



Work Psychology Group
Thinking differently

GP National Selection Process: Equalities Impact

Final Report

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1. Executive Summary & Recommendations

- 1.1. The **GP Equalities Impact Report** outlines further research aimed at understanding the nature of group differences in selection centre performance, specifically in relation to candidates' place of medical qualification, and exploring potential interventions aimed at reducing such differences.
- 1.2. A multi-stage project was conducted, comprising a desk review and data collection and focusing on equality and diversity (E&D) issues in relation to selection.
- 1.3. **Equalities Impact Reports 2007-11:** Consistent findings across annual equalities impact reports 2007-2011 indicate that female candidates, younger candidates and UK-trained candidates significantly outperform others in terms of Selection Centre (SC) total scores and scores for individual exercises and competencies. Generally White candidates significantly outperform other ethnic groups; variations existed for particular exercises/competencies across reports 2007-2011.
- 1.4. **Equalities Impact Reports 2009-11:** Since 2009, data on Foundation Programme (FP) attendance was monitored. Results from 2009 consistently demonstrate that candidates who attended an FP performed significantly better than those who had not and a greater proportion were successful.
- 1.5. **Place of Medical Qualification:** Consistently, UK-trained candidates perform significantly better than non-UK-trained candidates on SC total scores, all exercises and competencies. The proportion of UK-trained candidates successful at SC is significantly higher than the proportion of successful non-UK-trained candidates; since 2007 there has been no variation to these patterns.
 - 1.5.1. Additional regression analysis in 2011 indicated that **place of medical qualification independently explained the greatest amount of variance** in SC total scores.
- 1.6. **Literature Review:** The literature highlighted similar patterns in group differences as those identified during GP selection; group differences in relation to ethnicity, age, gender and place of qualification/training are often observed during selection in a number of contexts. The literature offered possible explanations in terms of unconscious bias, stereotyping and cultural differences although there was limited evidence of effective interventions aimed at reducing group differences.
- 1.7. **Existing Guidance & Interventions:** Information & support available to doctors who qualified overseas focuses on practical issues such as immigration and examinations; research suggests guidance does not necessarily provide adequate information about ethical/professional standards.
- 1.8. **Stakeholder Consultation:** Six key themes were identified including 'Best Practice in Assessment & Selection' and 'Cultural Differences' (see page 11), following consultation with stakeholders (N=9) from public sector, private sector and academic organisations.
 - 1.8.1. Stakeholders were familiar with group differences identified within GP selection and were in agreement that a standardised assessment/selection process, in accordance with best practice, plays the most significant role in reducing & avoiding adverse impact in selection.
- 1.9. **Recommendations - Selection and Assessment Practice:** Recommendations for selection best practice are presented, including benchmarking GP selection with other medical specialities and the use of external E&D advisors or specialists to review the cultural impact of processes.
- 1.10. **Recommendations - Selection Process:** Recommendations relevant to the selection process itself are also presented. These include selector-candidate matching, equal representation of ethnic groups during pilot phases and within the selector group, reduction in time pressure, comprehensive selection information and greater regulation of E&D awareness on the selector training agenda.
- 1.11. **Recommendations - Equal & Diversity:** Recommendations in relation to wider consideration of equality and diversity issues, e.g. equal opportunities monitoring and organisational familiarisation, are presented for consideration.
- 1.12. **Recommendations - Additional Research:** The Equalities Impact Report did not conclusively identify an explanation for group differences in selection (in terms of place of qualification or wider ethnicity) or identify evidence-based intervention strategies effectively reducing such differences. A number of additional areas for further research have therefore been identified.

2. Introduction and Methodology

- 2.1. Work Psychology Group (WPG) was commissioned to conduct an equalities impact project with the aim of understanding and reducing group differences in performance in the GP national selection process, building on the findings of annual equalities impact reports prepared by WPG.
- 2.2. Consistent findings in GP equal opportunities data, over a number of years, show that the largest group differences in performance in the national selection process relate to place of medical qualification, with UK-trained candidates significantly outperforming those trained elsewhere.
- 2.3. These findings indicated that appropriate and realistic efforts should be made to understand and reduce group differences in performance. It was recognised that some form of action is needed to ensure the ongoing fairness and defensibility of the selection process.
- 2.4. Further research was required to understand the nature of these differences and explore potential interventions before appropriate action could be taken. Implementation of interventions that is not informed by a thorough understanding of the issues is likely to be ineffective and possibly counterproductive.
- 2.5. A multi-stage project was conducted, focusing on equality and diversity issues in relation to selection.
 - 2.5.1. **Desk Review:** The purpose of the desk review was to summarise the equalities impact evidence to date and gather examples of possible interventions. The three features of this stage were as follows:
 - A summary of the GP Equalities Impact results from 2007-2011, drawing together key findings & conclusions.
 - A literature review focused on equality & diversity issues in selection.
 - Information on interventions or guidelines currently used in GP or elsewhere in medicine and evidence of their effectiveness.
 - 2.5.2. **Data Collection:** The purpose of this stage was to collect further data in order to understand the nature of the performance differences observed, how these arise or manifest themselves and to gather feedback on potential intervention strategies. Data was collected as follows:
 - Telephone interviews with a sample of key stakeholders¹ to explore their views on equality & diversity issues in selection, their perceptions of performance differences between candidates trained in and outside the UK and their knowledge of existing interventions / guidance aimed at reducing group differences.
- 2.6. The following report summarises the key findings and conclusions of the desk review and data collection stages. Recommendations, informed by the findings, are presented for further consideration by the GP National Recruitment Office.

¹The number of stakeholders initially invited to participate in the research was N=18. A further two stakeholders were contacted at a later stage and the final number interviewed was N=9. For some, a response to the invitation email was not received and others were unavailable during the interview period.

