.
Recommendations for UCAS and the Higher Education Statistics Agency (HESA)

Data
To assist with continued monitoring, consideration should be given as to whether cost and time required to access UCAS data can be reduced.

To help ascertain the numbers of care leavers studying medicine, data collection and the quality of data available on care leaver status should be improved.

There should be greater consistency in medicine course codes based on the type of medicine course to which people apply (i.e. standard entry, graduate entry and medicine with a preliminary year).

Medicine and dentistry programmes should be separated when UCAS and HESA report publicly available data.

Miscellaneous
Widening participation
Those responsible for compiling university league tables should place less emphasis on entry tariff and should instead develop a way of rating universities on their commitment to and impact on widening participation.

University Vice Chancellors, the Department of Health (England), and those responsible for health and education in the devolved administrations should publicly endorse the principle of contextualised admissions for medicine.
1. Evidence Base

Summary
This chapter builds on data analysis from the Selecting for Excellence End of Year Report to:
1. Provide a more detailed picture of medicine and widening participation.
2. Make recommendations about how best to continue monitoring this subject.
Context – applications

In the academic year 2013–2014, there were 40,625 undergraduate medical students studying at 33 medical schools.¹

The number of applicants that medical schools are allowed to accept onto their courses is set nationally through the central governments of all four countries in the UK. In recent years, numbers have been fixed at a new intake of approximately 8,000 students per academic year.

Competition for places at medical school is substantial. As the figure below shows, over the past five years competition for medical school places has been much higher than the average for all higher education courses.

Figure 1: Competition ratio for medicine and the higher education sector average; number of applications per place (UCAS web, 2008–2013)²

<table>
<thead>
<tr>
<th>Year</th>
<th>Medicine</th>
<th>Higher Education Sector Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>11.2</td>
<td>5.5</td>
</tr>
<tr>
<td>2012</td>
<td>10.6</td>
<td>5.7</td>
</tr>
<tr>
<td>2011</td>
<td>10.8</td>
<td>5.8</td>
</tr>
<tr>
<td>2010</td>
<td>10.2</td>
<td>5.6</td>
</tr>
<tr>
<td>2009</td>
<td>9.1</td>
<td>5.0</td>
</tr>
<tr>
<td>2008</td>
<td>8.9</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Medical school course types

Broadly, people getting into medical school are on three different types of course:

- **Standard entry courses** Typically five–six years
- **Graduate entry courses** Accelerated four-year programmes for those with acceptable previous degrees
- **Foundation/pre-clinical year** Course prior to an undergraduate medical degree which aims to prepare applicants for undergraduate medical education. They can be open for both students who do not have a background in the sciences, along with those from a widening participation background.

Comparison between the courses should be conducted with caution as the profile of applicants will not be the same as the profile of students who obtain places on the courses. Available data on students are not yet detailed enough to allow comparison between course types. UCAS data for applicants show that:

Graduate entry courses (as would be expected) attract an older profile of applicants and slightly higher proportion of applicants from Black and Minority Ethnic (BME) backgrounds. However, the picture is not clear for ‘family background’ indicators. Indeed, those who are applying through this route can reasonably be expected to be at a different stage in life from those applying to go to university for the first time. While family background may have an influence, a large amount of these data are missing, or ‘unknown’.

---

Foundation courses appear to attract more under-represented groups than other course types. However, numbers for these courses are small and they appear to disproportionately attract applicants from London.

Therefore, while acknowledging limitations in the analysis, data for applicants do not appear to demonstrate that particular course types have advantages or disadvantages in terms of attracting a wider pool of candidates. This is in line with other research in this area.3

**Challenges**

Distinguishing between these course types is made difficult by the data coding used. For example, a foundation/pre-clinical course at one institution may have the same UCAS code as a graduate entry course at another institution. This is an issue that is associated with the Joint Academic Coding System (JACS), as there is no way of identifying the variety of entry routes into medicine. In turn, this affects the robustness of Higher Education Statistics Agency (HESA) data. Recommendations for improving data coding are included at the end of this chapter.

**A picture of medicine**

A huge variety of data and characteristics can be used to explore the profile of medical school applicants, medical students and doctors working in the UK. Due to the complexity of defining a widening participation background, the Selecting for Excellence project has established that any indicators used should be triangulated. This means that multiple data sources should be used to construct a definition of a widening participation background rather than relying on a single measure. This sentiment was also shared by patients in our patient focus groups.

Therefore, the focus of this chapter is on data available in the following themes, as noted in the figure below:

> “multiple data sources should be used to construct a definition of a widening participation background”

---

For context, data are also presented where available for students and applicants to both dentistry and veterinary science. These courses were chosen as they are similar to medicine in that they are also courses with high entry requirements that are competitive in terms of application and acceptance ratios. However, these programmes operate in very different circumstances and have their own specific issues in relation to demographics so direct comparisons should be avoided.

Identity

This section considers data linked to ‘protected characteristics’, as defined by the Equality Act. Analysis focuses on age, disability, gender and ethnicity. Data are not available on gender reassignment, marriage and civil partnership, religion and belief, pregnancy and maternity, or sexual orientation.

Age

Data from UCAS indicate the highest proportion of applicants to medicine in 2013 (all entry routes) are aged 18 years and under. This perhaps demonstrates a tendency towards a linear progression from school to entry to study medicine, as can be seen more broadly when considering applications to higher education as a whole. Similar findings can be seen for applicants to dentistry and veterinary science.
Gender

As reported in the Selecting for Excellence End of Year Report, a higher proportion of medical students are female, something also supported by HESA data. Such findings are also reflected in dental and veterinary science students and are consistent with end of 2013 application cycle data from UCAS which notes that overall, 18-year-old females in England are a third more likely to apply to enter higher education than males.4

When considering GMC data from the State of Medical Education and Practice, it can be seen that 56% of registered doctors are male and 44% are female. These data are likely to shift as the workforce ages and there is a greater representation of more recently qualified females.

Applications – by gender (UCAS)

Ethnicity

Ethnicity within UCAS data is structured into broad categories which limit potential comparisons with HESA data. UCAS data demonstrate that a higher proportion of applicants to study via the foundation year route identify with a Black and Minority Ethnic (BME) background when compared to all entry routes to study medicine. By contrast, a lower proportion of medical students identify with a BME background compared to those who apply to study medicine. However, there are disparities across ethnic groups identified by medical students.

By way of context, 75% of applications to UCAS across the higher education sector as a whole in 2013 were made from candidates who identify with a white ethnic background. In addition, 10% of applications were made by candidates who identify with an Asian ethnic background and 8% identified with a black ethnic background.\(^5\)

When considering data from the GMC’s State of Medical Education and Practice, 29% of doctors identify with a BME background whereas 52% identify with white ethnic groups. This is lower than the proportion of medical students who identify with white ethnic groups (68%). Data are unknown for almost one fifth (19%) of doctors on the register and this means it is difficult to draw conclusions from this finding. These data also do not take into account the numbers of doctors who have trained overseas which may also impact on the demographics on the medical register.

When considering data for applications to study dentistry and veterinary science, 57% of dentistry and 6% of veterinary science applicants identified as coming from a BME background. In contrast, HESA data demonstrate that 44% of dentistry students are from a minority ethnic background and in veterinary science this figure stands at 4%.

---

\(^5\) http://www.ucas.com/data-analysis/data-resources/data-tables/ethnic-group
1. Evidence Base

**Note 1.** In the HESA data, the numbers of those who identified as 'Black – Caribbean' and 'Black – other black background' each made up less than 0.5% of the total return. Each of these percentages is, under HESA policy, recorded as 0%. These two categories are therefore omitted from the graph.

**Note 2.** In the HESA data, from 2012–2013 the category ‘Other’ also incorporates those who have identified with mixed multiple ethnic groups. These identifications were previously recorded separately.
1. Evidence Base

Disability

As reported in last year’s Selecting for Excellence End of Year Report, HESA data demonstrate that the higher education sector average for the proportion of students in receipt of disabled students’ allowances (DSA) is 5.9%, whereas aggregated data for medicine, dentistry and veterinary science demonstrate that 4.8% of students receive DSA indicating a slight underrepresentation. As reported last year, fitness to train is an important consideration which may have an impact on admissions decisions.

Challenges

- Broad categories and groupings make it difficult to identify specific issues. This is seen within the different ethnic group categories used in both UCAS and HESA data.
- Data are not available on a number of protected characteristics, including marriage and civil partnership, gender reassignment, religion and belief, pregnancy and maternity or sexual orientation.
- Data are unknown for some applicants and students as there is a reliance on self-declaration.
Family background

This section explores data sources associated with features of an individual’s household and upbringing. Analysis centres on National Statistics Socio-Economic Classifications (NS-SEC), parental/guardian experience of Higher Education, eligibility for income support/free school meals. Data on whether people have been looked after by a Local Authority or are care leavers were not available.

National Statistics Socio-Economic Classifications (NS-SEC)

NS-SEC is a method in which parental occupations are categorised, although it is suggested that there is a broad structure to the categorisation. Although it is not considered to be an ordinal scale.6

NS-SEC categories from the Office for National Statistics are listed below:7

1. Higher managerial, administrative and professional occupations
2. Lower managerial, administrative and professional occupations
3. Intermediate occupations
4. Small employers and own account workers
5. Lower supervisory and technical occupations
6. Semi-routine occupations
7. Routine occupations
8. Never worked and long-term unemployed

When considering both UCAS and HESA data for NS-SEC for all entry routes into medicine, there is a greater representation of the higher and lower managerial categories, as can also be seen within applications to study dentistry and veterinary science. Recent comparisons with the sector as a whole are not possible.

---

6 Ordinal can be defined as the ranking of information in a particular order.
1. Evidence Base

Applications – NS-SEC (UCAS)

Students – by NS-SEC (HESA)
1. Evidence Base

Parental experience of higher education

When considering both UCAS and HESA data, a high level of parental experience of higher education is reported; however, missing data may artificially inflate, or deflate, the level of parental experience of higher education. Such findings are also demonstrated when considering applications to study dentistry and veterinary science.

Similarly, the GMC’s 2014 survey of trainees suggests that almost 70% of the 6690 respondents identify parental experience of higher education, with 29% reporting no experience.
1. Evidence Base

**Household income indicators**

The GMC’s 2014 survey of trainees also considers whether the family of the trainee has previously claimed income support. This is seen to be an indication of the level of household income. Thirteen percent state their household had claimed income support. A further variable considered within the trainee survey is whether trainees received free school meals while at school: a relatively small proportion indicate they did so (8%). Data of this type are not currently easily available for applicants to medical school or for medical students.

**Challenges**

- UCAS codes NS-SEC from occupational information provided by applicants. While this could be argued to increase standardisation across these data, some occupations are unlikely to fit neatly into categories and this is a process prone to subjectivity. These data are not reported across the higher education sector and so it is difficult to draw a comparison.

- Data are missing for a relatively high proportion of the sample which again limits its robustness.

- Household income data are not easily available for applicants and medical students.

**Neighbourhood**

Data linked to the areas in which people live. Postcodes provide a score or ranking that describes a larger area’s characteristics. This section covers the Index of Multiple Deprivation and POLAR (Participation of Local Areas). It also includes a map of medical school applications by region.

**Index of Multiple Deprivation**

The Index of Multiple Deprivation (IMD) is a measure which uses a postcode to assign a household’s socio-economic status. Households are then ranked according to their Index of Multiple Deprivation score and this allows the most and least deprived areas in England to be identified. These can then be structured according to the analysis undertaken, for example, the IMD may be structured as deciles or quintiles.

The UK Clinical Aptitude Test (UKCAT) is one of the available admission tests which supports the selection of applicants to study medicine and dentistry. Data were

---

10. For further information on the Index of Multiple Deprivation, please see www.gov.uk/government/collections/english-indices-of-deprivation (date last accessed 09/10/2014).
Evidence Base supplied in 2013 by the UKCAT Consortium indicating the IMD category assigned to candidates sitting the test. As can be seen below, the majority of candidates come from the quintile seen to be the most affluent. It should also be noted that Scotland, Wales and Northern Ireland also use versions of the Index of Multiple Deprivation which are structured using broadly similar domains.

The GMC 2014 survey of trainees categorised the home postcode of Foundation Training Year One Trainees into the Index of Multiple Deprivation. Over half of Foundation Year One Trainees surveyed were found to come from quintiles 4 and 5, seen to be the least deprived in the country.

POLAR

POLAR 3, developed by the Higher Education Funding Council (HEFCE), provides a series of maps and datasets which are based on the higher education participation rates of people who were aged 18 and entered a higher education course between the academic years 2005–2006 and 2010–2011.11 It is formed by ranking 2001 Census Area Statistics wards by the participation of young people in higher education to give five quintile groups ordered from 1 (those wards with the lowest participation) to 5 (those wards with the highest participation).12

When considering both UCAS and HESA data, there is a high representation of applicants categorised within POLAR quintile 5, defined as coming from areas with the highest participation in higher education. These results can also be seen to be broadly similar for applicants to study veterinary science and dentistry.

---

11 For further definition of POLAR, please see HEFCE, 2012, Young participation rates in higher education www.hefce.ac.uk/media/hefce/content/pubs/2012/201226/POLAR3.pdf (date last accessed 19/08/2014).
1. Evidence Base

Considering the regions where applicants to study medicine come from could help to identify geographic underrepresentation in applications to study medicine. When considering these data, it is important to consider the distribution of the population. The table below demonstrates the spread of the population across the UK.

