School of Medicine, Keele University
Strategy for Widening Access to Medicine

Introduction

This strategic document is intended to outline the particular issues and activities particular to medicine that are required to meet the Keele University Widening Participation Strategic Assessment 2010-2013.

This strategy will not deal with graduate entry schemes as it has already been determined that the 4 year scheme previously run by Keele is no longer viable. It will not deal with disability; Keele welcomes applications from students with a disability. It will not deal with ethnicity explicitly, although widening participation affects candidates from diverse ethnic backgrounds.

Social mobility is a key government agenda across all political parties. It is in the interests of all to have an open society whereby all have opportunity to learn, develop and achieve to the best of their ability. It is defined by HM Government as “breaking the transmission of disadvantage from one generation to the next”.

The NHS careers website states that having doctors from diverse backgrounds is important in achieving the very best care for patients:

"Ultimately, increasing numbers of NHS organisations are realizing the benefits of employing doctors from a non-traditional background as it adds to the diversity of the workforce and this can in turn have a positive impact on patients."

Therefore it is a matter of some concern that access to the professions including medicine is very heavily weighted towards those who are able to access independent education. Although only 7% of the population is independently educated, over 50% of doctors had this background in early 2000.

Medicine is highly competitive and consequently the selection process has become very rigorous with great

![Chart showing % independently schooled, late 1990s vs early 2000s for various professions]
emphasis placed on a minimum of 3As predicted or gained at A level, success at first attempt, extensive work experience, extra-curricular interests and a well written personal statement and references. These may represent insurmountable barriers to students who have been socially and educationally disadvantaged from early in life.

Furthermore the long term trend is for the most economically advantaged families to gain a higher percentage of the places than previously.

A typical doctor born in 1970 grew up in a family with an income 62% above that of the average family: in today’s terms, this equates to growing up in a family that is richer than five in six of all families in the UK.

Widening participation (WP) schemes into medicine are designed to increase the numbers of applications to medical school from students with educationally disadvantaged backgrounds, e.g. those attending a school that has a below average performance level, those with a disability and those whose parents or carers did not attend university. These students have been referred to as “most able, least likely”. Therefore it is not about lowering standards or admitting students who are going to struggle with the course, in fact student retention and success is a key component of WP.

The panel on fair access to the professions has strongly recommended that all universities:

“Take into account the educational and social context of pupils’ achievement alongside attainment levels and aptitude tests to inform university admissions procedures.”
The objective of WP is to provide opportunity to able and well-motivated students, who because of their background and previous lack of opportunity are otherwise likely to find the barriers to medicine insurmountable. The university strategic assessment\(^1\) clearly defines much of the population surrounding Keele as suffering one of the highest levels of general deprivation in the country, with high levels of economic and educational disadvantage. Consequently there is a well-recognised issue with lack of aspiration affecting whole localities where children have no role models in their family or circle of friends.

Higher Education (HE) providers, where publicly funded, are required to set out their plans to ensure access for under-represented groups to the Office for Fair Access (OFFA) if they plan to charge students fees of more than £6000\(^8\). The White Paper\(^8\) also requires that: “All universities face the challenge of effectively targeting disadvantaged students in ways that will both support their attainment while at school, and encourage them to apply to higher education.” The same paper\(^8\) requires annual reporting of progress on WP via the Widening Participation Strategic Assessment to The Higher Education Funding Council for England (HEFCE). HEFCE provides funding to Universities specifically for Widening Access; for 2010/2011 Keele University received 500K.

In “Tomorrows Doctors”\(^9\) Medical Schools are charged by the GMC with “ensuring that students and applicants to medical schools are treated fairly and impartially, with equality of opportunity, regardless of factors that are irrelevant to their selection and progress. It is also concerned with encouraging diversity within the student population to reflect modern society.” To this end schools are required to monitor data about student applications to demonstrate evidence of addressing equality and diversity matters within admissions processes, progression, assessment and arrangements made for supervision, covering sex, race, disability, sexual orientation, religion or belief, gender identity and age.

In 2012 Alan Milburn the Independent Reviewer on Social Mobility and Child Poverty reported\(^6\) that Medicine had failed to achieve significant progress since his previous report in 2009\(^5\).