3. Desk Review: Part 1

3.1. Summary of GP Equalities Impact Results

- 3.1.1. Data from annual equalities impact reports, produced by WPG, between 2007 and 2011 was analysed to compare findings in relation to group differences in selection performance.
- 3.1.2. The annual equalities impact reports provide an anonymised analysis of the demographic data collected by the GP National recruitment office (NRO) from candidates participating in the national selection process.
- 3.1.3. A comparative analysis of the reports produced between 2007 and 2011 highlighted some consistent findings in terms of group differences in selection.
- 3.2. **Gender:** Female candidates significantly outperform male candidates on the selection centre (SC) total scores, all exercises and competencies². In addition, the proportion of males successful at the SC was significantly lower than the proportion of females.
- 3.3. **Age:** Younger candidates performed significantly better than older candidates on SC total scores, all exercises and competencies. On the whole the mean age of participants has increased since 2007³.
- 3.4. **Ethnicity:** The proportion of White candidates has been higher than the proportion of any other ethnic group since 2007. Overall, since 2007, the proportion of Asian, Black, Chinese and Other candidates who were successful at SC was significantly less than the proportion of White candidates. On the whole White candidates perform better than ethnic minority groups with minor variations across the years.
 - 3.4.1. 2008: White candidates performed better than all groups except Chinese candidates on the Written Exercise only.
 - 3.4.2. 2009: Results were the same as 2008 with the addition that there were no significant differences between White and Mixed⁴ candidates on the Simulation Exercise and Emotional Sensitivity.
 - 3.4.3. 2010: The variations observed were that there were no significant differences between White and Mixed or Chinese candidates on some exercises and competencies in Round 1.
 - 3.4.3.1. White candidates performed significantly better than all ethnic groups apart from Chinese in the Written Exercise and on two competencies (Problem Solving & Coping with Pressure).
 - 3.4.3.2. White candidates also performed significantly better than all ethnic groups apart from Mixed in the Written Exercise, the Group Exercise and on one competency (Problem Solving).
 - 3.4.4. 2011: The variations observed were that there were no significant differences between White and Mixed, Chinese or Other candidates on some exercises and competencies.
 - 3.4.4.1. In Round 1, White candidates performed significantly better than all other groups except Mixed on SC total score. There were no significant differences between White and Mixed or Chinese candidates for the three simulation exercises (A, B & C) and the written exercise. White candidates performed significantly better than all other ethnic groups except Chinese and Other candidates on all competencies.

² One exception in 2009 was that there was no significant difference between males' and females' performance on the Simulation Exercise.

³ Participants' mean age decreased slightly in 2008 and again marginally in 2009 before increasing over the last two years.

⁴ Mixed candidates includes the following categories: Mixed - White and Asian; Mixed - White and Black African; Mixed - White and Black Caribbean; Mixed - Any other Mixed background

3.4.4.2. For Round 2, White candidates performed significantly better than all ethnic groups apart from Chinese on SC total score. White candidates performed significantly better than Black and Asian candidates only for two of the simulations (B and C) and the written exercise. There were no significant differences between White and Other candidates on the all competencies and no significant differences between White and Chinese candidates on three of them (Emotional Sensitivity, Communication Skills and Conceptual Thinking & Problem Solving).

3.5. **Place of Medical Qualification:** Since 2007, the proportion of UK-trained candidates attending the SC has been much larger than the proportion of non-UK-trained candidates. Consistently, UK-trained candidates perform significantly better than non-UK-trained candidates on SC total scores, all exercises and competencies. In addition, the proportion of UK-trained candidates successful at the SC has been significantly higher than the proportion of successful non-UK-trained candidates; there has been no variation to either of these patterns since 2007.

3.5.1. The proportion of candidates training in the different regions was similar across the five years of reports analysed. The majority were UK-qualified (56.2-65.6%)⁵ followed by candidates qualified in Asia (21.9-31.2%), then those qualified in Africa (4-6.7%) or Europe (5-6.5%), with the smallest proportion of candidates qualified in Other regions (0.8-1.9%).

3.5.2. The proportion of UK-qualified candidates has increased yearly since 2007 (with the exception of 2009 where this figure decreased slightly) and after an increase in 2008, the proportion of candidates qualified in Asia has decreased.

3.5.3. The proportion of candidates qualified in Europe was at its lowest in 2011 and the proportion of candidates qualified in Africa at its highest in 2011, with small variations over the years. Since 2008 the proportion of candidates qualified in Other regions has decreased slightly.

3.5.4. The percentage of non-UK trained candidates successful at the SC increased every year between 2007 and 2010 (range 32.7-52%); this decreased slightly in 2011 to 49% of non-UK trained candidates successful at SC.

3.5.5. Since 2007, candidates trained in Asia have performed consistently worse than candidates trained in UK, Europe (excl. UK) and Africa on SC total scores and the Simulation Exercise.

3.5.6. Candidates trained in Asia also performed worse than candidates trained in these other regions on a number of the competencies, ranging from 2 of the competencies in 2007 to all of the competencies in 2011.

3.5.7. In 2011 there was a decrease in the number of successful UK-trained candidates across all ethnic groups and an increase in the number of non-UK-trained Chinese, Mixed and Other candidates.

3.5.8. Additional analysis as part of the 2011 report indicated that place of medical qualification independently explained the greatest amount of variance in SC total scores. Additional variance explained by ethnicity and gender was small (>1.5 % for ethnicity and > 2% for gender).

3.6. **Foundation Programme Attendance:** Since 2009 when analysis of scores based on Foundation Programme (FP) attendance was conducted, there have been greater proportions of candidates who have attended an FP compared with those who had not, attending the SC. Consistently candidates who had attended an FP performed significantly better on SC total scores, all exercises and

⁵ Numbers in brackets indicate ranges in the proportions of candidates within each of the regional groups.

competencies. Since 2009, the proportion of successful candidates has been significantly higher for those who had attended an FP than for those who had not.