<table>
<thead>
<tr>
<th>Region</th>
<th>2011 Millions (% of population UK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East</td>
<td>2.6 (4%)</td>
</tr>
<tr>
<td>North West</td>
<td>7.1 (11%)</td>
</tr>
<tr>
<td>Yorkshire and the Humber</td>
<td>5.3 (8%)</td>
</tr>
<tr>
<td>East Midlands</td>
<td>4.5 (7%)</td>
</tr>
<tr>
<td>West Midlands</td>
<td>5.6 (9%)</td>
</tr>
<tr>
<td>East of England</td>
<td>5.8 (9%)</td>
</tr>
<tr>
<td>London</td>
<td>8.2 (13%)</td>
</tr>
<tr>
<td>South East</td>
<td>8.6 (14%)</td>
</tr>
<tr>
<td>South West</td>
<td>5.3 (8%)</td>
</tr>
<tr>
<td>Wales</td>
<td>3.1 (5%)</td>
</tr>
<tr>
<td>Scotland</td>
<td>5.3 (8%)</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>1.8 (3%)</td>
</tr>
</tbody>
</table>

Considering data for applications to study medicine via all routes, there is an over-representation of applicants identified as coming from London compared to the population of the UK. As noted above, this overrepresentation is substantially

---

higher when considering the foundation year entry route where the proportion of applicants who are noted to live in London stands at 45% higher than other entry routes into medicine.

This should only be seen to be indicative as it does not take into account the proportion of the population which could reasonably be expected to apply to study medicine. From considering the information below, a higher proportion of 18 year olds in London apply to study at a higher education institution (HEI) compared to other regions, apart from Northern Ireland. Furthermore, the proportion of 15–19 year olds in London is no higher than the rest of England and Wales. It is also demonstrated that the highest proportion of medical students’ home region is noted to be London.

**Medicine applications – by region (UCAS)**

1. Evidence Base

This finding is also demonstrated when considering the region of applicants to study dentistry, whereas for applicants to veterinary science, this is a lower proportion.

**Challenges**

- Analysis of the home region of both applicants and medical students does not take into account the age profile of the population within regions.

- POLAR is based on postcode data. The use of postcode data has been frequently criticised as it does not provide a granular view of geographical location. Commercial databases, for example, MOSAIC and ACORN are available and do provide this granular view, however, their use incurs a cost for each individual institution.

- There have been three versions of POLAR to improve the methodology behind the data. HESA data have been structured using POLAR 3, with UCAS data reflecting POLAR 2, and this inhibits comparisons.

**Educational context**

This covers data about the education an applicant has received. For example, it can cover the type of school (e.g. state school or independent school), percentage of students in receipt of free school meals at a school and average attainment at GCSE and A-level.

“7% of school children in the UK are educated in the independent sector... 31% of trainees in year 1 of the Foundation Programme also identify that they attended an independent or fee-paying school”

Across all available data, the proportion of medical applicants, students and trainees who were educated at an independent school is higher than the proportion of the population who attended a private school. Indeed, the Independent Schools Council reports that 7% of school children in the UK are educated in the independent sector.15 Furthermore, 31% of trainees in year 1 of the Foundation Programme also identify that they attended an independent or fee-paying school, suggesting a far greater proportion than seen within the UK population as a whole.

This over representation is also seen within applicants to study dentistry and veterinary science. However, in 2011, UCAS ‘cleaned’ data on schools which were previously considered inconsistent and this has resulted in an increase in the occurrence of applicants assigned to the ‘Other’ school type category.

HESA data on school type are a little less granular than that presented within UCAS data. Nevertheless, a similar overrepresentation of those educated at a private school is again seen, however, these data are not known for over a quarter of medical students. Changes to state education policy may have created confusion as to the funding status of schools.

---

1. Evidence Base

Limitations

- There is a wide variety of school and college structures which are state funded, some may be selective and this may affect the educational experience of applicants and students.

- Referring to the type of school at which an applicant or student has studied does not consider the educational experience the individual may have had at school. It may be more relevant to consider the schools’ and colleges’ educational attainment in order to consider how this may have affected and enabled the decision to study medicine.
The demographic profile and destinations of ‘high achievers’

It is also relevant to consider the profile of academically high-achieving applicants who have the potential to obtain a place to study medicine. This helps to:

- Identify the profile of those who may be eligible to study medicine.
- Consider whether the profile of applicants to medicine is different from that of ‘high achievers’ who go on to study other subjects at a HEI.

To do this, ‘high achievers’ with science and maths A-levels were defined as those who accepted a place to study at a HEI and achieved all As or A* grades in any subject, along with A or A* in Chemistry and A or A* in Maths or Biology or Physics. This criterion was selected as it was felt that it reflected the standard academic entry requirements of most medical schools. Only A-level results were used as to use Scottish Higher results would require a re-coding of the data. Furthermore it should be noted that UCAS data tend to be more complete for younger UK applicants, again demonstrating a limitation in the data.

A summary of the socio-demographic profile of ‘high-achievers’ at A-level notes that:

- A higher proportion are male compared to applicants to study medicine.
- Over a quarter (27%) identify as coming from a BME background, a figure lower than the proportion of applicants to study medicine via all entry routes.
- A higher proportion are also identified as coming from an independent education background (25%) and also report higher levels of previous parental experience of higher education (76%): this could indicate that independent schools generate higher A-level results and so produce more ‘high achievers’ than state-funded schools.

Broad consistency is also seen with applications to study medicine when considering how ‘high achievers’ have classified their NS-SEC status, along with POLAR 2. Given the high-grade criterion on which accepted applications were selected, it is perhaps not surprising that the findings indicate a tendency for those who achieved high A-level grades to have a demographic profile suggestive of a more advantaged background.

Destination of ‘high achievers’

Along with considering the profile of ‘high achievers’, the type of university course this group enters was also explored.

It is clear that high achievers are attracted to apply, and are successful in obtaining a place, to study medicine, with 30% ‘high achievers’ in science in 2013 accepting a place to study medicine. In 2013, 5% of ‘high achievers’ proceeded to enter a dentistry course and 3% entered veterinary science. The proportion of ‘high achievers’ who entered medicine is also higher compared to other scientific subjects combined across the disciplines (for example, 14% physical sciences, 8% biological sciences and 6% mathematical sciences).16

---

16 These percentages do not include combinations of science subjects.
1. Evidence Base

Data sources

A summary of data sources which have informed this work has been listed below:

UCAS data

University and College Admissions Service (UCAS) manages the application services for access to higher education. Data were obtained for applications made to medicine through the three entry routes to study medicine as listed above, and also included aggregated data for all applicants to medicine for the years 2010–2013.

The following variables are included within these data:

- Age
- Gender
- Ethnicity
- Type of school attended
- POLAR 2
- Parental experience of higher education
- NS-SEC
- Domiciled Region

HESA data

Data on current medical students were obtained from the Higher Education Statistics Agency (HESA). Comparing data from UCAS and HESA shows the conversion from applicants to study medicine to becoming medical students.

The following variables for medical students in the 2012-2013 academic year are included within the obtained data:

- Age
- Gender
- Ethnicity
- Type of school attended
- POLAR 3
- Parental experience of higher education
- NS-SEC
- Region of application

17 Unless otherwise stated, data have been rounded to the nearest whole number.
18 A definition of POLAR can be found on page 25
19 A definition of NS-SEC can be found on page 21
1. Evidence Base

**General Medical Council**

**State of Medical Education and Practice**

The General Medical Council (GMC) draws on data collected through its function of regulating doctors in the UK and quality assuring medical education and training to produce a picture of the medical profession.

The following variables for all doctors on the GMC register are included within these data:

- Age
- Gender
- Ethnicity

**General Medical Council**

**National Training Survey 2014**

The General Medical Council (GMC) conducts an annual survey of all Foundation Training Year 1 (FY1) trainees. The 2013 survey asked questions on socio-economic status of all postgraduate doctors and in 2014 FY1 doctors were also included within the sample. Only data on FY1 doctors have been reported.

The following variables are included within the obtained data:

- Type of school attended
- Household receipt of income support while at school
- Receipt of free school meals while at school
- Parental experience of higher education
- Postcode data coded mapped to a measure of deprivation for each country in the UK

**Selecting for Excellence**

**Progress to date**

In the area of data and widening participation, the Selecting for Excellence project has:

- Collated data from multiple sources on widening participation in medicine. The analysis conducted has brought together existing and new data that have not previously been presented together.
- Met with the Who Cares Trust to understand data and widening participation issues relating to children and young people in care.
- Produced a submission for the Social Mobility & Child Poverty Commission recommending improvements to the data landscape.
- Responded to a consultation from the Higher Education Data and Information Improvement Programme on the potential reform of the Joint Academic Coding System.
Recommendations

Improving the coding of data about medical school programmes

There should be greater consistency in medicine course codes based on the type of medicine course to which people apply (i.e. standard entry, graduate entry and medicine with a preliminary year). Clear and reliable distinctions between these types of course in both HESA and UCAS data will help in assessing their relative benefit for widening participation.

While both are highly competitive courses, there would be a great benefit for medicine and dentistry programmes to be separated when reporting publicly available data.

Addressing gaps in data about medical school applicants and students

Easier access to and more detailed ‘postcode’/geographic data than those currently available through POLAR and the Index of Multiple Deprivation should be developed.

There should be stronger linkage between Department for Education data such as ‘EduBase’ and higher education data-sets. This would be valuable to improve the understanding of the educational context of medical school applicants. It is noted that efforts are underway to try to improve the ‘school level’ information provided by UCAS. In particular, information about schools’ average attainment at GCSE and A Level, percentage of students in receipt of free school meals and progression to higher education data would add significantly to understanding the profile of applicants. Eligibility for pupil premium would be another useful addition to the basket of measures about educational context. Learning from experience in Scotland would be useful, as there is greater access to these types of data. It is noted that the Higher Education Access Tracker combines these data and is a resource that should be explored by medical schools. The Standardised Tracking and Reporting Outcomes with Benchmarking and Evaluation (STROBE) tool developed by UCAS should also be explored.

To help ascertain the numbers of care leavers studying medicine, data collection and the quality of data available on care leaver status should be improved.

It is noted that improvements to the relevant section in the UCAS are being made and that the HESA record will now capture data on care leavers.

The Medical Schools Council should explore how to analyse data on those who make unsuccessful applications.
Continued monitoring

The Medical Schools Council must collate and publish a summary of data on the socio-economic profile of medical students and applicants every year. Reports should include the following metrics:

- **Identity**, including: measures of protected characteristics, and age, gender and ethnicity.

- **Family background**, including: National Statistics Socio-Economic Classifications (NS-SEC), parental/guardian experience of higher education and measures of family income. Data on whether people have been looked after by a Local Authority should also be considered.

- **Neighbourhood**, including: the Index of Multiple Deprivation and POLAR, along with applicants’ region of domicile.

- **Educational Context**, including: the type of school attended, percentage of students in receipt of free school meals at a school and average attainment at GCSE and A level.

To assist with continued monitoring, consideration should be given as to whether the cost and time required to access UCAS data can be reduced.

Opportunities to use the Unique Learner Number\(^\text{20}\) as a means to track the educational progress of individual young people should be explored. This would be helpful to understand whether the ULN could contribute to the evaluation of widening participation activity.

Medical schools must consider the potential to make use of data resources that track the progress of students from a widening participation background. For example, the Higher Education Access Tracker (HEAT)\(^\text{21}\) and the Standardised Tracking and Reporting Outcomes with Benchmarking and Evaluation (STROBE) tool developed by UCAS will be explored by medical schools in 2015.

---


\(^{21}\) [https://www.highereducationaccesstracker.org.uk/](https://www.highereducationaccesstracker.org.uk/)
2. Widening participation

Introduction

Widening participation has a variety of different meanings. For the purpose of this report it means increasing the number of people from groups that have historically had a lower participation rate in medical education.

Chapter one contains an analysis of the current demographics of students studying medicine in the UK. From this analysis it is clear that the key issue for medicine, and the one that is the focus of this report, is the unrepresentative number of students from a lower socio-economic background currently at medical school. The term unrepresentative is used because the percentage of students from a lower socio-economic background at medical school is lower than the percentage of people from these backgrounds in the UK. Analysis contained in chapter one of this report and in the previous Selecting for Excellence report provides more detail of participation rates across a number of different characteristics and this analysis has been used to establish the focus of this report.

The reasons for the low participation rate of students from a lower socio-economic background are complex. For many years medical schools have put in place different measures designed to tackle the problem. These include outreach schemes, the use of contextual data and foundation courses specifically designed to widen participation. None of these measures has had any substantial impact on the number of students from a lower socio-economic background studying medicine.

Additionally, unpublished analysis of UKCAT data shows that there is a high level of variation between the 22 medical schools that have used the test, both in terms of the number of applications they receive from applicants from a lower socio-economic background, and the number of these applications which are converted into offers and acceptances.

This is due to many factors, some beyond medicine’s control. However, one reason may be the diversity of approaches being used across the UK; greater consistency and a national approach may increase the impact of interventions. The Selecting for Excellence project has found that no one single intervention will solve medicine’s widening participation problem. Instead, a whole series of interventions is needed to encourage people from a lower socio-economic background to apply to medicine and to support them through the application process and beyond.
2. Widening participation

Outreach

The Office for Fair Access (OFFA) defines outreach as:

‘any activity that involves raising aspirations and attainment and encouraging students from under-represented groups to apply to higher education’.

At the start of this project data collected by the GMC through its quality assurance processes were used to determine that all medical schools currently run some form of outreach programme designed to encourage students from a lower socio-economic background to apply to medicine. However, it was clear from these data that approaches are varied. The GMC-commissioned research into selection methods and widening participation schemes run by medical schools recommended that further research be undertaken to establish the effectiveness of outreach in the UK. The Selecting for Excellence project commissioned this research in 2013 and the findings were published as an annex in the 2013 End of Year Report.

The research findings confirmed that, although all medical schools have outreach programmes, there is great variation in the form that they take. The research also found that insufficient evaluation was a common feature of most outreach schemes. As a result of these findings the Selecting for Excellence Executive Group determined that national guidance should be developed both to set expectations in terms of outreach and its evaluation and to share good practice between schools.

Support for the development of this guidance was provided by OFFA and Ceri Nursaw of Nursaw Associates was commissioned by the Selecting for Excellence project to create the guidance.

A journey to medicine: Outreach guidance was published in November 2014.

These are the key elements of the guidance that medical schools should deliver in order to make outreach effective:

- Build a programme that follows a Journey to Medicine from introductory to developmental to consolidation activities, which follow an individual’s life or learning experience.

- Use the skills, expertise, knowledge and resources of the parent university’s central outreach team, whether that is for training medical students, organising activities or for developing promotional materials.