“It lags behind some other professions in both the focus and priority is accords to these issues”

In 2002/2003 23% of medical and dental students were privately educated; this pattern had barely changed by 2010/2011 with 22% still coming from private schools.

The report\(^6\) mentioned common initiatives employed by medical schools to make the selection process fairer including the use contextual data, using the UK-CAT score to select students with lower academic performance on aptitude, foundation years, access programmes with grade reduction for WP students and extended medical degree programmes. All of these initiatives were welcomed, with the proviso that the UK-CAT may not favour WP students because the type of schools they attend may not prepare them adequately for the test.
**Data requirements and utilisation**

It is recommended in “Unleashing Aspirations” that universities publish more data about who gets into university, to help assess the effectiveness of widening participation programmes. This theme is echoed in the Milburn follow up report:

> “Data collection needs to be improved. At the moment there is no systematic collection of information on the social backgrounds of staff in the medical sector. More work needs to be done on this by both medical schools and individual NHS employers.”

*To this end a toolkit* has been published for the purpose of monitoring social mobility in the professions.\(^\text{10}\)

Keele University Medical School will require data to able to demonstrate the benefits of any widening access scheme both internally from the point of managing WP activity and externally as described above. Therefore a minimal data set will be required and a number of standard reports.

The following parameters are generally used to assess the WP status of University applicants:

- National Statistics Socio-economic Classification (NS-SEC) classes 4-7 (low social class)
- Low Participation Neighbourhood (LPN) - based on POLAR2
- State Schools or Colleges - based on previous institution

Unfortunately the NS-SEC data is difficult to interpret because it is dependent on parental occupation which the students do not have to declare. Furthermore classifying jobs from the job title is also notoriously difficult. Nevertheless this is the data we submit to the GMC. This data was also used in a national research study which concluded using NS-SEC data, that WP has done little to change the student demographics with the exception of graduate entry and small numbers entering through foundation courses.\(^\text{11}\)

The POLAR2 data is an analysis provided by HEFCE based on an analysis of wards across England. The population is divided into 5 equal sized quintiles where the lowest quintiles contain the wards with fewest numbers accessing higher education. In the last analysis 55% of eligible children entered higher education in the top quintile, but only 15% in the lowest quintile.\(^\text{12}\) As a means of measuring trends this is a powerful methodology but in terms of accessing individuals it is possible that children from an advantaged background may live in a “disadvantaged” ward and visa versa.

For this reason it is important to take into consideration all these measures, and to record whenever possible other parameters known to be associated with socio-economic disadvantage such as being in local authority care, receipt of free school dinners or income support and students who have undertaken a carer role.

In considering the reporting of WP data a practical approach is required based on the availability of appropriate data for analysis through HEFCE, UK-CAT and local data collection. At the present time the
medical school is not able to obtain WP data on applicants and students offered places through HEFCE, but there is some limited data of this type available from UK-CAT.

The following analyses are suggested as a model for annual reporting in order to monitor trends within Keele Medical School. The interpretation can be refreshed each year to reflect any changes in trends or methods of analysis.

This figure above shows for each year of the medical school the percentage of young students from state schools or colleges, the percentages from social class 4-7 (NS-SEC 4-7) based on parental occupation and the percentages from low participation neighbourhoods (LPN). As expected the percentages from state schools and the percentage with both indices of educational disadvantage are consistently lower for medicine than other subjects. In fact the percentages for LPN is about half that of the others.
The above figure shows the trends for the percentages featured in the previous figure. The independent schools are calculated by assuming that all the non state schools are independent schools, which may not be entirely correct. The percentage from the independent sector is around the 22% identified in the Milburn follow up report and although there is a fluctuation, presently there is no clear trend.

The NS-CES 4-7 data looks more promising with a trend towards greater participation in the lower social classes. Unfortunately this data has to be interpreted cautiously because the data is optional in the HEFCE submission and the percentage of students completing this data item has fallen from 93.7% to 80.4% over four years. No assumptions about the distribution of data in those not reporting can be made.

The LPN data is consistently available for all students. Nationally the lowest neighbourhoods run at about 15% participation which is consistent with all subjects at Keele, but the medical school is consistently running at a much lower participation rates.