- 3.7. **Length of Time since Qualification:** Data concerned with the length of time since a candidate had achieved their primary medical qualification was only analysed in 2011 so a comparison with previous years is not possible. In 2011, the length of time since qualification accounted for more of the variation in scores than age for Round 1.
- 3.8. **English Language Proficiency:** Data regarding candidates' English language proficiency was only analysed in 2011 so a comparison with previous years is not possible. In 2011, candidates who received an undergraduate degree taught in English performed significantly better on SC total scores, all exercises and competencies, than candidate's whose English language proficiency was indicated by their achievement of the minimum score on the IELTS or any 'Other' measure⁶

⁶'Other' indicates either completion of another English Language qualification, working in the UK NHS for 2 years or more , or an 'other' category

4. Desk Review: Part 2

4.1. Literature Review

4.2. A review of the academic literature and relevant policy documentation was conducted to explore equality and diversity issues in relation to selection. Academic journal databases and other sources i.e. government & organisational reports and policies were searched and results sifted for relevant articles. Specifically, the review focused on the following questions:

- What are the key equality and diversity issues in selection?
- What can we learn about equality and diversity in selection medical education?
- What is the nature of group differences, particularly in relation to ethnicity, nationality or place of qualification, in selection performance
- What causes group differences, particularly in relation to ethnicity, nationality or place of qualification, in selection performance?
- What guidance currently exists, in relation to equality and diversity in medical selection?
- Are there interventions which effectively reduce the group differences in selection?
- How are strategies aimed at reducing group differences implemented?

4.3. The outcome of the literature review presented in this report is based on the key themes identified. The key findings summarised and presented in the report have been weighted based on where a body of evidence exists across the literature.

4.4. References from the literature review are listed at the end of this report.

4.5. **Group Differences in Medical Selection & Education:** The literature identified similar patterns as those noted in GP selection with differences in performance identified for ethnicity, gender, age and place of training. A recent meta-analysis indicated that findings of an ethnic difference in assessment outcomes were both consistent and persistent (Woolf et al, 2011).

4.5.1. Differential performance has been indicated for gender in terms of females performing better than male candidates in selection or medical education (e.g. McDonough et al, 2000).

4.5.2. Females have also been found to perform better in communication skills-based assessments in general practice (e.g. Dewhurst et al, 2007). Explanations for this difference have included women's greater effectiveness in the ability to listen (Clack & Head, 1999) and potentially a greater sense of patient care values (Zaharias, Piterman & Liddell, 2004).

4.5.3. Across medical education and training, at both undergraduate and postgraduate levels, differential performance between ethnic groups is a consistent finding. Notably ethnic minority groups do not perform as well as White candidates across various assessments.

4.5.4. Overseas training, significantly predicted lower success rates for doctors on qualification assessments such as the MRCGP (Wakeford, Farooqi, Rashid & Southgate, 1992). The literature has also indicated that a significant proportion of the Asian doctors in the UK are from India (Young et al, 2003) and that Asian doctors born and trained in the Indian subcontinent perform particularly badly (Wakeford et al 1992).

4.5.5. Medical students and doctors from ethnic minority group significantly underperform academically at machine-marked tests and practical clinical assessments (Woolf et al., 2009; Woolf et al., 2011; Dewhurst et al., 2007).

4.5.6. Doctors who had qualified and undertaken training overseas tended to have lower success rates during training than UK-trained doctors (White, 2009).

4.5.7. There are examples within the literature of no significant differences existing between ethnic groups trained in the UK e.g. no differences in GP placement success amongst ethnic minority doctors trained in the UK in 2004 & 2008 (Plint et al, 2009). This suggests that place of qualification and experiences during training may be a significant influential factor.

4.6. **Causes of Group Differences in Performance:** The causes of group differences in selection & educational performance in medicine are multi-factorial. There is no conclusive evidence within the literature to provide an explanation for group differences although a number of significant factors may be contributing to the phenomenon to varying degrees.

4.6.1. A difference in the cultural values of certain ethnic groups was identified within the literature as a possible explanation for differences in performance within other medical speciality areas (e.g. MRCP examinations). For example cultural differences in the perceived status of a medical career may result in non-white candidates making exceptional efforts to gain entrance into medical school (Dewhurst et al, 2007). These efforts may not however be sustainable in the long term resulting in regression to the mean when it comes to more senior selection.

4.6.2. Hofstede's (1984; 2001) 'cultural dimensions theory' offers a systematic framework for differentiating national cultures and provides an approximate understanding of other cultures in terms of values. The model assists with cross-cultural understanding and may be useful in informing some of the cultural differences between the UK and non-UK candidates entering the GP selection process (as well as other medical selection processes).

4.6.2.1. All levels of communication are affected by cultural dimensions: verbal communication (words and language itself), non-verbal communication (body language, gestures) and etiquette (e.g. do's and don'ts in terms of clothing, customs and protocol). Cross-cultural understanding and intercultural competence⁷ is therefore critical.

4.6.2.2. Hofstede's six dimensions of values are as follows: power (equality versus inequality), collectivism (versus individualism), uncertainty avoidance (versus tolerance), masculinity (versus femininity), temporal orientation, and indulgence (versus restraint).

4.6.2.3. In Europe, power distance⁸ tends to be lower in northern countries (e.g. Sweden, UK) and higher in southern and eastern parts (Italy, Spain). Individuals in low power distance countries therefore expect and accept relationships between superiors and subordinates are more consultative or democratic. In high power distance countries, individuals may accept power relations between superiors and subordinates that are more autocratic and paternalistic.

4.6.2.4. Generally, western countries can be considered as individualistic (i.e. importance is placed on personal achievements and individual rights) whereas countries such as Asia, Africa and Latin America have strong collectivistic values (i.e. individuals act predominantly as members and in the interests of their cohesive group or organisation).