- Medical students acting as ambassadors are often the best people to lead activity and their work should be integrated into the medical school’s wider programme.

“for outreach to be successful it must target young people in different ways at different points in their educational career”

22 A journey to medicine: Outreach guidance available at www.medschools.ac.uk
Ambassadors who reflect the social composition of the target population should be chosen to support the sense that university is ‘for people like me’.

- If working with primary schools, those which feed secondary schools which the medical school or university partner with on more intensive activities should be considered. This allows the work at secondary school to reinforce the students’ experience at primary school.

- Support young people’s subject choices for Scottish Nationals, GCSE and post-16, helping them to make the appropriate decisions and build their understanding and confidence in their ability and suitability for a career in the health service.

- Support post-16 students to develop the confidence, skills and knowledge to apply and make the transition to university as effectively as possible. There are many elements of admission processes, which can seem daunting to some students; therefore, it is important that there are programmes in place to support their application.

- Build programmes to help, support and advise teachers, parents and carers. They are highly influential in a young person’s decision-making process.

- Build a culture within the medical school that provides leadership and management support to coordinated outreach activities.

- Ensure evaluation is sought out and seen as essential to good management. Seek out information in order to learn how to better manage and deliver programmes and services, and thereby improve impact and benefits.

- Outreach is only one part of the student lifecycle. Admissions, transition to university, student support and future career advice should also be considered.

The Selecting for Excellence project believes this is the first subject-specific outreach framework of its kind and that it represents significant progress not just for medicine but for other professions which will be able to adapt the guidance to meet their own challenges in terms of widening participation.

**Recommendation:** Medical schools must use the Selecting for Excellence guidance on outreach to consider how they can strengthen the outreach currently provided.

Whilst the implementation of the guidance will mark significant progress in strengthening outreach in UK medical schools further work will still need to be done. The outreach provided by medical schools is generally focused on their local area; this is where they have developed relationships with local schools and communities. However, not every area of the UK has a local medical school; medical schools are often attached to universities which are located in cities. Large parts of the UK do not have access to outreach schemes run by medical schools. This is particularly the case in rural areas.

Research commissioned as part of this project and supported by HEE and OFFA, led by Dr Paul Garrud from Nottingham Medical School, found that ‘around half of UK secondary schools and colleges did not provide any applicants to medicine over a three-year period’. Clearly more should be done to reach students in these schools.

Within Scotland all the medical schools collaborate to ensure that all schools performing below the national average are part of the REACH outreach programme. In Scotland each of the five Scottish medical schools takes responsibility for providing outreach in a different geographical area ensuring that there is coverage across the whole country. An obvious solution to this problem
is that medical schools across the UK could collaborate on outreach which would mean that they would be able to pool resources and therefore target a wider geographical area.

**Recommendation:** The MSC should consider and test potential collaboration between medical schools on outreach programmes.

Whilst collaboration may widen the area that medical schools are able to target via outreach it is likely that remote rural areas would still not be reached. However, at this point in time it is not possible to say where these areas are in the UK and how many people are affected by a lack of outreach opportunities. Work needs to be done to establish the scale of the problem. Once this has been undertaken, and depending on the findings, one option could be to develop a national outreach programme that targets these areas to complement the outreach provided by medical schools. Any scheme of this type would need to be developed in partnership with medical schools to ensure it is fit for purpose.

HEFCE’s newly established national networks for collaborative outreach could assist medical schools in expanding medical outreach by allowing them to feed into the activity of their parent universities through these networks.

**Recommendation:** More work needs to be done to identify geographical areas across the UK where young people do not have access to outreach programmes run by medical schools. MSC should work with HEE and other bodies to establish what can be done to provide outreach activities to students living in these areas.

Widening participation is not just an issue for medical schools. It is an issue for the medical profession as a whole. It is accepted that doctors have a duty to teach and mentor junior colleagues for the good of the future of the profession. If widening participation is truly valued then it follows that doctors also have a duty to encourage people from all backgrounds to join the profession; they are the best possible role models for those interested in medicine as a career. Doctors at all stages of their training and working lives should be encouraged to become involved in outreach; indeed suitable younger doctors can provide excellent role models. The fact that doctors in training tend to be closer in age to the applicants themselves may make them better at communicating with this age group.  

**Recommendation:** Trained and motivated doctors must be encouraged to support outreach and activities designed to raise aspirations to study medicine. Royal Colleges and employers should consider how doctors might be recognised, through organised CPD, for their contribution to widening participation activity.

“Widening participation is not just an issue for medical schools. It is an issue for the medical profession as a whole”

**Recommendation:** Trained and motivated doctors must be encouraged to support outreach and activities designed to raise aspirations to study medicine. Royal Colleges and employers should consider how doctors might be recognised, through organised CPD, for their contribution to widening participation activity.

---

23 For example, the Royal College of Surgeons (London) is working with My Big Career to provide mentoring opportunities for disadvantaged students: www.mybigcareer.org
Better information for all applicants

One consistent message the Selecting for Excellence project received as part of the engagement processes undertaken to support this project was that potential applicants and their advisers, be they teachers or careers advisers, were confused about the entry requirements for and selection processes to medicine. There was also a lack of awareness about the types of widening participation activity medical schools already provide.

As a first step the Selecting for Excellence project concluded that medical schools need to look at their own websites to ensure that information on widening participation is easy to find. Medical schools have previously carried out a similar activity in relation to providing information for disabled applicants. In that case they agreed that all information should be available within ‘three clicks’ of the medical school’s home webpage. Selecting for Excellence would like to see the same approach applied to information on widening participation.

**Recommendation:** Medical schools must ensure that the details of any widening participation programmes they run are easily accessible on their websites; ideally it should only take ‘three clicks’ for a user to access this information.

Medical school entry criteria and selection processes are complex; this is to a certain extent inevitable given the popularity of the course and the fact that medical schools need to choose individuals who possess the values and attributes needed to be a good doctor not just those with the best academic record. In particular there is an increasing drive towards values-based recruitment across all the health professions. Nevertheless the Selecting for Excellence projects feels there is still scope to improve the way information on these processes is presented on medical school websites. On many websites it is hard to access this information.

**Recommendation:** Medical schools must review the information on selection available on their websites to ensure it is easy to understand and to locate.

MSC can help medical schools simplify the information they provide. As part of ongoing work with NHS Careers, now part of HEE, MSC is developing online information for potential applicants to medicine. This information includes a series of tables that clearly set out the entry requirements for each course that a medical school runs. The same format will be used for each course and this will make it easy for applicants to compare courses. It will also help applicants pick courses whose entry requirements meet their own strengths, e.g. if an applicant has a high UKCAT score, for instance, they can pick medical schools that place more emphasis on this in selection.

This information, along with general advice on applying to medical school and helpful links to websites such as BMAT, GAMSAT and UKCAT, will be available on the new, revamped NHS Careers website which is due to be launched in early 2015.

Whilst this collation of information and resources about selection processes and applying to medicine will be helpful to all applicants it is hoped that it will be

---

24 Further information on values-based recruitment is available at [http://hee.nhs.uk/](http://hee.nhs.uk/)
of especial help to applicants from a widening participation background who may have less support and advice provided for their applications than their more privileged peers.

**Recommendation:** MSC must continue to work with HEE to ensure the best possible information for potential applicants to medicine is provided by NHS Careers and other careers services.

**Expectations of a career in medicine and other options available in the NHS**

The recently published *Shape of Training* report\(^25\) makes it clear that the way medicine is practised and the specialties that will be needed to deliver this will change in the future. An ageing population means more patients with complicated co-morbidities which will require more generalists and general practitioners to manage and treat these conditions. Those entering the medical profession need to be aware that they are increasingly likely to be required to work in community settings and as GPs rather than in hospitals and as specialists. Applicants should be aware that the numbers of jobs in highly specialised fields such as surgery are likely to decrease.

At the same time advice to potential applicants should also point applicants towards the many different careers available in the NHS. This is not directly related to widening participation; all applicants should be aware of other options. Being a doctor is a demanding job and not all applicants, whatever their backgrounds, will have the right skills and attributes needed for a career in medicine; these applicants need to be aware that the NHS provides access to a wide range of healthcare professions and rewarding careers, including many that combine an interest and ability in science with a genuine interest in caring for the patient.

**Recommendation:** MSC and NHS Careers information provided to potential applicants must be designed to manage expectations of future careers in medicine. Any information must make clear what specialties the NHS will need in the future and highlight the need for more general practice and community based doctors. It must also highlight the fact that the NHS provides a wide range of other rewarding career opportunities outside of medicine.

As part of the Selecting for Excellence project an event for careers advisers was held and a survey of secondary school teachers was carried out. It was clear from both these activities that there is scope to do more to engage with these groups; particularly those working with state schools. Research commissioned by the Selecting for Excellence project using funding provided by HEE and OFFA and carried out by Dr Gail Nicholls in support of this project confirmed these findings. Focus group participants drawn from potential applicants to Leeds medical school said the following in relation to careers advice:

---

\(^{25}\) *Shape of Training* Final Report, October 2013. Available at www.shapeoftraining.co.uk
"I felt that most of our teachers just had no idea about the application process of medicine. Some of my teachers didn’t even know that it was an early application ahead of the other more general university applications. In terms of the date and things – they could be better informed."

Female respondent, State School, East Midlands.

"I think it would have been much easier to decide what I wanted to do if I had received some careers advice from school in order to push me in the right direction."

Female respondent, State School, North West.

MSC can provide more information on applying to medicine and bespoke resources for those advising applicants, but it is also important that efforts are not just focused on medicine but include other professions that work in the NHS such as pharmacy, healthcare science and the allied health professions.

**Recommendation:** HEE and others must consider how careers advice and information on the breadth of available healthcare careers can be promoted to teachers and careers advisers within primary and secondary schools.

**Recommendation:** MSC must produce guidance for careers advisers and teachers on supporting their students through the medical application process.

**Work experience**

The Selecting for Excellence Executive Group agreed that work experience – its purpose and quality – should become an area of focus for the project. This was informed by findings in *Fair Access to Professional Careers: A progress report* that work experience for medicine is “unstructured and ad hoc” and favours ‘young people with connections – including many sons and daughters of doctors’. Additional feedback on the problems associated with work experience was sought during engagement activity with teachers and careers advisers; their feedback confirmed that there is confusion as to how to access work experience and what types of activity constitute work experience.

The Selecting for Excellence project, with support from HEE and OFFA, also commissioned further research on whether work experience requirements act as a deterrent to applicants. Dr Gail Nicholls from Leeds Medical School was commissioned to carry out this work which focused on applicants’ views of work experience requirements through both surveys and focus groups. The following quotes highlight some of the problems perceived by applicants to medical schools:

“Every medical school seemed to want me to say different things about my work experience but none would specify what those things were and were unable to provide any helpful advice.”

Male respondent, State School, Yorkshire and Humber.

“I found the work experience departments at the hospitals I attempted to get work experience from extremely unhelpful and disinterested.”

Female respondent, State School, West Midlands.
“It [work experience] makes it harder for prospective students further down the socio-economic ladder to gain a place.”

Male respondent, State School, North East.

Therefore when the Selecting for Excellence project looked at work experience it focused on two main areas; increasing access for those from a lower socio-economic background and achieving consensus on the purpose of work experience.

Access and quality of placements

When the Selecting for Excellence project first considered work experience it felt that there were lessons that could be learned from other professions in terms of how they had increased access for those from a widening participation background. In particular the approach taken by the law profession through its PRIME commitment which heavily influenced policy development in this area. The PRIME commitment was developed in partnership with the Sutton Trust and is a scheme whereby law firms make a public commitment to prioritise work experience opportunities for students from a lower socio-economic background.

The Selecting for Excellence project team felt that this commitment could be applied to the NHS and the following criteria were developed with the assistance of the Sutton Trust and the Social Mobility Foundation. These criteria are the PRACTISE commitment:

The PRACTISE Commitment

**widening participation in health and social care work experience**

- We agree to prioritise work experience applications from students who:
  - have been eligible for free school meals and/or;
  - are the first generation to be applying to university having been at a school where at least 30% of pupils were eligible for free school meals
- We will advertise work experience opportunities openly.
- We will support students by providing financial assistance to ensure they can attend work experience. As a minimum we will provide refreshments and reimburse reasonable travel expenses.
- We will inform participants about the range of careers available in the medical profession and wider healthcare sector.
- We will support the development of key personal skills and an understanding of the values of the NHS Constitution that are required for entry into the healthcare professions and to optimise the patient experience (e.g. patient focus, safety, team working, communication, professionalism).
- We agree to provide PRACTISE sponsors with an evaluation of the impact of the scheme. This will be submitted six months after signing up to this commitment.

Placement providers may wish to add additional criteria. For example, evidence of a commitment to study medicine, or demonstration of likely academic success could be added to the criteria above if deemed appropriate and shared with the PRACTISE sponsors.

The project team’s original intention was that MSC would run this scheme with the assistance of Local Education and Training Boards in England and their equivalents in the devolved administrations. However, as this work developed it became clear that HEE would be best placed to run this scheme in England as it has a clear
relationship with placement providers through the commissioning of education and training. This would also mean that the scheme could be extended to include all applicants wishing to join the health service; not just those wishing to become doctors.

HEE has included the PRACTISE commitment in its Widening Participation Strategy and it has added criteria to ensure it covers professions other than medicine and can be used for mature learners. It will not be enough to simply roll out the PRACTISE scheme; evaluation must be undertaken to ensure that once operational it works and that it truly benefits those from a lower socio-economic background. For the scheme to be truly beneficial the Selecting for Excellence project suggests that it should be adopted by at least 250 NHS trusts in England.

**Recommendation:** HEE, through its Local Education and Training Boards and NHS partners, must use its influence to promote and support the adoption of the PRACTISE commitment by healthcare organisations and review the level of its adoption by December 2015.

**Recommendation:** Placement providers, HEE and others must develop and put in place monitoring and evaluation mechanisms to assess the uptake and impact of work experience programmes by participants from a widening participation background.

HEE’s remit only extends to England and therefore MSC must do more work to ensure the PRACTISE commitment is also adopted in Northern Ireland, Scotland and Wales.