This figure is derived from Keele UK-CAT data and shows the % of students accessing higher education from the top and bottom quintile on an Index of Multiple Deprivation calculated from the postcodes. Although not the same as the POLAR2 the principle is the same. An equal percentage of students should come from each quintile in a situation where socio economic background is eliminated as a variable. This clearly demonstrates that our admission process widens rather than closes the gap in each of 3 successive years. The 2009 data is flatter so we need to see this trend continue into future years.

In order to assess our own students more accurately we will use an anonymous survey (appendix 1) which has been approved by the student council and the university ethics committee. This will be
employed for the first time in 2012 and an annual analysis will follow. The survey has been based on the national toolkit\textsuperscript{10}.

During the past 18 months the unique student learning number has been collected from all students attending Keele widening access schemes and open days and this will continue to be collected whenever possible so that we can look at the outcomes of WP activities if software becomes available in the future to track the progress of student through Higher Education.

**Widening Participation Initiatives**

Widening participation encompasses a number of possible initiatives including:

- Raising aspiration
- Mentoring
- Providing insight into medicine
- Providing enrichment
- Raising attainment
- Providing work experience
- Use of contextual data
- Lowering interview threshold
- Access programmes with grade reduction

Those initiatives that are supported by Keele University Medical School are explained in more detail below.

**Raising Aspiration**

Medical students will be supported by the medical school in developing a programme of raising aspiration activities under the student chosen name of Keele Medpath. The students will be responsible for organising and delivering sessions to school children. The support of the University will benefit the students and the programme by ensuring that:

- They receive adequate training for the role
- They present a positive and corporate image of the university
- All the legal, insurance and safeguarding requirements are met
- Records are kept to evaluate the work they do
- Their work is promoted to local schools through Keelelink
- They receive appropriate credit/payment for their work
- There is continuity from year to year
- They get support in booking school sessions
- Time is allocated appropriately within the course for activities to take place (appendix 2)
The training will be developed through the University Ambassador scheme, which involves a selection process and a 2 day training course.

Volunteer staff members help with the development of lesson plans and a partnership has been agreed with the Skills Academy at the University Hospital at North Staffordshire to assist the students in putting on sessions to benefit WP students from a range of different schools in a safe environment.

Priority will be given to students at key stage 3 & 4 so as to influence GCSE and A-Level subject choices.

**e-Mentoring**

This will be provided by students as part of Medpath using the Keele supported safe e-mentoring package (Bright Journals). Training will be provided to student ambassadors by the University. It is envisaged that WP students receiving e-mentoring in key stage 5 will be receiving this help as part of A2P or A2K and those in key stage 3 & 4 as part of the Keele study support e-mentoring programme.

**Insight into medicine**

Each year the University holds a Royal Society of Medicine (RSM) information day entitled “So you want to be a doctor”, whereby school children can gain an insight into studying medicine. There is also an annual summer school which is a two day event jointly organised by the Medical School and the Skills Academy at the University Hospital of North Staffordshire. The medical school participates in 4 University open days per year. Admissions staff also go to local secondary schools to talk to key stage 5 students about applying to medical school at Keele and nationally.

**Providing enrichment**

The University provides two WP programmes which are suitable for prospective medical students which provide enrichment in key stage 5. Access to the professions (A2P) provides young people with direct access to people who work in the professions through mentoring, although there may also be opportunities for work shadowing and career related visits. It also provides HE information, experience and contact with students currently undertaking the courses. Information on making successful university applications and interviews is also included.

Access to Keele (A2K) involves a more formal course of study to support entry to Keele University, through the completion of a portfolio of work demonstrating specific knowledge and skills, which is structured across three strands entitled Experience, Develop, and Learn. The learn module is run by the medical school and provides an opportunity for university level learning in both the classroom and the laboratory settings.

**Raising attainment**

The University provides study support in the form of e-mentoring to WP students in key stage 4. This will be provided to those wishing to study medicine through Keele Medpath.
**Contextual data**

The White Paper\textsuperscript{8} encourages Universities to use contextual data, such as average attainment in an applicants school to help identify individuals with the greatest potential. There is evidence that exam grades alone are not the best predictor of success at University\textsuperscript{13;14} although the results are complex in that students from independent schools do consistently less well than those from other schools and colleges on a grade for grade basis, but some children from poor performing schools will do less well than peers from well performing schools. Nevertheless the “Government believes\textsuperscript{8} that this (use of contextual data) is a valid and appropriate way for institutions to broaden access while maintaining excellence, so long as individuals are considered on their merits, and institutions’ procedures are fair, transparent and evidence based.”