4.6.3. Schwartz (1992; 1994) also identifies 7-10 cultural values which exist in varying degrees across different countries. In a comparison of different countries in terms of their values Schwartz (1999) identified where countries were similar or differed in terms of national cultures. For example Sweden and Denmark appeared to have similar national value cultures whereas China and Italy had largely opposite profiles.

⁷ Intercultural competence refers to the ability to successfully capture and understand, during interaction with people from foreign cultures, their specific concepts in perception, thinking, feeling and acting.

⁸ "Power distance is the extent to which the less powerful members of organisations and institutions (like the family) accept and expect that power is distributed unequally (Hofstede, 1984)

- 4.6.4. Development of intercultural competence appears crucial for successful communication between individuals of different cultural backgrounds. One of the most difficult aspects of the intercultural communicative competence is the ability to distinguish between idiosyncratic and culturally conditioned behaviours. Difficulty in explaining the nature of group differences in relation to ethnicity, country of origin or training could be linked to the complexity associated with areas such as this.
- 4.6.5. Diverse university populations provide unique social forums to foster intercultural development (Volet, 1999) and the development of multicultural individuals (Adler, 1974). Differences in the diversity of universities and medical education facilities in different countries could therefore explain differences in individuals' levels of intercultural development and their effectiveness interacting in different cultural environments.
- 4.6.6. Related to cultural differences, is the finding that eastern and western cultures also demonstrate different thinking styles based on the difference in their individualistic versus collectivistic contexts (e.g. Nisbett, 2003). For example Eastern Asians have been found to think contextually whereas Westerners focus on the point in hand. In addition Eastern Asians tend to think holistically whereas Westerners think more analytically.
- 4.6.7. In terms of communication differences, research suggests that vernacular language and accents can cause difficulties. In addition, language related to prescribing can present some problems – with generic names being common in the NHS, but with some use of brand names when communicating with patients. However overseas-qualified doctors are often accustomed to using scientific names (Illing et al, 2009).
- 4.6.8. Many overseas doctors come to the UK to post-Foundation roles. These doctors' clinical practice is established, and so they may find greater difficulty in adapting to a different workplace culture, and may not have as much support as the Foundation Programme (FP) doctors (Illing et al, 2009). The FP may therefore be an influential factor in enhancing performance.
- 4.6.9. Furthermore non-UK qualified doctors entering specialty rather than foundation training are likely to be older therefore also impacting on age-related group differences.
- 4.6.10. The negative impact of unconscious bias is currently being explored and is growing in popularity as a possible explanation for emerging differences in ethnic minority doctors' learning and performance ratings.
- 4.6.11. Differences in the culture of the UK NHS compared to overseas healthcare systems was highlighted as a possible explanation for the difficulties experienced by overseas doctors training in the UK; in particular the patient-centred culture of the NHS and working within a holistic model of care where social issues are important, was considered a cultural change for overseas doctors (e.g. Illing et al, 2009). International doctors may be less familiar with holistic models and have a more paternalistic view of the doctor-patient relationship.
- 4.6.12. The literature highlights areas in which overseas medical graduates differ, or attribute their perceptions to differences from their country of origin e.g. elements of teamwork, such as working in a less hierarchical environment with greater equality between clinical professions, and greater communication between trainees and senior doctors (see Illing et al, 2009). Doctors who have trained overseas may therefore experience difficulties understanding the roles and responsibilities of other team members within the NHS.
- 4.6.13. Overseas doctors may also encounter different clinical presentations and pathologies and social problems within the UK which may not have been encountered within their own cultural environments.

- 4.6.13.1. Research within the Canadian health service found that international medical graduates rated knowledge of healthcare systems and processes as well as knowledge of pharmaceuticals as two key areas of difficulty when moving to practice abroad (Zulla et al, 2008). This could indicate a mismatch in perceptions and could suggest some form of integration programme for overseas doctors may be beneficial.
- 4.6.13.2. Some research suggests the possibility of 'stereotype threat' as a psychological explanation for individuals from ethnic minority groups underachieving academically. This research has predominantly focused on Black student populations and may not be widely generalised to all ethnic group differences in the medical context, however the impact of stereotypes is a widely recognised psychological phenomena (see Woolf et al, 2009).
- 4.6.13.3. According to stereotype threat theory, in test situations members of negatively-stereotyped groups can feel sufficient anxiety at the prospect of fulfilling a negative stereotype about their group that they subsequently underperform.

4.7. **Interventions & Strategies for Reducing Group Differences:** There was limited evidence of the effectiveness of targeted interventions aimed at reducing group differences in performance during medical selection or wider medical education. Strategies to support international doctors or reduce adverse impact were identified and may inform possible future interventions, although it is recommended that further evidence of effectiveness is explored before actions are implemented.

- 4.7.1. In relation to the concept of stereotype threat, the effect may be reduced by changing individuals' perceptions of themselves, their ability and their potential. Following a self-affirmation intervention the ethnic attainment gap was narrowed by almost 40% in one study. The self-affirmation task (asking doctors to write about their values) enhanced individuals' self-esteem and self-worth thus removing the stereotype threat.
- 4.7.2. The quality and availability of pre-registration training is variable and international medical graduates may benefit from more consistent approaches to induction. In addition mentoring schemes supporting refugee doctors have been found to positively impact on performance and such support could have benefits for qualified doctors from overseas.
- 4.7.3. Research suggests pre-arrival information, induction on arrival, and ongoing support can benefit overseas-qualified doctors coming to the UK, making the transition experience easier (Illing et al, 2009). This support may positively impact on performance in selection and training but needs a more programmatic approach to measure the effect of each of these elements in more detail.
- 4.7.4. Research suggests performance differences are greatest in relation to communication skills and it has been demonstrated that training in this area is valued by non-UK trained doctors (Slowther et al.2008).
- 4.7.5. The academic literature still recommends that performance differences, especially in relation to ethnicity, are tracked over time and studied further to understand the underlying causes. Royal Colleges, medical specialities and medical schools should share and explore patterns in the performance differences they experience in selection and during training.
- 4.7.6. A growing number of studies show a link between hidden biases and actual behaviour; discrimination can therefore still occur without an individual being conscious their actions. Implicit Association Tests (IATs) (see Greenwald, McGhee, & Schwartz, 1998) measure unconscious, or automatic, biases and are designed to tap into our stereotypes in order to determine how biased they are and how we are governed by them. Raising individuals' awareness of their personal biases could assist with reducing unconscious discrimination.