**Recommendation:** MSC must work with the devolved administrations to ensure the PRACTISE commitment is adopted across the UK.

At present the PRACTISE commitment has only been discussed in relation to hospitals. It is crucial that work is done to extend the scheme to cover placements in GP practices. Reports such as *Shape of Training* strongly suggest that in the future more care will take place in community settings and GP practices and therefore it is important that potential applicants to medicine have a chance to experience this aspect of care before they join the profession.

In the research commissioned on work experience, GP placements were flagged as an issue; potential applicants found it hard to gain placements in this setting due to concerns around issues such as confidentiality. The research recommendations call for ‘a formal evaluation of the primary care projects taking place across the country including work done by the University of Leeds to evaluate best practice in primary care and this should influence the national provision of placements through liaison work with the Royal College of General Practitioners (RCGP) and the Postgraduate and Undergraduate Departments of General Practice’.

**Recommendation:** MSC must work with HEE, the RCGP and other bodies to ensure that the PRACTISE commitment is extended to GP practices and other primary care providers.
The purpose of work experience

In order to tackle the confusion that exists for applicants and their advisers as to the purpose of work experience the Selecting for Excellence project team has worked with admissions deans from all 33 UK medical schools to come to a consensus as to why work experience is important and what type of experience applicants should have.

As a result of this work a definition of work experience has been developed:

Work experience is any activity that allows an applicant to demonstrate:

- That an applicant has had people-focused experience of providing care or help to other people and that they understand the realities of working in a caring profession.

- That an applicant has developed some of the attitudes and behaviours essential to being a doctor such as conscientiousness, good communication skills, and the ability to interact with a wide variety of people.

- That an applicant has a realistic understanding of medicine and in particular the physical, organisational and emotional demands of a medical career.

Guidelines for applicants on work experience have also been developed and are available on the MSC’s website.26 Work experience guidelines for applicants to medicine makes it clear that applicants are strongly recommended to undertake a caring or service role as part of their work experience and that they should also consider some direct observation of healthcare. However, the guidelines also make it clear that clinical work experience is not essential if the applicant has done research to understand what being a doctor involves. It also makes it clear that paid employment is valid work experience and that it can provide applicants with opportunities to develop some of the skills and attributes needed to be a doctor. The guidelines discourage applicants from undertaking multiple periods of shadowing doctors, which better connected applicants might find easier to arrange, and instead focuses on encouraging them to undertake caring or service experience.

Medical schools have all signed up to these guidelines but it will also be important that they are used in their selection processes. For example, scoring of personal statement or interview questions must not give preference to those with clinical work experience at the expense of those who have undertaken volunteer work or paid employment.

Recommendation: Medical schools must implement Work experience guidelines for applicants to medicine and ensure that all aspects of their selection processes fit with the principles laid out in the guidelines. They must also clearly signpost the guidelines on their websites and other published materials aimed at applicants.

Recommendation: The Selecting for Excellence guidelines on work experience must be reviewed in 2017 to ensure that they remain fit for purpose.

“scoring of personal statement or interview questions must not give preference to those with clinical work experience at the expense of those who have undertaken volunteer work or paid employment”

26 www.medschools.ac.uk
Volunteering

The work experience guidelines also emphasise that volunteering can provide very helpful work experience for those wishing to become doctors. Research carried out by Dr Gail Nicholls of Leeds Medical School confirms that potential applicants to medicine find volunteering a rewarding experience:

“Medical work experience has given me an insight into the profession, but shadowing….has taught me very little in terms of skills compared to voluntary sailing instructing and helping in a care home.”

Male respondent, State School, South West.

“I have gained most experience and skills in my voluntary work in care homes, opportunities as head ambassador at my sixth form and other mentor opportunities within school.”

Male respondent, State School, West Midlands.

In order to develop more opportunities for young people to undertake volunteering within the health service MSC has agreed to work with Step up to Serve and the Association of UK University Hospitals (AUKUH) to promote volunteering in the health service and to facilitate contacts between young volunteers and those organising voluntary service within the NHS.

MSC has agreed to work with Step up to Serve, the #iwill campaign and the Association of UK University Hospitals to promote volunteering in the health service.

**Recommendation:** MSC and AUKUH must work together to facilitate volunteering opportunities for young people within the NHS.

---

2 Volunteering programmes should be based on the six principles for social action as defines by Step up to Serve:

The 6 agreed principles are that social action should be:

- **Challenging:** stretching and engaging as well as exciting and enjoyable.
- **Youth-led:** led, owned and shaped by young people.
- **Socially Impactful:** creating positive social change that is of benefit to the wider community as well as to the young people themselves.
- **Progressive:** progressing to other programmes and activities.
- **Embedded:** becoming the norm in a young person’s journey towards adulthood and a habit for life.
- **Reflective:** valuing reflection, recognition and reward.
Alternative entry routes to medicine

Foundation Courses

Selecting for Excellence recognises the diversity of foundation years which are intended to allow people from a wide-range of backgrounds access to medicine. Some models are intended for high-achieving students who do not have a background in the sciences, whereas others are intended for those who do not quite have the required grades to access an MBBS through a traditional route.

Foundation years intended for those with a disadvantaged socio-economic background are a valuable instrument in widening participation, offering people whose educational adversity would prevent their progression through medical schools’ selection processes the opportunity to enter medicine. Analysis in chapter one shows that more students from a lower socio-economic background use foundation courses in comparison to other types of courses.

The experience of medical schools which offer foundation years for students from a widening participation background also suggests that a high proportion of those who enter foundation years go on to thrive as medical students and progress to have successful careers in medicine.

Nevertheless, it is recognised that, by their very nature, foundation years require a high degree of resource from medical schools, limiting the number of places that schools can provide. The experience of medical schools suggests that successful foundation years create a supportive and close-knit experience for students, rightly requiring a high-level of investment from staff. While this environment is conducive to the progression of confident, high-achieving medical students, only a minority of students with a widening participation background and aptitude to study medicine are likely to be able to access a foundation year. Additionally, undertaking a foundation course increases the cost of medical education for students as they have to pay fees for an additional year of study.

Consequently, foundation years should not be seen as the only way to widen participation in medicine. Foundation year students are selected according to their aptitude to study medicine, in the recognition that an additional year will help to reinforce knowledge and build confidence. The achievements of this group of students should not be downplayed.

To widen participation in medicine, a multi-factorial response is required. Foundation years should be seen to be part of an arsenal of responses to a complex and multifaceted problem. Such a response will also need to consider the use of contextual information, outreach, selection and the provision of transparent information to potential applicants.

Recommendation: Medical schools must consider the impact that their widening participation activities have had and consider whether, based on these outcomes, they should introduce a foundation course or expand the course they currently run. This evaluation should take into account value for money and the impact that interventions have on widening participation.
Access Courses

Access courses provide a route for learners, and in particular mature learners, wishing to study medicine or dentistry who do not have A-level or equivalent qualifications in Biology and Chemistry. They are typically delivered in further education colleges rather than medical schools or universities. These routes can help to widen participation in medicine and dentistry by providing an entry route to those with different experiences and backgrounds from those who are eligible for standard entry and graduate entry medical and dental programmes.

In 2012, MSC undertook work to clarify medical school expectations of access courses and, as a result of this, guidance was produced setting out acceptability criteria for access courses which would allow medical and dental schools to consider applicants who had used these courses.

Recommendation: MSC must continue to promote the guidance on access courses to medical schools.

Graduate Entry Courses

Graduate entry courses are not specifically designed to increase the numbers of students from a lower socio-economic background. Instead they provide another option for students wishing to study medicine who already have a degree.

It is hard to determine whether they have any significant impact on widening participation as defined in this report. In part this may be because it is harder to assess the socio-economic background of older applicants as measures such as parental occupation arguably have less of an impact. However, in the absence of clear data the Selecting for Excellence project team cannot recommend graduate entry courses as a tool for widening participation although they do make a significant contribution to increasing the diversity of the medical profession in other ways. The fact that these courses bring individuals into the profession from varied backgrounds is to be valued.

The funding arrangements for students on graduate entry courses vary across the UK with different arrangements in place across the devolved administrations. What is clear, however, is that students on these courses are dependent on the financial support package currently in place.

Recommendation: Any future changes to the NHS Bursary should protect graduate-entry medical students who are from under-represented groups.

Medical schools should also be mindful of the work that HEE and others are doing to encourage those already working in the health service to access further education and training opportunities. This work has yet to be developed so this report cannot make any concrete recommendations as to what medical schools should specifically do in relation to this issue.

Recommendation: Medical schools must keep up to date with HEE’s (and relevant devolved administrations bodies’) work to encourage those in other health professions to consider other NHS careers/courses and assist where appropriate.
Contextualised admissions

Research published by Supporting Professionalism in Admissions (SPA)\(^\text{28}\) confirms that there is a secure evidence base for using contextualised data in admissions’ processes to widen participation. Many medical schools in the UK already use contextualised data in their selection processes although the form this takes varies. Research commissioned by the Selecting for Excellence project and led by Dr Paul Garrud from Nottingham Medical School found that medical schools use more sources of widening participation data than their parent universities.

The Selecting for Excellence project has found that contextualised admissions is a powerful tool in widening participation and medical schools should continue to use it in their overall selection processes.

Research has shown that students from disadvantaged backgrounds are less likely to be missed in the admissions process where contextual data is being used. It can help universities and medical schools recruit students who have the greatest potential to get the best outcomes from higher education where there is a pool of highly qualified applicants. The application of contextual data is a key element of an admissions process which sets out to be fair to all and which strives for academic excellence.

**Recommendation:** All medical schools must consider and evaluate their approach to the use of contextual data.

Transparency for applicants as to what data will be used in contextualised admissions is very important. Selection for Excellence realises that the use of contextual data is problematic for medical schools as there are often concerns that it will be used to disadvantage students who are academically able. However, focus groups with patients and the public run by the Selecting for Excellence project team found that attendees were broadly supportive of its use.\(^\text{29}\)

It would be very helpful for medical schools if the Department of Health were to confirm that they support the use of contextualised admissions in selection to medical school.

**Recommendation:** University Vice Chancellors, the Department of Health (England) and those responsible for health and education in the devolved administrations should publicly endorse the principle of contextualised admissions for medicine.

More detail on how medical schools should use contextualised admissions will be given in Chapter 4 – Selection Methods.

---

\(^{28}\) Contextualised admissions: Examining the evidence, Supporting Professionalism in Admissions, 2013. www.spa.ac.uk

\(^{29}\) A full report of the discussions held at the patient focus groups is available at www.medschools.ac.uk
Supporting students

One issue that the Selecting for Excellence project has been keen to address is how students from a widening participation background can be supported once they enter the course. This was also highlighted as an issue by in the GMC-commissioned research led by Professor Jen Cleland.

In many ways this is a wider issue than just how to support students from a widening participation background. Students with disabilities or health conditions may also require additional support and every student has their own individual needs which, if addressed proactively, are not a barrier to students both succeeding and excelling. Interventions such as the provision of education around learning styles and access to study support can benefit all students.

**Recommendation:** Medical schools must recognise that all students are individuals and may need support arising from their individual circumstances. This includes widening participation students whom medical schools should support to ensure they are able to progress and reach their maximum potential.

To help medical schools address these issues the Selecting for Excellence project has developed *A journey to medicine: Student success guidance* which provides advice and examples of good practice in relation to student support with a particular focus on widening participation. This work has been undertaken on behalf of the project by Ceri Nursaw of Nursaw Associates and has been supported by OFFA.

**Recommendation:** Medical schools must implement the Selecting for Excellence project’s *A journey to medicine: Student success guidance*.

**Recommendation:** Attrition rates and benchmarks drawn from the higher education sector as a whole must be used to evaluate the success of medical schools in supporting students from widening participation backgrounds.
League Tables

One barrier to widening participation raised by medical schools is the emphasis placed by those putting together university league tables on entry tariff; requiring high grades at the point of entry moves universities up the league table or maintains their position. Medical schools are often put under pressure by their parent universities to set and maintain high entry criteria; medicine is a popular course and therefore there is no shortage of applicants and less competition between courses run by different universities. But this can impact on the ability of medical schools to use contextualised information to lower the tariff for those from a widening participation background and to inform applicants that they will do this.

It would be helpful if those who compile league tables would broaden the indicators on which league tables are based to include rating medical schools and universities on their commitment to widening participation. This would have a positive impact on the culture of widening participation across UK universities.

**Recommendation:** Those responsible for compiling university league tables should place less emphasis on entry tariff and should instead develop a way of rating universities on their commitment to and impact on widening participation.

Recognising excellence in widening participation

The Selecting for Excellence project recognises that there are challenges for medical schools in widening participation. While medical schools have indicated that they can and will play their part in widening participation they cannot address all the issues that contribute to the lack of students from a lower socio-economic background studying medicine. Many of these issues stem from inequalities in the UK education system which is why other professions and universities that require high levels of attainment, including dentistry and veterinary science as well as highly selective universities, also struggle to achieve a student body that is representative of the UK in terms of socio-economic background. This is further confirmed by research carried out by Nottingham Medical School to support this project which found ‘a substantial majority (80%) of medicine applicants came from around only 20% of schools or colleges: these were more likely to be selective schools (grammar or independent) or large sixth form colleges.’

However, medical schools have indicated that they are committed to tackling the problems that they can solve and their efforts to do so should be formally recognised and rewarded. Therefore Selecting for Excellence proposes that an awards scheme is developed that recognises the progress that individual schools make in widening participation. This scheme should be similar to the Athena SWAN awards which have done much to increase the number of women involved in academic medicine within medical schools.

**Recommendation:** HEE and others should develop or sponsor an award recognising and celebrating excellence in widening participation by medical schools, and other institutions providing healthcare education.

“a substantial majority (80%) of medicine applicants came from around only 20% of schools or colleges”
3. Role of the doctor

Introduction

This chapter examines what medical schools are selecting for during the selection process. This is the starting point for all selection processes; unless it is clear what the outcome expected is it is impossible to know how and what to test.