From 2012 UCAS is planning to make contextual data available. This is based on:

- School performance average of students achieving 5 A*-C GCSE including English or Welsh and Mathematics or equivalent
- School performance average QCA point score for best 8 GCSEs
- School performance average QCA points per A level entry (or equivalent) i.e. A level discipline performance
- School performance average QCA points per A level student (or equivalent) i.e. average student performance
- Lives in a low progression to higher education neighbourhood (Polar 2).

The way in which the use of this data is to be piloted by the University for applicants to medicine is shown in appendix 3. It is important to note that students should have more than one flag to qualify for WP. In addition the UCAS form may record whether a student has ever been in care, although this is not part of the contextual data, when the information is supplied it will lead to an automatic WP flag. Students with a WP flag will automatically be listed for interview provided they are above the academic threshold for studying medicine at Keele. The contextual data is also used to give priority to WP students who have just missed their grades if places are available at the end of the cycle.

**Access programmes with Grade Reduction**

A2K\textsuperscript{15} provides enrichment studies for local students who are WP and have the ability to succeed. Assessment for joining A2K is rigorous, taking into consideration the postcode, school, family education history, parental occupation and family composition. Students with significant disability or in care are automatically accepted. Students completing A2K successfully will be awarded one grade reduction in each of two subjects, with no grade below a B in any subject. A student offered the standard offer of AAA or A*AB will be admitted with ABB on completing A2K successfully.

**Promotion of WP Activities**

WP activities are promoted to local schools through Keelelink. In addition the activities will be advertised on the University website through the WP pages and medicine admissions pages. Medpath
will also develop a website to promote their activities. Partnership with the Skills Academy at the University Hospital of North Staffs is also another avenue to promote opportunities for WP students.

Reference List

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(4) Medical Careers: Widening Participation. [Link](http://www.medicalcareers.nhs.uk/considering_medicine/widening_participation.aspx)

(5) The panel on fair access to the professions. Unleashing Aspirations. 1-7-2009; [Link](http://webarchive.nationalarchives.gov.uk/+/http://www.cabinetoffice.gov.uk/media/227102/fair-access.pdf)


(7) Harris, M. What more can be done to widen access to selective universities. 1-4-2010; [Link](http://www.offa.org.uk/wp-content/uploads/2010/05/Report-on-access-to-highly-selective-universities.pdf)

(8) Department for Buinsess Innovation and Skills. Higher Education: Students at the heart of the system. 1-6-2011; [Link](http://c561635.r35.cf2.rackcdn.com/11-944-WP-students-at-heart.pdf)

(9) General Medical Council. Tomorrows Doctors: Outcomes and standards for undergraduate medical education. 1-9-2009; w

(10) Professions for Good. Social Mobility Toolkit for the professions. 1-3-2012; [Link](http://www.professionsforgood.com/wp-content/uploads/2012/03/SocialMobilityToolkit-FINAL.pdf)


(12) HEFCE. Trends in young participation in higher education:Core results for England. 2010; [Link](http://www.hefce.ac.uk/media/hefce/content/pubs/2010/201003/10_03.pdf)
(13) HEFCE. Schooling effects on higher education achievement. 1-7-2003; http://www.hefce.ac.uk/pubs/hefce/2003/03_32/03_32.pdf

(14) HEFCE. Schooling effects on higher education achievement: further analysis – entry at 19. 1-2-2005; http://www.hefce.ac.uk/pubs/hefce/2005/05_09/05_09.pdf

Appendix 1

**Keele Medical School WP survey**

Social mobility is high on the Government agenda because a fair society benefits everyone. As a higher education establishment, Keele University is responsible for ensuring that it provides education to students from a wide range of different backgrounds without prejudice to any. It is well recognised that students from lower socio-economic groups find it much harder to access university education even when they have the ability to succeed. All publicly funded higher education establishments are required to address this issue, particularly in courses like medicine that provide access to a profession.