4.8. Existing Guidance & Interventions

4.9. Existing guidance & information on interventions or guidelines currently used in GP / medicine and evidence of their effectiveness was investigated. Website resources, policy and guidance documentation was reviewed.

4.10. **Equality & Diversity Guidance within Healthcare:** General guidance and information in relation to equality and diversity as well as advice for international medical graduates or doctors can be sourced from the General Medical Council (GMC), Department of Health (DH), British Medical Association (BMA), regional postgraduate medical deaneries and relevant NHS organisations (e.g. NHS Employers, NHS Careers etc).

4.10.1. The UK's Race Relations Amendment Act (2000) places a duty on all public authorities, including universities and the NHS, to monitor admission and progress of students and the recruitment and career progression of staff by ethnic group to be able to address inequalities or disadvantage.

4.10.2. Information & support available to doctors who qualified overseas focuses on practical issues such as immigration and examinations; research suggests guidance does not necessarily provide adequate information about ethical/professional standards.

4.10.3. Guidance has been produced for International Medical Graduates (e.g. by NHS Employers) which provides an overview of the healthcare system in terms of structure and including information about the employment of general practitioners in primary care; it does not specifically relate to medical selection processes.

4.10.4. Approaches across medical deaneries differ somewhat in terms of the general guidance and support offered to overseas doctors and IMGs although guidance specifically related to selection is relatively standardised.

4.11. Guidance & Information in GP/Medical Selection:

4.12. DH best practice guidelines suggest that GPs recruited from abroad should be given a mentor, an individual induction assessment and group induction upon entry into the NHS. Employers should also make available information about English language support through local education providers.

4.13. The GP National Recruitment Office website outlines their equality and diversity policy and provides information for overseas doctors on the requirements regarding immigration status, application processes and the GP role within the NHS.

4.14. There is more detailed information about what it is like to work in the NHS, including short videos of current employees, on specialist NHS careers websites (e.g. NHS Careers and NHS Medical Careers) and there are links to these websites from the GP recruitment website. These alternative websites also include specific advice and information regarding the GP speciality.

4.15. The GMC provides detailed information about their requirements for medical selection processes including the use of criteria and processes which treat eligible candidates fairly, selection of candidates through open competition and the need for information about places on training programmes, eligibility and selection criteria and the application process to be published and made widely available in sufficient time for doctors who may be eligible to apply.

4.16. The BMA has produced a report which recommends equal opportunities awareness training for selectors, further guidance for applicants on filling in application forms and on interview procedures and best practice in equality and diversity to be shared in order to improve medical recruitment processes and reduce potential barriers for ethnic minority applicants.

5. Data Collection

- 5.1. Key Stakeholder Consultation: Interviews were conducted with stakeholders (N=9) from within and outside of General Practice and / or medicine. The final sample included representatives from the public and private sector with expertise in Selection and Assessment and Equality and Diversity, as well as academics with expertise in the area of Equality and Diversity.
- 5.2. Stakeholder interviews were approximately 30 minutes long; three were conducted face-to-face and six via telephone. All the information gathered as part of the stakeholder consultation has been made **anonymous** and stakeholders' contributions will be kept **confidential**.
- 5.3. Stakeholders were asked to comment on three key areas: 1) Knowledge or experience of group differences in selection performance, 2) Perceptions of the nature and causes of such group differences and 3) Knowledge, experience or perceptions of the necessary guidance for selectors / candidates or effective intervention strategies aimed at reducing group differences.
- 5.4. Interview responses were transcribed and descriptors extracted via a qualitative coding process to identify key themes. Individual themes were further grouped in to six broad themes (Figure 1.)

Figure 1: Overview of Key Themes from Stakeholder Consultation



- 5.5. The majority of organisations represented by the stakeholders consulted did not necessarily focus on 'place of qualification' as an area of interest for equal opportunity and diversity monitoring. The outcomes of the stakeholder consultation are therefore likely to inform the broader issues of ethnicity and consideration of equality & diversity issues in relation to selection.

5.6. **Key Theme 1: Best Practice in Selection & Assessment:** The most significant theme occurring during stakeholder consultation was the importance of rigorous and standardised assessment processes, designed and evaluated in line with best practice guidelines (e.g. British Psychological Society).

5.6.1. Assessment and selection processes that are robustly designed and supported by thorough selector training will reduce the adverse impact against minority groups; any group differences are unlikely to be the result of bias in the process but other external influences.

5.6.2. The GP selection process has been rigorously implemented with exercises designed to reflect job relevant characteristics and informed by a comprehensive job analysis process. The standardised GP selection process already follows best practice guidelines and its validity and reliability demonstrated. The process therefore delivers to similar standards of assessment practice as other stakeholder organisations in the public and private sector.

5.6.3. Some of the characteristics of this theme are as follows:

- Merit-based assessment processes which are supported by a rigorous job analysis, designed in a standardised and objective manner and evaluated at all levels to identify any possible areas of bias.
- Equal representation of ethnic groups amongst selectors and during any pilot phases.
- Formal selector training in assessment principles & awareness of cultural differences.
- Familiarisation: ensure candidates understand the format & objective of exercises, how they will be measured and provide opportunities to practice where appropriate.
- External validation or review of processes (e.g. specialist diversity advisors) to identify possible cultural bias in language or exercise used.
- Objective assessment of training standards and equivalence of qualifications for international applicants / those who achieve primary qualifications outside of the UK.