Medical schools have agreed that selection into medical school implies selection into the medical profession. However, the medical profession is varied and doctors are not only required to develop therapeutic relationships with their patients but also to undertake diverse roles working in numerous specialties and undertaking roles encompassing research, teaching, leadership and management. Therefore the skills and attributes that need in order to be tested at the point of admission are also complex and varied.

This chapter looks at what the skills, attributes and values are that should be tested at the point of admission and the steps that the Selecting for Excellence project team have taken to identify them.

31 MSC, Guiding Principles for the Admission of Medical Students, 2004, revised 2010
Role of the Doctor Consensus Statement

In 2009 the MSC published a consensus statement on the role of the doctor.32 The statement defines what a doctor does within the healthcare team. Therefore its use in admissions is to identify what skills and qualities an applicant needs at the point of selection which will allow them to learn to be a doctor as set out in the statement. It is important to note that many of the skills set out in the consensus statement will be learnt at medical school but nevertheless there are some values and attributes that applicants need to help them succeed in this process.

The development of the consensus statement was supported by a number of conferences and events and the final version was approved by all four of the UK Chief Medical Officers. A number of other organisations also approved the statement by becoming signatories. These bodies are:

- The Academy of Medical Royal Colleges
- The Association of UK University Hospitals
- The British Medical Association
- The Council of Postgraduate Medical Deans
- The GMC
- The King’s Fund
- The Medical Schools Council
- NHS Employers
- The former Postgraduate Medical and Education Training Board

As part of the overall Selecting for Excellence project it was agreed that the consensus statement should be updated to ensure that it remained fit for purpose and to reflect recent developments within the NHS.

Updating the statement

The process for updating the statement involved asking the original stakeholders to suggest changes in the light of recent changes to, and public enquires into, the health service. Additionally the Selecting for Excellence project team ran a series of focus groups with patients and the public to test their perceptions as to the role of the doctor. Changes have been made to the statement in light of the feedback from the focus groups and the original signatories.

The Role of the Doctor Consensus Statement has now been updated and is available on the MSC’s website.33

---

32 Available at www.medschools.ac.uk
33 Available at www.medschools.ac.uk
3. Role of the doctor

Identifying the core values, skills and attributes that should be tested at the point of selection

Developing a common statement

The updated Role of the Doctor Consensus Statement provides guidance on what a doctor does and gives indications as to the implications of this in terms of the attributes a medical student needs at the point of selection. However, the Selecting for Excellence project felt that the values that need to be tested at selection should also be identified.

The project felt that the development of a statement setting out the core values, skills and attributes needed to be a doctor would be valuable for two reasons: firstly it would encourage consistency in selection by setting out clear expectations as to the core elements that selection should test; secondly a statement would benefit applicants by making it clear what medical schools are looking for during the selection process.

The Selecting for Excellence project team identified two main sources of values that were used to create the common statement on the core values, skills and attributes needed to study medicine: the GMC’s guidance *Good Medical Practice*[^34] and the values contained in the NHS Constitution[^35].

These sources of values were mapped to each other and the skills identified in the Role of the Doctor Consensus Statement. Feedback from focus groups held with patients and the public was also added as it was felt that it was important that their views were taken into account. Once the mapping exercise was completed the results were used to develop the final version of a common statement on the values and attributes needed to study medicine. The final version of the statement was tested with sixth form students from two different schools to ensure that its target audience understood the content.

Content of the statement

The statement is set out under the same headings used in *Good Medical Practice* as this is the guidance on professional and ethical standards that applies to all registered doctors.

The core values, skills, and attributes identified in the statement are listed in the text box below. Advice is given within the statement as to why these are essential to both practising doctors and medical students. Skills that students will learn during their time at medical school are also identified within the full statement to provide context.

[^34]: Available at www.gmc-uk.org
[^35]: Available at www.nhs.uk/choiceintheNHS/Rightsandpledges/NHSConstitution/Pages/Overview.aspx

"The statement is set out under the same headings used in *Good Medical Practice*"
3. Role of the doctor

Skills, values and attributes

- Motivation to study medicine and genuine interest in the medical profession
- Insight into your own strengths and weaknesses
- The ability to reflect on your own work
- Personal organisation
- Academic ability
- Problem solving
- Dealing with uncertainty
- Manage risk and deal effectively with problems
- Ability to take responsibility for your own actions
- Conscientiousness
- Insight into your own health
- Effective communication, including reading, writing, listening and speaking
- Teamwork
- Ability to treat people with respect
- Resilience and the ability to deal with difficult situations
- Empathy and the ability to care for others
- Honesty

Implementing the statement

The purpose of the statement is primarily to help applicants prepare for their application to medical school by giving them an outline of what skills, values, and attributes might be tested. To that end the statement that has been developed will be adapted to provide more advice to applicants as to what the core values, skills, and attributes mean and how they might evidence them during the selection process. A similar document should also be developed to help careers advisers and teachers understand the statement and how they might use it to advise those wishing to apply to medical school. The Selecting for Excellence project has identified this as a key priority and one that MSC should address as soon as possible.

Recommendation: MSC must provide additional guidance to applicants and careers advisers/teachers based on the statement of the core values, skills and attributes needed to study medicine by March 2015.

The statement should also be used by medical schools as they design and develop their selection processes. It is important to note that these are the core values, skills, and attributes that have been identified as necessary to study medicine; medical schools may also want to test for other things important for their particular mission.
However, those medical schools wishing to test additional capabilities should clearly state this on their websites and other materials provided for applicants.

**Recommendation:** Medical schools must utilise the common statement on the core values skills and attributes needed to study medicine in designing and developing their selection processes.

Medical schools will measure these skills, values, and attributes in appropriate ways within the overall selection process. However, work should be done by MSC and medical schools to determine the best ways of testing these core values, skills and attributes.

**Recommendation:** MSC must work with medical schools to determine the best ways of testing the values, skills and attributes set out in the common statement.

### Values-based recruitment

The Selecting for Excellence project is aware that Health Education England (HEE) has also been doing a large amount of work to examine how and why values should be considered during selection processes to healthcare subjects as part of its work on values-based recruitment.

Medical schools are not directly subject to the national core requirements that HEE has developed, which are set to be in place in HEIs by April 2015, as medical education is not directly commissioned by HEE. Nevertheless the Selecting for Excellence project is supportive of HEE’s work in this area and therefore it feels that medical schools should work towards compliance with the core requirements whether or not they are based in England.

**Recommendation:** All medical school selection processes must involve evidence based assessment of core values.

HEE’s core national requirements for values-based recruitment were launched in October 2014.³⁶ In summary they state:

- **Materials produced for potential applicants, for example prospectuses, should reference the importance of values.**
- **The values used in selection processes should be mapped to those in the NHS Constitution.**
- **Patients and the public should be involved at some point in the recruitment process.**
- **The selection process should involve a structured, face-to-face interview.**
- **Feedback should be given to applicants if requested.**
- **The values in the NHS Constitution should be embedded in curricula.**

³⁶ Health Education England, Values based recruitment framework, October 2014. Available at www.hee.nhs.uk
The majority of UK medical schools are already compliant with these requirements. As already stated the new common statement on the core values, skills, and attributes needed to study medicine has used the values contained in the NHS Constitution and mapped them to the contents of Good Medical Practice and therefore medical schools who use the common statement in their selection processes will be compliant with this core requirement. The Selecting for Excellence project feels that it is important that medical schools continue to engage with the values-based recruitment agenda.

**Recommendation:** As part of the implementation of the selecting for excellence project MSC must ensure that medical schools’ selection processes take into account HEE’s work on values based-recruitment.
4. Selection methods

Introduction

Medical school selection processes are complex. Medical schools are picking individuals who will ultimately enter the health service as doctors. This means that factors other than academic attainment have to be considered; medical schools have to judge whether applicants have the necessary core skills, values and attributes which can be developed during their time at medical school in order to become a good doctor.

One of the two reasons for the instigation of the Selecting for Excellence project was to respond to a research report commissioned by the GMC into the selection methods used by UK medical schools.37 The research which was published in February 2013 found that medical schools use a variety of different methods for selecting students, but that evidence was varied as to the effectiveness of these methods.

One aim of the Selecting for Excellence project was to determine whether greater consistency between medical schools regarding selection methods would be feasible. The issue of feasibility relates to whether there is evidence to suggest that medical schools use particular methods over others because they are more effective at selecting students who excel on the course and make good doctors. The intention is not to prescribe to schools what type of student they should pick as each school has its own mission, although clearly all medical schools want to pick individuals who will make good doctors. Rather, this work is designed to provide schools with evidence as to which methods work best.

In the 2013 GMC report, the research team, led by Professor Jen Cleland of Aberdeen Medical School, found ‘that the evidence for multiple mini interviews (MMIs), aptitude testing, situational judgement tests (SJTs) and selection centres is ‘better’ overall than that for traditional interviews, references and autobiographic reports’.38 These findings have already had an impact on the methods medical schools use, with a number of schools now placing less emphasis on scoring personal statements.

In order to make further progress on improving consistency in selection methods, the Selecting for Excellence project commissioned research from the same team, again led by Professor Cleland, to look at this issue. The final report of this project is available on the MSC website and the main findings form the basis of this chapter. The report was commissioned by the Selecting for Excellence project with the financial support of HEE and the Office for Fair Access (OFFA).39

While the focus of this chapter is on selection methods, the impact that different methods have on widening participation is also a crucial concern and is referenced throughout.

---

37 Identifying best practice in the selection of medical students, Cleland et al, February 2013. Available at www.gmc-uk.org
38 e.g. UCAS personal statements
39 How can greater consistency in selection between medical schools be encouraged? A mixed-methods programme of research that examines and develops the evidence base, Cleland et al, December 2014. Available at www.medschools.ac.uk
Summary of research findings on selection methods

Interpretation of the wider literature relating to various selection methods

<table>
<thead>
<tr>
<th></th>
<th>Effectiveness</th>
<th>Process/fairness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reliability</td>
<td>Validity</td>
</tr>
<tr>
<td>Traditional interviews</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>MMIs</td>
<td>Moderate to high</td>
<td>Moderate</td>
</tr>
<tr>
<td>Aptitude testing</td>
<td>High</td>
<td>Various</td>
</tr>
<tr>
<td>Academic records</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Personal Statements</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Situational Judgement Tests</td>
<td>High</td>
<td>Moderate to high</td>
</tr>
<tr>
<td>Selection centres</td>
<td>Moderate to high</td>
<td>Moderate to high</td>
</tr>
</tbody>
</table>

Main findings on selection methods

The research identified some clear messages about the comparative reliability, validity and effectiveness of various selection methods for medical school admission.

- The academic attainment of candidates remains a common feature of all selection policies and the strength of evidence for its continuing to do so remains strong.

- The strength of evidence paints a relatively clear picture regarding structured interviews/MMIs, aptitude testing and SJTs being effective across several criteria. Selection centres appear worth exploring further.

- In terms of assessing different types of factors, the data suggest that SJTs and MMIs are the most valid predictors of inter- and intra-personal (non-academic) attributes such as empathy and integrity.

- The picture at this point in time is less clear for aptitude tests generally but there is emerging evidence that UKCAT and BMAT can enhance predictive validity and improve fairness.

- The strength of evidence for continuing to use personal statements is low.

- There is very little research on the incremental predictive validity of combining selection tools, although this is common practice.
Consistency

The research team commissioned by the Selecting for Excellence project was asked to consider whether there would be scope for the MSC to develop a national framework for selection to be used by all UK medical schools.

The conclusion of the research team was that at present there is not sufficient evidence to suggest that medical schools all adopt a single strategy for the selection of students. More work needs to be done to improve the evidence base before a framework can be developed and this chapter goes on to identify what steps can be taken to facilitate this. However, they did find that ‘there is sufficient evidence to state that medical school selection processes should be moving towards a combination of academic attainment, aptitude tests and multiple mini interviews (MMIs).’

Whilst it is disappointing that at present a national framework for selection cannot be developed, the report identified areas where further research and development can take place which may enable greater consistency in selection methods to be developed in the future. It is crucial that MSC and medical schools continue to gather evidence on the effectiveness of different selection methods so that in the future a national framework for selection can be developed.

**Recommendation:** Although evidence may not at present be available to enable a national framework for selection to be developed MSC and medical schools must continue to gather evidence to enable such a framework to be developed in the future.

**Recommendation:** Medical schools must evaluate whether they should develop a selection processes that includes elements of academic attainment, aptitude tests and multiple mini interviews (MMIs).

As work is done to develop best practice and guidance across a range of areas associated with selection it will be imperative that medical schools use this work to change and improve their own selection processes. The Selecting for Excellence project believes that the GMC will have a role to play in ensuring medical schools do this. As the regulator of undergraduate medical education and training the GMC rightly does not get involved in decisions around the selection of individual applicants. It does, however, set standards for the processes medical schools use to select students and it quality assures against these standards. When evidence is developed which clearly shows that certain methods are better than others the GMC has a role in ensuring that medical schools follow best practice.

**Recommendation:** The GMC should encourage adherence with evidence-based best practice through its quality assurance of medical schools.

“It is crucial that MSC and medical schools continue to gather evidence on the effectiveness of different selection methods”
Multiple mini interviews

The research clearly states that there is an increasing evidence base being developed to show that structured interviews and MMIs are an effective means of selecting students. In particular there is evidence to suggest that these interviews are a good way of testing values at the point of admission to medical school. Because MMIs are thought to be less susceptible to coaching than traditional interviews their use may benefit applicants from a widening participation background who are less likely to have access to coaching than their more privileged peers.

Further work on the use of MMIs should examine what impact their use has on widening participation. In particular any work to standardise MMI usage or format must not place widening participation applicants at a disadvantage by increasing the impact of coaching on performance.

Based on these findings the Selecting for Excellence project feels that there is more work that can be done by MSC and medical schools both to increase the use of MMIs and to strengthen the evidence base for their use. The research team states that ‘MMIs are not equal: they are … complex selection instruments with a wide range of options available in relation to item formats, instructions and scoring. In other words, the MMI of Medical School A might be more effective, in terms of predictive validity and fairness, than that of School B, and both might be better than that of School C, depending on their design.’