At Keele we are committed to working with local schools to raise aspiration and assist less advantaged young people through the application process. Much of this important work is undertaken by medical students. There is a need to monitor the impact of these initiatives on the student cohort because the Medical School has to report annually to the Office for Fair Access the higher Education Funding Council and the General Medical Council. Unfortunately the monitoring information from the UCAS forms alone is inadequate, particularly as students may decline to answer some of the optional questions. Therefore the Medical School needs your help.

I would be extremely grateful if you would be prepared to provide some additional information about your family background and educational experience anonymously and in complete confidence. The information you provide will be used to report on fair access and to assist the school in developing an ongoing strategy for widening participation. We need to know what works.

Thank you for assistance, it will help us to ensure that we operate a system of selection that is as fair as possible.

Andy Spencer
Deputy Director of Admissions

It is appreciated that some of the questions are sensitive and personal and for this reason the survey is guaranteed to be absolutely anonymous. No student identifiable data is being collected. Furthermore the collation and presentation of results will be by year group and will not include any individual responses.

1. Did any of your parent(s) or guardian(s) complete a university course or equivalent (eg. BA, BSc or higher)?
   - [ ] Yes
   - [ ] No

2. What type of school did you mainly attend between ages 11 and 16?
   - [ ] A non selective state run or state funded school
   - [ ] A selective (on academic, faith or other ground) state run or state funded school
   - [ ] Independent or fee paying school
   - [ ] Attended school outside the UK
   - [ ] I don't know

3. Have you ever been in Local Authority care
   - [ ] Yes
   - [ ] No

4. Did your household receive income support at any time during your school years?
   - [ ] Yes
   - [ ] No
   - [ ] Don't know
5. Did you receive free school meals at any point during your school years?
   - Yes
   - No
   - Don't know

6. Young carers are children and young people who look after someone in their family who has an illness, a disability, or is affected by mental ill-health or substance misuse.

   Young carers often take on practical and/or emotional caring responsibilities that would normally be expected of an adult. The tasks undertaken can vary according to the nature of the illness or disability, the level and frequency of need for care and the structure of the family as a whole.

   Have you ever been a carer as defined above:
   - Yes
   - No

   Thank you for completing the survey. It is greatly appreciated.
Appendix 2 – Policy for students to have time for WP activities – under development.
Appendix 3 - Contextual Data – Implementation Plans

October 2011

1 Background

Higher Education Institutes have for many years been using data in addition to the stated qualifications and criteria for entry, when considering applications for courses at universities and colleges. It was given greater impetus with the publication of the Schwartz report, ‘Fair admissions to higher education: recommendations for good practice,’ in September 2004, and more recently with the policies and initiatives of government around the UK. Contextual data can be used to support access, inclusion and progression, from fair access to the professions, fair admissions decision making to information underpinning widening participation and outreach identified in Access Agreements for OFFA.

Keele committed to the use of contextual data in the OFFA agreement which was submitted earlier in 2011 and will be carrying out a pilot in 2011/12. Work is now progressing to support this pilot and this paper provides an explanation of the proposed developments and use of certain elements of contextual data.

To ensure we comply with the OFFA agreement development of contextual data needs to begin during the 2011/12 recruitment cycle. However, as it is a new data set, is a new factor to consider in the admissions process and also has political sensitivities, a phased approach to development is proposed as follows:

- **Phase 1**: Proposed course: Medicine – during 2011/12 recruitment cycle;
- **Phase 2**: Proposed courses: Pharmacy; Psychology; Neuroscience; Biomedical science – during 2012/13 recruitment cycle.

2 Proposed Framework

Keele is proposing to begin trialling the use of contextual data in undergraduate admissions during the recruitment cycle for entry to 2012, and the pilot will focus on Medicine which is a highly selective course. If the initial trial is successful then the trial will be rolled out over the following two recruitment cycles to a wider number of courses.

UCAS are issuing information to all HEIs to support the use of contextual data across the sector, and Keele has signed up to receive this data. The contextual data supplied by UCAS is as follows, please note this headline information is the only detail available at the moment – clarification on the exact coverage is being sought:

1. School performance average of students achieving 5 A*-C GCSE including English or Welsh and Mathematics or equivalent
2. School performance average QCA point score for best 8 GCSEs
3. School performance average QCA points per A level entry (or equivalent) i.e. A level discipline performance

4. School performance average QCA points per A level student (or equivalent) i.e. average student performance

5. Percentage of students at the school entitled to free school meals

6. Percentage of students at the school entitled to educational maintenance allowance - (note this information will be available for one year only for England as EMA will cease thereafter in England).