5.7. **Key Theme 2: Equality & Diversity in Organisations:** Organisational practice in relation to equality and diversity, candidates' familiarisation with organisations and positive action or targeted diversity initiatives are the core elements of this theme.

5.7.1. The consultation process highlighted that candidates' familiarisation with an organisation and the associated culture can impact on their success both in selection and training. In addition, the extent to which organisations proactively engage in equality and diversity training or awareness activities and positive action initiatives (e.g. targeted recruitment) can reduce possibilities for inadvertent discrimination. Some of the characteristics of this theme are as follows:

- Equality & diversity training / cultural awareness training: need greater evidence base of the effectiveness of such interventions but they could support organisations in being more aware of diversity practice; E&D is not given enough focus in training.
- Cultural programmes may help people understand difference in contexts; mentoring / advice and information about how to use support networks not just access them may be useful.
- Integration and cultural familiarity can be issues for individuals moving to the UK from overseas; if these individuals are not supported they may seek out support networks within their own cultures, in turn reducing possibility of integration with UK culture.
- Familiarisation with an organisation's structure/processes as well as the organisational culture can give candidates more confidence entering selection processes.
- Targeted attraction events / diversity initiatives: use as opportunities to further support or coach minority groups in selection processes and familiarise them with organisations.

5.8. **Key Theme 3: Trends in Group Differences:** Stakeholders identified a number of similar patterns to those identified in GP, in terms of group differences in performance during selection. In addition a number of stakeholders referred to their investment in continued equal opportunities monitoring and selection data analysis in order to identify patterns in performance; this is similar to the activities conducted in relation to GP selection (i.e. annual equalities impact reports).

5.8.1. Whilst similar patterns to GP selection emerged in relation to age and gender, these were not necessarily as significant or consistent as the pattern of ethnic group differences (i.e. White candidates outperforming those from a number of other ethnic groups). The consultation process did suggest however that there was still no conclusive evidence to explain why such performance differences emerge among ethnic groups.

5.8.2. A number of stakeholders referred to differences in the applicant pools for their selection processes compared to that of the GP selection process. For example within GP selection there may be a narrower applicant pool (i.e. candidates have already undergone a certain level of specific medical training). For some of the stakeholders we consulted they were managing a much wider range of applicants whereby an undergraduate degree may be the minimum level of attainment; there may therefore be motivational differences within the applicant populations.

5.8.3. Stakeholders identified similar patterns to GP selection in terms of a higher proportion of younger applicants successful at selection compared with older candidates. Results are likely to be caused by a number of factors but could be an artefact of age where the applicant pool includes a small minority of applicants who reapply, without necessarily developing competence, and therefore are older with each year of re-application.

5.8.4. In summary some of the characteristics of this theme are as follows:

- Still a lack of conclusive evidence to explain why ethnic minority groups perform worse in selection and generally in terms of academic performance.
- Proactive monitoring and evaluation of equal opportunities and selection data is conducted by other public and private sector organisations in order to analyse trends and seek to understand the nature of group differences.
- Most stakeholders noted the following group differences in selection or performance (generally but not universally): White candidates outperforming all other ethnic groups, females outperforming males and older candidates performing less effectively than younger candidates.
- Greater proportions of ethnic minority groups, compared to White candidates, with lower levels of academic attainment at selection and other points of measurement once selected (e.g. performance review).

5.9. **Key Theme 4: Cultural Differences:** This theme refers to differences in candidates' cultural backgrounds (as defined by their nationality, ethnicity or place of origin). A difference in candidates' cultural frames of reference was repeatedly offered as a significant influential factor or possible explanation for differential performance during selection (as well as in training and organisational performance) amongst ethnic groups. Some of the characteristics of this theme are as follows:

- Differences in the training and practicing environments of non-UK doctors compared with the UK culture could create difficulty. Organisational cultures of UK versus non-UK healthcare systems could contribute to group differences when assessed in UK environment.
 - Roles and responsibilities perceived differently between cultures e.g. nurses form part of the team in UK, in other cultures this role may be seen to 'serve' doctors.
- Potential negative attitudes towards overseas doctors (negativity or scepticism from the public and media highlighting incidence of overseas doctors referred to GMC for fitness to practice). This

stereotyping or attitudinal shift could impact on opportunities and experiences they have practicing or training in a UK context.

- Values developed as a result of parental influence / cultural background e.g. some cultures place higher value on education (perceptions in some ethnic groups that education is not 'cool').
- Differences in cultural values and beliefs e.g. within Asian culture there is an emphasis on family networks and supporting large numbers of dependents and there is stigma associated with 'failure'; such factors could cause additional pressures which affects performance.

5.10. **Key Theme 5: Individual Differences:** This theme refers to differences inherent in the individual candidates or their personal experiences. Candidates' socioeconomic backgrounds, educational experiences and educational level of attainment as well as their English language proficiency were considered to be some of the individual differences referred to as potentially offering explanations for ethnic group differences in performance. Some of the characteristics of this theme are as follows:

- Similar issues exist within other public sector and private sector organisations in relation to English language proficiency; candidates whose first language is not English are less successful. If using English as a second language this can result in slower reading and processing of information; has a significant implication for timed exercises/tests.
- Mixed perceptions regarding impact of socioeconomic status/background although overall the majority of stakeholders view this as having a significant impact on the educational and training opportunities candidates are exposed to as well as the network of contacts they can draw upon for support and guidance. Newly arrived overseas doctors may lack similar networks.
- Differential opportunities to develop relevant competencies or skills; e.g. differences in training experiences, interactions with peers and educators, methods of teaching and structure of learning could contribute to differences in training experience and therefore level of knowledge and competence developed.
- Performance in selection likely to be explained by variation in experiences prior to this point i.e. training, work experience etc – need to understand nature of this variation.