This finding suggests that there is work that MSC can do in partnership with medical schools to contribute to increase the effectiveness of MMIs already in use and to develop an evidence base that can be used to develop consensus as to what works best in terms of MMIs. This would involve working with medical schools to develop a bank of items that can be used in MMIs and using these items to build evidence of the types of items that work best to measure different values or skills. There may also be scope to share best practice with those involved in the admissions processes of other healthcare professions.

**Recommendation:** MSC must work with medical schools to facilitate the sharing of MMI items and the building of an evidence base as to the effectiveness of different forms of MMI items. The impact of MMIs on widening participation must also be evaluated as part of this work.

Selection centres

Selection centres can be defined as ‘A multi-trait, multi-method selection process whereby a number of the candidates’ competencies are assessed using a number of methods’.

Both the research report and feedback from admissions deans suggests that selection centres may be a way of both introducing consistency to medical admissions processes and increasing the collaboration between medical schools on the issue of selection.

Selection centres have other potential benefits; their use would mean that medical schools would be able to pool resources which in turn would mean that more applicants could be invited to the second stage of the application process than is the case when individual schools run interviews.40 This in turn would mean that there would be greater scope for those who might not fit the traditional applicant

40 And applicants would not need to undergo multiple interviews at different schools.
model to be invited to the selection centre, for example those identified through the use of contextual data. For applicants, particularly those from a lower socio-economic background, there would be an advantage in that they would have to prepare for, and attend, fewer interviews and aptitude tests.

It is important to note that if selection centres were to be introduced applicants would still need to be given the opportunity to visit the individual medical schools they had applied to, or wished to apply to.

Research commissioned by Selecting for Excellence and carried out by Dr Paul Garrud from Nottingham Medical School has found that there are patterns in the medical schools to which applicants apply in that when an applicant applies to X medical school there is a likelihood they will also apply to Y and Z medical schools. The research found that there are ‘seven groups of medical schools which are more likely to have co-application within than between groups’. These are helpful data in that they suggest there is scope to pilot selection centres as there are clusters of medical schools which are more likely to share an applicant pool.

Exactly what form selection centres might take will require further work and additional funding may be required in order to pilot their use.

**Recommendation:** MSC, in partnership with medical schools, must look into the feasibility of medical schools collaborating on the development of selection centres.

### Contextual data

This report has already recommended that all medical schools must use contextual data in their selection processes; this section will look at its use in more detail.

The 2014 research carried out by Cleland et al identified a number of different types of contextual information that medical schools can use in their selection processes and a number of potential problems associated with their use:

**Overview of the types of contextual data that may be used by university admissions tutors, and possible issues**

<table>
<thead>
<tr>
<th>Type and description</th>
<th>Possible problems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area/community focused</strong></td>
<td></td>
</tr>
<tr>
<td>Socio-economic data, area-based deprivation indicators, measures of participation. Postcode data allows analysis of the area in which applicants live against a range of data related to socio-economic indicators of relative disadvantage or rates of higher education participation.</td>
<td>Area-based measures are not necessarily indicative of specific individuals’ circumstances, e.g. Taylor et al (2013) found that 6% of students from independent schools were located in low-participation neighbourhoods (LPNs). Populations within neighbourhoods do not necessarily share the same characteristics.</td>
</tr>
</tbody>
</table>

---

41 Adapted from Moore, Mountford-Zimdars & Wiggans (2013)

42 Although some postcode-based measures, such as MOSAIC and ACORN, are based on much smaller geographic units (approx. 15 households) than public measures like POLAR and IMD.
### Selection methods

<table>
<thead>
<tr>
<th>Type and description</th>
<th>Possible problems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School or college focused</strong></td>
<td>School performance is often related to the school type (e.g., grammar schools are overrepresented amongst the highest performing schools). Issues arise in regards to whether applicants correctly report their educational establishment in their UCAS application as well as the question of how to treat applicants who have changed schools. The data may be hard to interpret, e.g., some applicants may overachieve in underachieving schools, some ‘disadvantaged’ schools may achieve good performance and some schools may manage the curriculum to influence their results. Comparing individual pupil attainment against a school’s average may indicate higher performance levels than their peers.</td>
</tr>
<tr>
<td><strong>Individual focused</strong></td>
<td>This data looks at a person’s constraints and opportunities. This is mainly self-declared data and is thus susceptible to misinformation/misunderstanding, and can be difficult to verify. Classification may be problematic and non-response can affect coverage of the data. Data available at the point of admission may not be available to researchers after a certain point and is not available to providers as part of admissions decision making.</td>
</tr>
<tr>
<td><strong>Outreach focused</strong></td>
<td>Individuals’ circumstances may be assessed at the pre-entry stage for inclusion in outreach programmes. This helps to reaffirm the providers’ commitment to widening access, and outreach data can be linked to applicants. There are small numbers in these types of programmes and they are not open to all (usually there is a local focus). Validating participation and completion in targeted programmes can be problematic (relies on institutional widening participation teams to input). Targeting of different outreach provision could be inconsistent. Communication may be an issue: outreach policies and programmes may change over time.</td>
</tr>
</tbody>
</table>

Additionally, chapter one of this report provides an analysis of the data available to monitor widening participation and some of the drawbacks and problems associated with different sources.
Based on these finding the Selecting for Excellence project feels that it is essential that when medical schools use contextual data they triangulate it with other sources to ensure the individuals they identify are truly from a widening participation background.

**Recommendation:** Medical schools must use more than one source and different types of contextualised data in their admissions processes. They must triangulate data to ensure the individuals they identify are truly from a widening participation background.

Whilst many medical schools already use contextualised data in their admissions processes the way in which they use it and the data that they use varies. In some cases this may be as a result of having to work within the frameworks set by their parent universities in relation to the use of contextual data. In their 2014 report Cleland et al say ‘There is little research examining the use, and outcome, of contextual data in medical schools admissions. This lack of evidence may explain, at least to some extent, the diversity of contextual data currently used by UK medical schools.’ They also make a strong recommendation that guidance should be developed to help medical schools use contextual data:

‘A range of contextual data markers and metrics are used across medical schools: irrespective of marker(s), all schools are struggling with their use and defensibility at the individual level. This is one area where clear guidance would be most welcome.’

The Selecting for Excellence project accepts this recommendation. It is clear that further research is needed to examine which data medical schools should use and how they should use them. This research should be commissioned as a priority and should be used to develop national guidance for medical schools on the use of contextual data. How contextualised admissions should be used in relation to graduate entry courses was another area identified by Cleland et al as needing further investigation and any national guidance should cover this point.

National guidance would also help medical schools use contextualised admissions as it would help them to defend their decisions if challenged by unsuccessful applicants. Additionally it would increase transparency for applicants, which is essential in terms of fairness and encouraging those from a widening participation background to apply.

The long-term impact of the use of contextual data should be something that is tracked through the UKMED project detailed below. Steps should be put in place to ensure that the database captures the types of contextual data medical schools use currently or may use in the future.

**Recommendation:** 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.

**Recommendation:** The long-term impact of the use of contextualised admissions should be tracked as part of the UKMED project.
Combining selection methods

Medical schools commonly combine the results of different selection methods in order to make their decisions on selection. For example they may use academic attainment, performance in aptitude tests and performance at interview in order to rank candidates.

The 2014 research by Cleland et al recommends that medical schools consider moving towards combining academic attainment, the results of aptitude tests and performance in MMIs in order to make decisions on selection. As individual methods they found that each of these methods had some predictive validity in picking individuals who perform well on the medical course although the predictive validity of MMI and some aptitude tests needs further development. What is not clear is how medical schools combine, sequence and weight these elements and what impact this has on issues such as the validity of individual methods and the process as a whole and widening participation.

For example research commissioned by the Selecting for Excellence project by Paul Garrud found that:

Selection processes that employ cut-off scores (e.g. three As at A-level; threshold scores on UKCAT or GAMSAT) have an appreciable effect on the socio-demographic profile of applicants. In particular, applicants from disadvantaged backgrounds (neighbourhood, family, and schooling) and some minority ethnic communities are less likely to meet these thresholds.43

At present the evidence base on selection methods looks only at which methods predict academic success on the medical course. This evidence base needs to be developed to include the impact that different methods, including situational judgement tests, have on selecting students with the values, skills and attributes to make good doctors.

It is clear that more research should be carried out into the impact of how different elements of selection processes are weighted and used.44 The findings of this research will of course bring closer the time when a common framework for medical selection can be developed.

Recommendation: MSC must commission research in 2015 to examine the impact of different weightings of admissions procedures on selection values and widening access.

Longitudinal evidence base

One of the key recommendations made by Cleland et al in the 2014 research is that longitudinal research should take place to establish the validity of different selection methods. At present, studies on the validity of selection methods only look at whether they are good predictors of performance on the medical course45 rather than whether they pick individuals who go on to be good doctors, often called ‘on the job’ validity.

---

43 However Tiffin (BMJ 2012) found that employing a cut off based on UKCAT had a less negative impact on widening participation than one based on A-level performance.
44 It also shows the urgent need for medical admissions to be contextualised in order to correct some of the imbalances associated with academic attainment.
45 With the exception of A-level performance, where McManus and colleagues have studied predictive validity in Royal College Membership exams.
In addition to determining the validity of selection methods, longitudinal analysis would also be helpful in assessing the impact of widening participation initiatives. This will be particularly important in assessing the impact of contextualised admissions; if it can be shown that those entering the course with lower academic attainment, which has been contextualised, go on to become successful doctors then this will have far reaching implications for medical admissions policy.

At present it is very hard to establish ‘on the job’ validity as it is hard to track students’ progress once they graduate from medical school and enter postgraduate education and training. At this point, data about their performance are held by different organisations. However, work currently being undertaken by MSC, the GMC and other stakeholders aims to address this lack of data linkage.

UK Medical Education Database (UKMED)

UKMED is a proposed database that would link performance and demographic data about students collected at medical school with equivalent data collected throughout postgraduate medical education and training. Data would be linked at an individual level, but reported on globally.

The project is at a very early stage; at present phase one of the project is looking at the feasibility of linking data collected during medical school selection processes with a limited pool of data collected as part of postgraduate medical education and training. Should this prove feasible and should funding become available to develop the database further then more data will be added to create a comprehensive database.

The proposal is that the UKMED database will be accessible to researchers wishing to use the data. Some of the key research questions that the project team would want to encourage researchers to use the database for include issues around the long-term validity of selection methods.

The Selecting for Excellence project is very supportive of the steps being taken to set up UKMED. It is crucial that this work progresses, as without a secure, longitudinal data set there will always be questions about the validity of selection methods. Stakeholders who hold data about performance across the continuum of medical education and training must engage with this project and allow the data they hold to be added to the database. This includes those who run aptitude tests such as UKCAT, BMAT and GAMSAT and organisations like Royal Colleges which are involved in postgraduate medical education and training.

The Selecting for Excellence project team has been reassured that the collection of data on students from a widening participation background and their progress forms part of the overall project plan. This is a welcome development.

**Recommendation:** The GMC and MSC must continue to develop the UK Medical Education Database. The development of the project must continue to ensure that in the long term UKMED can be used to evaluate the impact of widening participation initiatives.
As the UK evidence base on selection methods develops it will be important that medical schools also take into account best practice developed in other countries. Every country will have its own challenges in terms of widening access, including different targets in terms of which demographics of students are underrepresented on their courses. Likewise healthcare systems and career pathways for doctors will be different from those in the UK. However, work should be undertaken to establish, having taken these differences into account, whether there are lessons that could be drawn from the experiences of other countries.

The Selecting for Excellence project feels that the MSC is best placed to collect and share international evidence on selection and widening participation. On this basis the project welcomes the work MSC is doing, with the Association for the Study of Medical Education (ASME), to establish the International Network for Researchers in Selection into Healthcare (INReSH).

**Recommendation:** MSC must ensure that UK medical schools are aware of the latest thinking internationally on medical selection. To facilitate this MSC should continue, along with ASME, to support the INReSH conference.
5. Implementation

The Selecting for Excellence project has achieved much that is valuable in the 18 months since its inception including the development of guidelines for applicants on subjects such as values and work experience which will help those considering applying to medical school. Guidance documents on outreach and supporting students will support medical schools to further develop best practice. To continue to support long-term change and continuing improvement we have developed a robust implementation plan.

This chapter will set out a vision for how the recommendations of this report should be implemented. It will set targets in terms of improving the numbers of students from a lower socio-economic background studying medicine.
Widening participation targets

The setting of targets in relation to increasing the number of students from a lower socio-economic background is difficult. As set out in chapter 1, there are real issues with the data available on social background that can make it hard to identify individuals from a lower socio-economic background and other under-represented groups. This is why medical schools are encouraged to use more than one data source when using contextual data in admissions.

However, the Selecting for Excellence project believes that targets are important – medical schools and other bodies need to understand and be held to account on their progress and targets are the best way of doing this. Nevertheless a pragmatic approach has been taken with targets being based on the current percentages of students from a widening participation background across a range of different measures. If improvement is made on each of these measures then overall the number of students from a widening participation background will increase.

Ten year targets

The data that underpin these targets are HESA data on the demographics of medical students currently at medical school. As noted in chapter 1 there are drawbacks to many of the data used to measure the socio-economic background of medical students. These targets have been based on POLAR 3 data as this is the most complete data set available at present. However, the Selecting for Excellence project feels that medical schools and the MSC should work together to set further targets based on different data sets.

**Recommendation:** MSC must work with medical schools to develop additional targets for widening participation that utilise different data sets.

POLAR is a geographical measure that assigns post codes into quintiles based on participation in higher education. Postcodes in quintile 1 have the lowest participation rates. There are five quintiles in total and the target is based on increasing the percentage of students from the lowest two quintiles. These targets are based on the POLAR 3 data set that looks at youth participation in higher education.