7. Lives in a low progression to higher education neighbourhood (Polar 2).

It is proposed that a selection of the UCAS contextual data will be used to flag candidates’ records for further consideration? and in addition, (after internal considerations) the ‘looked after/in care’ data which is not provided through contextual data but can be accessed from the UCAS application form. The proposed internal flags to be used are as follows (the in brackets figure relates to the data set from UCAS):

- **Educational Indicator 1**: Average school performance at GCSE (UCAS 1 & 2);
- **Educational Indicator 2**: Average school performance at A Level (UCAS 3 & 4);
- **Social Indicator 3**: Lives in a low progression to Higher Education neighbourhood (UCAS7);
- **Social Indicator 4**: Experience of being looked after/in care prior to application (this data is not part of the contextual data set).

It is important to not rely on one flag i.e. on one piece of contextual data; therefore a combination of indicators is necessary to receive an overall contextual ‘flag’. The flag would be generated as a result of one of the following combinations:

- Indicators 1+2+3
- Indicators 1+3
- Indicators 2+3
- Indicator 4

(Missing data will be flagged with an M in the contextual data flag field i.e. where contextual data is not received the records will be flagged with a M)

The use of contextual data does not result in either an automatic offer of a place or lower offer to a candidate. The candidates flagged through use of contextual data are interviewed in addition to students who are short-listed for interview using the usual departmental interview short-listing criteria,
so they do not displace students who have already demonstrated the expected academic ability and potential.

3 Technical Development and considerations/issues

The following technical developments are needed to support the implementation of the use of contextual data:

- Development of a ‘ranking’ of the indicators so we know at what level a flag will be applied i.e. for school performance if they are in the bottom 20% of schools this is considered poor performance and a flag will be applied. WP already has criteria which could possibly be adopted and this needs to be considered and built into the algorithm. Views from members of the committee are sought on this.
- Issues with the EDH (educational history) records and other related data are currently being worked through MIS.
- Applicants will potentially have multiple EDH records i.e. changed schools, sixth form college, etc; do we consider just the most recent or all of them? Views from members of the committee are sought on this point.
- The algorithm will need to be written and implemented to provide the overall contextual flag (as detailed in section 2 of this paper). This will be supported by the Planning Team.
- Development of Evision so that the contextual flag can be seen by admissions staff: this has been mentioned to MIS so they are aware of the development work needed.
- Training for admissions staff, in the first instance in Medicine, to identify the flag and how to locate the underlying data to aid the decision making process. It is important that colleagues are aware that the flag is just bringing the data to the attention of admissions staff they then need to review the contextual data to decide on any resulting action.

4 Other uses/considerations

The presence of any flag (i.e. of the 1 to 4 rather than the overall contextual flag after application of the algorithm) could be used as a ‘WP’ marker. There have been discussions reference the development of a WP marker previously, but sensitivities were identified. By using these contextual flags, it is not a ‘WP’ marker as such but an indicator of factors that are linked to WP criteria. This will help areas such as Medicine who are having increasing demands for WP analysis which currently are labour intensive.

The range of markers could then be used to provide additional data analysis in CARD on reports such as applications, progression, completion rates, and degree classifications. This would help support embedding the monitoring of WP performance.

Other indicators which are associated with WP could be used, i.e. ethnicity, disability, parental education, socio-economic class, etc. However this is then moving away from the premise of this paper which is contextual data into the remit of dedicated WP – the use, and development, of such
measures would need to be considered by the Directorate of Marketing & Communications in liaison with Faculties and MIS.

Consideration will be needed as to the maintenance of the markers throughout the life cycle of the student, it would seem logical that this is a ‘snapshot’ marker that is then static for the duration of the individual completing the course. The markers could be reassessed at application points if the student returns for further study at Keele.

5 Action required

Members of the committee are asked to provide comment and endorse the proposed approach, and also provide comment on the points raised in section 3 and 4 of this paper.