5.11. **Key Theme 6: Psychological Factors:** During discussions, a number of psychological factors were considered as potentially contributing to explanations of performance differences. Levels of motivation, achievement commitment, personal values, and the impact of self-esteem, behaving consistent with stereotypes and testing anxiety were all identified as key factors to consider within the scope of this matter. Some of the characteristics of this theme are as follows:

- Unconscious bias is increasingly growing in popularity as a theoretical explanation of adverse impact and differential performance between ethnic groups during assessment and selection processes.
 - Raising awareness of this contributes to reducing the impact it has. Tests to assess unconscious bias are also available to assist individuals in understanding their own personal unconscious biases.
- Test anxiety is still a common problem and can be reinforced when individuals are aware of diversity statistics which indicate poor performance in their demographic group.
- Ethnic group differences particularly exist when highly cognitively loaded tests are used under strict time pressured conditions (even in tests designed rigorously & checked for cultural bias).
- Understanding of issues faced by diverse groups and how individuals cope or what additional support they need might be useful.
- Impact of social network on performance was also considered. This is linked to cultural integration and the psychological impact of isolation or a sense of belonging can have on individuals' performance and interaction with others.

6. Overall Summary

6.1. Overview of Group Differences in Medical Selection & Education

- 6.1.1. Within the academic literature and based on the outcomes of stakeholder consultation, it is evident that the patterns of group differences observed in GP selection (across a number of years) are common, consistent findings across selection practice, both in medicine and other contexts.
- 6.1.2. Generally, White candidates perform better than other ethnic (non-white) groups on a variety of assessments (e.g. presentations, exams, interactive exercises) and on the whole are more successful in selection.
- 6.1.3. The literature also confirms a pattern of overseas doctors (doctors who received their medical training and qualification outside of the UK) and international medical graduates performing less effectively than UK-trained candidates. In addition some ethnicity differences are less significant within UK-trained populations.
 - 6.1.3.1. The patterns in the literature lend further weight to the findings of additional regression analysis conducted as part of the 2011 equalities impact report, which highlighted place of medical qualification as explaining the greatest amount of variance in GP Selection Centre total scores. Ethnicity and Gender only explained a minimal amount of additional variance suggesting the place of qualification was a more significant factor in explaining differential selection performance.
 - 6.1.3.2. If competition increases within the UK for GP specialty training posts (as well as other medical specialities), the observation from 2011 in terms of a decrease in non-UK trained candidates successful during GP selection, could potentially continue. Stakeholders consulted during this process recognised greater competition for job roles within their fields and believed that group differences were likely to continue to emerge over the coming years.
- 6.1.4. The literature and stakeholders in other environments also confirm that group differences exist for gender (female candidates perform better than male candidates), however these differences are not always significant and the pattern is not as profound as that for ethnicity. There is some evidence also to support age-related group differences with younger candidates performing more effectively.

6.2. Causes of Group Differences in Medical Selection & Education

- 6.2.1. Both the literature and stakeholders within other contexts, suggest that cultural differences play a large role in explaining the differences in selection performance between different ethnic groups and more specifically UK versus non-UK trained candidates.
 - 6.2.1.1. Models such as that of Hofstede (1984; 2001) and Schwartz (1992; 1994) highlight the cultural differences in values between countries and demonstrate the impact such differences can have on communication, interpretation and understanding.
 - 6.2.1.2. Similarly differences in thinking styles, as influenced by a background in an Eastern or Western culture, could also impact on interpretation of written or verbal communication.
- 6.2.2. Based on stakeholder consultation, socioeconomic background was considered to be a factor of growing importance in contributing to our understanding of the causes of group differences in selection.
- 6.2.3. The research indicates that cultural differences in healthcare systems and roles within healthcare could result in different experiences for overseas doctors, impacting on their ability to adapt to the UK healthcare culture and model.

6.2.4. Psychological explanations in terms of the impact of stereotypes and unconscious bias were also identified within the literature and by a number of stakeholders.

6.3. **Guidance or Interventions to Support the Reduction of Group Differences**

- 6.3.1. Comprehensive information to prepare candidates for the selection process should be maintained on the GP recruitment website e.g. descriptions of exercise format and information about what is expected in terms of the outcomes and measurement of exercises. Best practice within the literature and the experience of other stakeholders is that this is a useful source of information for candidates.
- 6.3.2. The current information and guidance available to candidates (in GP and other specialities) focuses heavily on processes and structures. In addition guidance, information and advice about careers in GP, and the NHS more widely, are spread across a number of different resources. Whilst there are links on all websites to assist with accessing the various information sources, overseas doctors may find this hard to navigate.
- 6.3.3. Current guidance may not necessarily provide adequate information about ethical/professional standards however by the nature of their design, the assessment materials present professional and ethical dilemmas to respond to. In addition the behavioural competencies assessed will address these standards therefore ensuring candidates receive some exposure to and gain an understanding of these principles prior to selection which should prepare them adequately.
- 6.3.4. Best practice (i.e. GMC recommendations) and the outcomes of stakeholder consultation indicate that external review & inspection of processes ensures objectivity in selection e.g. use of external equality and diversity advisors or specialists.
- 6.3.5. Selectors need sensitising about the issues of equality and diversity in selection and the inclusion of equality and diversity awareness training as part of assessor or selector training is critical. Further verification of an individual's knowledge and understanding of equality and diversity issues following training could be assessed to determine their suitability as a selector.
- 6.3.6. A number of possible areas for further research have been identified as there is still an absence of a conclusive explanation for group differences and a successful intervention to reduce their occurrence in selection. For future reference, Professor Patterson and colleagues have recently reviewed the issues relevant to GP in an editorial in the *British Journal of General Practice* (Dec, 2011) which provides recommendations on a future research agenda in this area (Patterson, Denney, Wakeford, Good, *Making assessment fair and equal in postgraduate training; A future research agenda*. BJGP, 2011, 61(593):712-713).