<table>
<thead>
<tr>
<th>Quintile</th>
<th>2013 figure</th>
<th>2023 target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>2</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>3</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

Ideally all UK courses would be made up of 20% of students from each quintile. The figures above show that currently medicine has an over representation of students in quintile 5, therefore the targets are based on improving the numbers from quintiles 1 to 3 by taking 20% as the base rate and comparing that to the current figures. The target is not 20% for each quintile as academic attainment is lower in quintiles 1 to 3, therefore it is harder to recruit students from these quintiles to medicine.
Note: the methodology used to work out POLAR is subject to change and therefore these figures and targets will need to be reviewed regularly.

**Recommendation:** Medical schools must work towards meeting the targets for increasing the numbers of students from a lower socio-economic background.

These targets are 10 year targets but it is acknowledged that data sets and their effectiveness will change over time. Therefore it will be important that work continues to both track progress against these targets and to adapt them to reflect a changing data landscape.

**Recommendation:** MSC must report annually on medical school progress in meeting these targets.

**Recommendation:** MSC must undertake a formal review of these targets and progress achieved to date in 2019 to ensure they remain fit for purpose.

**Widening participation best practice indicators**

The Selecting for Excellence project has made a number of recommendations as to what medical schools must do in order to improve access for individuals from a lower socio-economic background. It is also important that medical schools are able to demonstrate that they have a commitment to widening participation and that as individual organisations they constantly evaluate the impact that their efforts to widen participation are having.

Annex A to this report contains a series of best practice indicators that medical schools can use to show their commitment to widening participation. This document has been produced by HEE, with the support of MSC, as part of its wider work to widen participation in healthcare education as set out in its *Widening participation: It matters* strategy. These are not mandatory requirements but it is hoped that they will support medical schools in furthering their widening participation work. As such the Selecting for Excellence project strongly recommends that medical schools should consider how they can implement the best practice indicators set out in the document.

**Recommendation:** Medical schools should consider how they can implement the best practice indicators set out in Appendix A.

**Implementation Governance**

The Selecting for Excellence project feels that in order for the recommendations in this report to be implemented a strong governance system needs to be put in place. The best people to drive change are those tasked with delivering that change in individual organisations; in this case this means the admissions deans who manage the selection processes within medical schools.
Selecting for Excellence therefore recommends that admissions deans are formally brought together in a new organisation to take forward the recommendations in this report that are targeted at medical schools. The MSC should provide organisational and secretariat support for this new organisation. The Selecting for Excellence project has noted that that medical schools working together on issues around assessment through the MSC Assessment Alliance has proved successful in increasing the sharing of best practice and collaboration. Therefore it is recommended that the new selection organisation is based on this model and is called the MSC Selection Alliance.

In common with MSC Assessment Alliance, the MSC Selection Alliance should have a democratically elected board formed of eight to ten representatives from medical schools who are admissions deans. Additionally, each medical school should nominate two members of staff involved in admissions to attend reference group meetings where all medical schools contribute their ideas as to what work the elected board should prioritise. These reference group meetings will also be a chance for schools to share best practice and discuss issues they have in common relating to selection.

In order to ensure that widening participation remains a core consideration of the MSC Selection Alliance, the terms of reference for this group will state that widening participation is a core responsibility of the Selection Alliance but also it will report on progress on an annual basis.

Observers from other organisations who can assist admissions deans in their work could be invited to both board and reference group meetings. For example, SPA has a huge amount of experience in advising on the use of contextual data and could be invited to attend meetings.

Selecting for Excellence feels that not only will the MSC Selection Alliance be the best way of implementing the recommendations in this report targeted at medical schools it will also strengthen the role of admissions deans within medical schools.

**Recommendation:** The MSC must set up a selection alliance to take forward the recommendations in this report that are targeted at medical schools.

**Oversight**

The newly formed MSC Selection Alliance will report to the directly to Medical Schools Council. However to ensure that good progress is made in widening participation an oversight group will be established to ensure that the MSC Selection Alliance continues to focus on these issues. This group should have similar membership to the Selecting for Excellence Executive Group. This group should meet twice a year to oversee the work of the MSC Selection Alliance in terms of widening participation.

**Recommendation:** The MSC must create an oversight group to ensure that widening participation remains at the heart of the work of the MSC Selection Alliance.
Appendix A:
Supporting widening participation in medical schools: Best practice indicators

Introduction

This appendix identifies and proposes an initial set of best practice indicators that medical schools should find useful in guiding and evaluating their current progress in widening access to medical school by underrepresented groups. Whilst appreciating the autonomy that medical schools have in determining their own admission procedures and processes, suggestions are given about how schools can evidence their progress in widening access which can then be utilised by a range of stakeholders who have strategic system responsibility and interest in promoting widening participation (WP).

Principles underpinning the best practice indicators

The proposed best practice indicators have been identified to:

- Enable initial consistency and transparency in the visibility of the widening participation agenda within medical schools.
- Support continuous improvement in that best practice indicators can be reviewed and reset once common practice thresholds have been achieved.
- Support medical schools by giving them examples as to how they can track their own progress in relation to WP.
- Enable and integrate monitoring, without adding to further undue additional burden, through existing assurance arrangements.
- Provide a means for recognising and celebrating best practice enhancement.
- The need and development of the best practice principles and indicators as set out here has been informed by the findings and/or strategic implications from the following the key reports:
  - Arc Network Ltd (2013) Contextualised admissions: Examining the evidence, Report to SPA, the Supporting Professionalism in Admissions Programme, Cheltenham: SPA
  - ARC Network (2013) Literature review of research into widening participation to higher education, available at www.hefce.ac.uk/pubs/rereports/year/2013/wplitreview/
  - Medical Schools Council, A Journey to Medicine: Outreach Guidance, available at www.medschools.ac.uk
## Best practice indicators

**Leadership: Desired practice**

There is demonstrable public commitment by lead accountable officers in all medical schools to widening participation and that this is reflected in the school’s strategic and operational plans.

Medical schools set out how they will address widening participation on a year-by-year basis and link this to a long-term strategy.

<table>
<thead>
<tr>
<th>How might this be evidenced?</th>
<th>How might this information be collected and utilised?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Appointing a lead for WP within the medical school.</td>
<td>• This information can be used to support requests for information from the Office for Fair Access and other stakeholders such as the Medical Schools Council, Health Education England and others who might request such information to gauge progress being made by medical schools in relation to widening participation.</td>
</tr>
<tr>
<td>• There is a current medical school strategy and/or action plan in place and endorsed by lead accountable officers for promoting WP within the school.</td>
<td>• Progress reports related to the implementation of any endorsed action plan and can be used as a source of evidence for review during relevant quality assurance visits.</td>
</tr>
<tr>
<td>• Specific actions for improvement for WP are identified and included in any current school plans.</td>
<td>• Getting feedback from applicants and accepted students, with known WP characteristics, about their experience of applying and effectiveness of the Schools WP programmes/activity.</td>
</tr>
<tr>
<td>• A WP commitment statement is included on the medical school’s website</td>
<td>• Reviewing and auditing the school’s websites, prospectuses and other key publicity information to ensure WP is clearly is referenced.</td>
</tr>
<tr>
<td>• The WP Commitment Statement is shared and is included in medical school prospectuses and is referenced at activities such as open days.</td>
<td>• Auditing the awareness of academic and other staff involved in student selection as to whether they can identify and articulate the Medical School’s specific WP priorities and the plans in place to achieve them.</td>
</tr>
<tr>
<td>• Academic and faculty staff involved in selection receive training on the school’s widening participation commitment.</td>
<td></td>
</tr>
<tr>
<td>• Equality and diversity training for all staff covers the need to be aware that students come from a variety of backgrounds and their need for support may vary.</td>
<td></td>
</tr>
</tbody>
</table>
**Engagement and Collaboration: Desired practice**

Medical schools review their communication and engagement plans to consider whether they target WP candidates sufficiently.

Medical schools ensure that they have plans in place to work with local schools and colleges, healthcare providers and other stakeholders (including other HEIs or medical schools where appropriate) to support widening participation activities, including outreach.

<table>
<thead>
<tr>
<th>How might this be evidenced?</th>
<th>How might this information be collected and utilised?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Review current profile of engagement using available data on participation rates in education, school performance and deprivation level in local areas to ensure that engagement on WP is focused in the areas of greatest need in the first instance.</td>
<td>• Producing an annual report detailing the approach, range and impact of outreach activities, with recommendations for further enhancement and active dissemination to stakeholders with an interest in widening participation.</td>
</tr>
<tr>
<td>• Medical schools carry out an audit to ensure the information on their websites about widening is easily accessible.</td>
<td>• Producing reports and action plans to support the development of further partnership agreements</td>
</tr>
<tr>
<td>• Identify options and put plans in place for establishing collaborative relationships with other WP initiatives, including those run at a national level and those run locally.</td>
<td>• Producing activity reports, planning schedules, timetables and resources which reflect the best practice set out in <em>A journey to medicine: Outreach guidance.</em></td>
</tr>
<tr>
<td>• Sign up and adoption of the Medical Schools Council’s <em>A journey to medicine: Outreach guidance.</em></td>
<td>• Producing a case study setting out the personal experiences of existing student ambassadors which can be used to help promote the Ambassador Scheme to new medical students.</td>
</tr>
<tr>
<td>• Produce a case study reflecting the degree of involvement by medical students in supporting ambassador and outreach schemes, benefits seen and inform plans for further development.</td>
<td></td>
</tr>
</tbody>
</table>
Evaluation and impact: Desired Practice

Measure demographics of current students and monitor how they change in relation to selection methods and/or admissions criteria changes.

WP activities, including outreach activities which are monitored and evaluated.

Admission processes are reviewed and evaluated against the baseline participation rate and agreed targets.

<table>
<thead>
<tr>
<th>How might this be evidenced?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Annual evaluation on selection processes and admission criteria to judge the trends and impact on WP of any changes made.</td>
</tr>
<tr>
<td>• Flags put in place to identify WP students and to track their progress through medical school. (This would also include monitoring for retention.) Where possible this should include evaluation of the long-term career progression of students.</td>
</tr>
<tr>
<td>• Publish admission equality evaluation performance on Medical School Website.</td>
</tr>
<tr>
<td>• Plan in place to assess and test the use and processes related to the use of contextual data; or, if currently using, produce an overall annual evaluation of the impact that the use of contextual data has had on WP.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How might this information be collected and utilised?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Producing an annual report that can be shared through appropriate internal quality and governance structures and can be actively disseminated to stakeholders with an interest in widening participation.</td>
</tr>
<tr>
<td>• Putting a tracker monitoring system in place.</td>
</tr>
<tr>
<td>• Making information available on the medical school website</td>
</tr>
<tr>
<td>• Producing a review report that is shared through appropriate internal quality and governance structures and is actively disseminated to stakeholders with an interest in widening participation.</td>
</tr>
</tbody>
</table>

It is recognised that some medical schools will already be able to evidence progress and/or achievement against the best practice indicators given here. It is anticipated that once initial threshold progress has been achieved by all Medical Schools that the indicators can be developed to set further stretch and improvement. Consequently it is envisaged that these best practice indicators will be reviewed on an scheduled basis.
Research and engagement

The Selecting for Excellence project team has met with a number of different organisations and groups as part of the development of the project. Research has also been commissioned to develop the recommendations in this report. This section provides details as to these engagement and research activities.

Research

- A review of current practice to support Widening Participation in Medicine, J Cleland (Aberdeen Medical School), and S Nicholson (Queen Mary University) – 2013. Published on MSC website
- *How can greater consistency in selection between medical schools be encouraged? A mixed-methods programme of research that examines and develops the evidence base J Cleland (Aberdeen Medical School), J Dowell (Dundee Medical School), F Patterson (Cambridge University and Work Psychology Group) and S Nicholson (Queen Mary University). 2014 – published on MSC website
- *Work experience: a deterrent to applicants to medicine from a widening participation background? G Nicholls, D Wilkinson, N Danks and L Stroud (Leeds Medical School). 2014- published on MSC website
- *Help and hindrance in widening participation: commissioned research report P Garrud, Nottingham Medical School

* Denotes support provided by HEE and OFFA

Engagement

- Careers advisers – focus group report available on MSC website
- Medical school admissions deans – Symposium report available on MSC website
- Teachers – survey results available on MSC website
- Patients and the public – three focus groups held – report available on MSC website
- Postgraduate medical education and training leaders – report from roundtable available on website
- Who Cares – met in 2014
- UCAS – met in 2014
- NHS Careers – worked with extensively
- Sutton Trust – ongoing discussions
- HELOA – met in 2014
- ASCL – met in 2014
Tony Weetman has been the Sir Arthur Hall Professor of Medicine at the University of Sheffield and Consultant Endocrinologist at the Sheffield Teaching Hospitals Foundation Trust since 1991. He was Dean of the School of Medicine and Biomedical Sciences from 1999–2008 and became Pro-Vice-Chancellor for the Faculty of Medicine, Dentistry and Health in 2008. He is a Founder Fellow of the Academy of Medical Sciences (Council member 2002–2005) and received the Merck Prize of the European Thyroid Association (2002), the Novo Nordisk Jacobeus Prize (2012) and the Paul Starr Award of the American Thyroid Association (2013). He is currently Chair of the UK Healthcare Education Advisory Committee and has been Chair of the Medical Schools Council, President of the British Thyroid Association and a member of the Council of the Royal College of Physicians of London.

Charlie Bell

Charlie Bell is an MB PhD student at the University of Cambridge, undertaking intercalated research into mechanisms and interventions in type 1 diabetes. He currently teaches undergraduate biochemistry, ethics and physiology, and has been involved with widening participation at both college and university level for some time. He is currently national Co-Chair of the British Medical Association Medical Students Committee.

The Medical Students Committee has put a focus on ensuring that, in all aspects of their work, opening up medicine to the most talented and able is a core value. The profession should represent the population that it serves, and selection should be based on ability, not ability to pay.

Professor Les Ebdon

Professor Ebdon has been Director of Fair Access to Higher Education since 1 September 2012. He was previously Vice Chancellor of the University of Bedfordshire.

That followed an illustrious career in analytical chemistry, including more than 250 publications and several awards.

Professor Ebdon obtained his PhD at Imperial College, London, then lectured at Makerere University in Uganda and Sheffield Hallam University, before becoming Reader in Analytical Chemistry at what is now the University of Plymouth. He was promoted to a personal chair in 1986, became Head of Environmental Sciences in 1989 and then, in the same year, Deputy Director. He was promoted to Deputy Vice Chancellor (Academic) in 1992. He remained in that position until 2003, when he was appointed Vice Chancellor at the University of Luton and became Vice Chancellor of the University of Bedfordshire on its creation in 2006.

Professor Ebdon was awarded a CBE in 2009 for services to local and national higher education and was appointed Deputy Lieutenant of Bedfordshire in 2011. In 2013 he was named one of Britain’s 500 Most Influential People by Debrett’s.
Professor Ged Byrne

Ged is a surgeon by profession. Having graduated in Manchester in 1989, he trained in Manchester, Scotland, India and the West Midlands, returning to Manchester as a clinical lecturer in 1997. Having been appointed a senior lecturer and consultant in 2000, he was appointed Hospital Dean in South Manchester in 2004. He founded the Universities’ Medical Assessment Partnership in 2003 and became the founder director of the Medical Schools’ Council Assessment Alliance. He also lead the establishment of the UHSM Academy in 2009. In 2010 he became Professor of Medical Education at the UoM and was awarded a National Teaching Fellowship by the higher education academy. In 2012 he became Associate Dean for Communications at the Faculty of Medical and Human Sciences at the University of Manchester and an honorary Professor of Health Sciences at The University of Salford. He took up the current role as Director of Education and Quality for Health Education North West in December 2013, and has recently been appointed to HEE Director of Education & Quality (North).

Maddy Desforges

Maddy Desforges was appointed Deputy Director for Quality Access and Governance in Higher Education at the Department for Business, Innovation and Skills in July 2014. She has a civil service background in a range of policy and operational posts in both BIS and its predecessor departments. Maddy has worked predominantly in post-16 education and training in both further and higher education, as well as in employment policy including the New Deal and young people Not in Education, Employment or Training (NEET).

Professor Anne Garden

Anne graduated from the University of Aberdeen in 1973 and after house jobs in Aberdeen and Stornoway settled on a career in Obstetrics and Gynaecology, gaining MRCOG in 1979 and FRCOG in 1992. She worked in Cape Town, South Africa and Toronto, Canada before taking up post as Senior Lecturer in Obstetrics and Gynaecology in Liverpool in 1987. Whilst in Liverpool she developed an interest in Paediatric and Adolescent Gynaecology, setting up a service for the sub-specialty based at Alder Hey Children’s Hospital. She has written two books on the subject.

Her interest in Medical Education began in 1996, becoming Director of Medical Studies at Liverpool in 2001, going on to be Professor and Head of the School of Medical Education in 2003, during which time she led the successful bid for a Centre for Excellence for Learning and Teaching for Developing Professionalism. She moved to Lancaster in 2006 to establish a new medical school there.

One of her main areas of interest is Quality Assurance in Medical Education, having served as a QAA Subject Specialist Reviewer for Medicine from 1998 to 2001. She is a Team Leader for the GMC’s QIF (Quality Improvement Framework) and is a member of Council of the Academy of Medical Educators.

In 2014, she was awarded an MBE in the Birthday Honours for services to Medical Education.
David Johnston

David is a member of the Social Mobility and Child Poverty Commission, established by Parliament to monitor progress made in improving social mobility and child poverty by government and other key actors such as universities and professions.

Sarah Howls

As Head of Student Opportunity, Sarah oversees the broad range of policy development and implementation across the Council’s work to widen participation in higher education which includes supporting activity to widen access, improve student retention and success and support progression to further study or employment. Sarah leads on HEFCE’s funding policy for widening participation and oversees the development of an outcomes framework for widening participation which will measure the impact of the sector’s investment and activity on outcomes for individual students and more broadly for the economy and society. Sarah is responsible for the development of the Council’s approach to addressing unexplained differences in degree attainment and progression to further study or employment for students from different groups, a key priority identified in the National Strategy for Access and Students Success. Sarah also has responsibility for HEFCE’s policy as it relates to disabled students and maintains oversight of the development and funding of the National Networks for Collaborative Outreach.

Martin Hart

He is a member of the Corporation (governor) of Oaklands College in Hertfordshire and a Governor of Abbot’s Hill School, Hemel Hempstead.

Prior to joining the GMC he was Head of Commercial Policy at Ofcom, the regulator for the UK communication’s industries. Earlier in his career he worked for the Independent Television Commission, the BBC and ITV. He is a Fellow of the Royal Television Society (RTS), has an MBA from the University of Warwick and a first degree from the University of Cambridge.

Martin is Assistant Director, Education and Standards at the General Medical Council. In this role he oversees the GMC’s responsibilities to promote high standards of basic medical education and training so that patients, now and in the future, can be confident they will receive safe, high quality medical care.

He oversaw the 2009 review of Tomorrow’s Doctors (the GMC’s standards and outcomes for undergraduate medical education) and the development of the Gateways guidance (providing advice to medical schools on admitting students with disabilities). More recently he has led on the development of guidance to support students with mental health conditions and work to revise GMC guidance on student fitness to practice. He is currently leading the work to evaluate the case for a UK national licensing examination.

He is a member of the Corporation (governor) of Oaklands College in Hertfordshire and a Governor of Abbot’s Hill School, Hemel Hempstead.

Prior to joining the GMC he was Head of Commercial Policy at Ofcom, the regulator for the UK communication’s industries. Earlier in his career he worked for the Independent Television Commission, the BBC and ITV. He is a Fellow of the Royal Television Society (RTS), has an MBA from the University of Warwick and a first degree from the University of Cambridge.

Sarah Howls

As Head of Student Opportunity, Sarah oversees the broad range of policy development and implementation across the Council’s work to widen participation in higher education which includes supporting activity to widen access, improve student retention and success and support progression to further study or employment. Sarah leads on HEFCE’s funding policy for widening participation and oversees the development of an outcomes framework for widening participation which will measure the impact of the sector’s investment and activity on outcomes for individual students and more broadly for the economy and society. Sarah is responsible for the development of the Council’s approach to addressing unexplained differences in degree attainment and progression to further study or employment for students from different groups, a key priority identified in the National Strategy for Access and Students Success. Sarah also has responsibility for HEFCE’s policy as it relates to disabled students and maintains oversight of the development and funding of the National Networks for Collaborative Outreach.

Martin Hart

Martin is Assistant Director, Education and Standards at the General Medical Council. In this role he oversees the GMC’s responsibilities to promote high standards of basic medical education and training so that patients, now and in the future, can be confident they will receive safe, high quality medical care.

He oversaw the 2009 review of Tomorrow’s Doctors (the GMC’s standards and outcomes for undergraduate medical education) and the development of the Gateways guidance (providing advice to medical schools on admitting students with disabilities). More recently he has led on the development of guidance to support students with mental health conditions and work to revise GMC guidance on student fitness to practice. He is currently leading the work to evaluate the case for a UK national licensing examination.

He is a member of the Corporation (governor) of Oaklands College in Hertfordshire and a Governor of Abbot’s Hill School, Hemel Hempstead.

Prior to joining the GMC he was Head of Commercial Policy at Ofcom, the regulator for the UK communication’s industries. Earlier in his career he worked for the Independent Television Commission, the BBC and ITV. He is a Fellow of the Royal Television Society (RTS), has an MBA from the University of Warwick and a first degree from the University of Cambridge.

Sarah Howls

As Head of Student Opportunity, Sarah oversees the broad range of policy development and implementation across the Council’s work to widen participation in higher education which includes supporting activity to widen access, improve student retention and success and support progression to further study or employment. Sarah leads on HEFCE’s funding policy for widening participation and oversees the development of an outcomes framework for widening participation which will measure the impact of the sector’s investment and activity on outcomes for individual students and more broadly for the economy and society. Sarah is responsible for the development of the Council’s approach to addressing unexplained differences in degree attainment and progression to further study or employment for students from different groups, a key priority identified in the National Strategy for Access and Students Success. Sarah also has responsibility for HEFCE’s policy as it relates to disabled students and maintains oversight of the development and funding of the National Networks for Collaborative Outreach.

Martin Hart

Martin is Assistant Director, Education and Standards at the General Medical Council. In this role he oversees the GMC’s responsibilities to promote high standards of basic medical education and training so that patients, now and in the future, can be confident they will receive safe, high quality medical care.

He oversaw the 2009 review of Tomorrow’s Doctors (the GMC’s standards and outcomes for undergraduate medical education) and the development of the Gateways guidance (providing advice to medical schools on admitting students with disabilities). More recently he has led on the development of guidance to support students with mental health conditions and work to revise GMC guidance on student fitness to practice. He is currently leading the work to evaluate the case for a UK national licensing examination.

He is a member of the Corporation (governor) of Oaklands College in Hertfordshire and a Governor of Abbot’s Hill School, Hemel Hempstead.

Prior to joining the GMC he was Head of Commercial Policy at Ofcom, the regulator for the UK communication’s industries. Earlier in his career he worked for the Independent Television Commission, the BBC and ITV. He is a Fellow of the Royal Television Society (RTS), has an MBA from the University of Warwick and a first degree from the University of Cambridge.
Professor Gary Mires

Gary Mires is Professor of Obstetrics and Dean of Medical Education in the School of Medicine, University of Dundee. He is an Honorary Consultant Obstetrician at Ninewells Hospital and Medical School, Dundee.

He obtained his MBChB and MD from the University of Dundee, is a Fellow of the Royal College of Obstetricians and Gynaecologists (RCOG) and a Fellow of the Higher Education Academy. His clinical interest is high risk pregnancy particularly the management of multiple pregnancy and pregnancy complicated by diabetes. His research interests relate to both obstetrics and medical education.

He is Chair of the Scottish Deans Medical Education Group.

Sarah Parsons

Sarah is the Medical Workforce Manager in NHS Employers Medical Pay and Workforce.

Alan Robson

Alan Robson is a Senior Civil Servant at the Department of Health. He has worked in the health service throughout his career at local, regional and national level. In his previous role, Alan worked as the Secretary to the Mid Staffordshire NHS Foundation Trust Public Inquiry – supporting Robert Francis QC in his role as Chairman. Alan has held the position of Deputy Director of Workforce Development Strategy since April 2013.

Dr Tessa Stone

During the period of this project Dr Tessa Stone was Chief Executive of Brightside, the education charity which uses online technology to connect, inform and inspire more young people to achieve their potential through education. Brightside’s online mentoring service connects disadvantaged young people with volunteer mentors from universities or professional backgrounds who can support them into further and higher education and employment. Its free online resources – www.brightknowledge.org and www.studentcalculator.org.uk – provide accessible, impartial information about education, money, student life and careers.

Tessa is also actively involved in national debate about widening participation as founder and chair of the Bridge Group, the independent policy association promoting social mobility through access to Higher Education (www.thebridgegroup.org.uk).

Before working in the Third Sector Tessa was a historian and an Admissions Tutor at the University of Cambridge. She was the Director of the Sutton Trust from 2002-2008, and after nearly 6 years at Brightside left them in September 2014 to become Chief Executive of the Farms for City Children, the education charity founded by Clare and Michael Morpurgo to expand the horizons of inner-city children by providing a magical week in the countryside living and working together on one of the charity’s three farms.
# List of acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASME</td>
<td>Association for the Study of Medical Education</td>
</tr>
<tr>
<td>AUKUH</td>
<td>Association of UK University Hospitals</td>
</tr>
<tr>
<td>BMA</td>
<td>British Medical Association</td>
</tr>
<tr>
<td>BMAT</td>
<td>Bio Medical Admissions Test</td>
</tr>
<tr>
<td>CPD</td>
<td>Continuous Professional Development</td>
</tr>
<tr>
<td>DSA</td>
<td>Disabled Students’ Allowance</td>
</tr>
<tr>
<td>GAMSAT</td>
<td>Graduate Australian Medical Schools Admissions Test</td>
</tr>
<tr>
<td>GMC</td>
<td>General medical Council</td>
</tr>
<tr>
<td>HEE</td>
<td>Health Education England</td>
</tr>
<tr>
<td>HEFCE</td>
<td>Higher Education Funding Council for England</td>
</tr>
<tr>
<td>HEI</td>
<td>Higher Education Institution</td>
</tr>
<tr>
<td>HESA</td>
<td>Higher Education Statistics Agency</td>
</tr>
<tr>
<td>INReSH</td>
<td>International Network for Researchers in Selection into Healthcare</td>
</tr>
<tr>
<td>JACS</td>
<td>Joint Academic Coding System</td>
</tr>
<tr>
<td>LETB</td>
<td>Local Education Training Board</td>
</tr>
<tr>
<td>MMI</td>
<td>Multiple Mini Interview</td>
</tr>
<tr>
<td>MSC</td>
<td>Medical Schools Council</td>
</tr>
<tr>
<td>MSCAA</td>
<td>Medical Schools Council Assessment Alliance</td>
</tr>
<tr>
<td>MSCSA</td>
<td>Medical Schools Council Selection Alliance</td>
</tr>
<tr>
<td>NES</td>
<td>NHS Education Scotland</td>
</tr>
<tr>
<td>NS-SEC</td>
<td>National Statistics Socio Economic Classification</td>
</tr>
<tr>
<td>OFFA</td>
<td>Office for Fair Access</td>
</tr>
<tr>
<td>POLAR</td>
<td>Participation of Local Regions</td>
</tr>
<tr>
<td>RCGP</td>
<td>Royal College of General practitioners</td>
</tr>
<tr>
<td>SJT</td>
<td>Situational Judgement test</td>
</tr>
<tr>
<td>SPA</td>
<td>Supporting professionalism in Admissions</td>
</tr>
<tr>
<td>UCAS</td>
<td>Universities and Colleges Admissions Service</td>
</tr>
<tr>
<td>UKCAT</td>
<td>UK Clinical Aptitude test</td>
</tr>
<tr>
<td>UKMED</td>
<td>UK Medical Education Database</td>
</tr>
<tr>
<td>WA</td>
<td>Widening Access</td>
</tr>
<tr>
<td>WP</td>
<td>Widening Participation</td>
</tr>
</tbody>
</table>