7. Recommendations

7.1. Recommendations: Selection and Assessment Practice

- 7.2. A consistent, national approach to benchmarking the GP selection process, in terms of diversity statistics and final numbers selected within different demographic groups, against other medical specialities is recommended. This would allow comparison of the patterns and trends in group performance differences across medical specialities; the patterns are unlikely to be unique to GP. Data could be collected and collated for each deanery.
- 7.3. The involvement of external equality advisors in the design and review of the selection process is recommended to ensure the process is free from any cultural bias. Diversity specialists can identify cultural impact of the language used and the structure of selection exercises.
- 7.4. There is a wealth of information and guidance resources available via recruitment, deanery, speciality and general NHS websites for all applicants, including overseas doctors, looking to work in the NHS. The volume and large distribution of this information may make it difficult to sift through and navigate and it may be useful to draw all relevant information sources together for non-UK qualified doctors so they have one point of reference.
 - 7.4.1. Alternatively it may be useful to offer some form of mentoring or advisory support to assist international doctors with accessing and navigating these sources to ensure they familiarise themselves with the necessary information, both process and context related.
- 7.5. Implicit Association Tests may be a practical way of understanding individuals' unconscious biases. Making use of them in a confidential, developmental manner for selectors may be a useful way of assisting them in understanding their own subconscious biases, contributing to more objective and conscious assessments of candidates during selection.
- 7.6. **Recommendations: Selection Process:** The key recommendations, based on this research, in terms of delivering a robust and objective selection process which reduces adverse impact against minority groups, are as follows:
- 7.7. Matching selectors and candidates based on ethnic background or nationality and equal representation of ethnic groups during pilot phases and within the selector group.
- 7.8. Slower processing of information by candidates whose first language is not English could be mitigated by ensuring there is not an undue time pressure in completing selection tests/exercises. It should be noted however that this effect can also be mitigated by the inclusion of behavioural assessments within a selection process, in addition to cognitively loaded tests, as in the current GP selection process.
- 7.9. The inclusion of equality and diversity awareness training as part of selector training is critical. Standardised face-to-face verification of a selector's completion and understanding of the equality and diversity training, whereby they are required to demonstrate their skills and knowledge, is highly recommended.
- 7.10. Selector training should be highly standardised and regulated and it would be beneficial to support any online equality and diversity training with face-to-face workshops to consolidate learning.
- 7.11. Based on a job analysis and best-practice competency modelling techniques, a selector competency framework has been developed for use in the national GP selection process. This competency model enhances the quality of selector training, providing the national process with further credibility. It is recommended that selector training continues to emphasise the importance of achieving and maintaining effectiveness in these competency areas in order to deliver objective assessment and selection processes. Formal assessment of individuals against these competencies may further assist with the selection of highly competent selectors for use in the national process.

7.12. Recommendations: Equal & Diversity

7.13. In terms of future monitoring and analysis of group differences, it is recommended that validation and evaluation of selection processes continues. In addition equal opportunities monitoring and equality assessments of the process should continue on an annual basis.

7.13.1. Analysis of scores and performance at a very detailed level based on ethnicity and / or place of medical qualification may provide additional insight into differences in performance.

7.13.2. More detailed case level analysis of the SC exercises may also be useful in further explaining performance differences (e.g. analysing differences in performance for different cases used within the three Simulation exercises).

7.13.3. More in-depth analysis of performance for each of the 'Mixed' ethnic origin sub-groups may, for example, contribute to further understanding of the differences between ethnic groups.

7.14. Organisational policy in relation to equality and diversity should be routinely reviewed and updated; equal opportunities data monitoring should reflect such changes and additional data should be collected as indicated by these policies.

7.15. Raising awareness of newly developed GP competency (identified by GP Job Analysis project, 2011) '*Respect for Diversity and the Law*' for selectors and candidates. Stakeholder consultation indicated that measurement of behaviours relevant to equality and diversity can raise awareness and improve practice in this area.

7.16. Evidence shows that organisational familiarisation can contribute to greater confidence in candidates during selection. It is recommended that material provided on national recruitment and deanery websites is continually reviewed to ensure it is relevant and provides accurate information or signposting which allows all candidates, including international candidates, to familiarise themselves with organisations, the GP role and selection processes.

7.17. Promoting cultural sensitivity enables people to work more effectively when interacting with individuals from other countries and also assists with making transactions between cultures more effective. Raising awareness of cultural differences (e.g. using models such as Hofstede, 1984; 2001) with both selectors and candidates may be a useful stage in equality and diversity practice. Online training tools specifically for raising awareness of cultural differences and sensitivities may be a useful and accessible resource.

7.18. Recommendations: Additional Research and Evaluation

7.19. Findings in the equalities impact reports (2009-11) indicate that candidates attending Foundation Programmes (FP) are more successful in GP selection. In addition the current literature suggests overseas doctors who enter speciality training without having attended a UK FP have greater difficulty adapting to the UK healthcare system. Links between these two findings could be explored to determine *how* the FP contributes to more effective performance in selection.

7.20. Consultation with ethnic minority groups and doctors trained overseas to understand their needs in more detail i.e. what they are seeking from employment & the support they need as well as what they find particularly challenging about GP selection processes within the UK.

7.21. Continued research, across medical specialities at postgraduate level, is required to understand the nature and *cause* of group differences, particularly in relation to ethnicity & place of qualification.

7.22. The benefits of objective assessment of equivalence of qualifications could be explored in more detail. Individuals experience training differently in different contexts; we may benefit from learning more about the difference in standards/content in order to determine equivalence of qualifications. It may be beneficial to seek further expert assistance in this area.

7.22.1. It is also recommended that the criteria outlined in the Acceptable Overseas Qualifications paper provided by the GMC is understood and regularly reviewed (GMC, 2010).

7.23. A more systematic measurement of the effect of the pre-arrival information, induction on arrival, and ongoing support provided to overseas doctors entering training within the UK, may provide implications for possible interventions to support overseas doctors at the selection stage prior to training.

7.24. **Actions & Next Steps**

7.25. Additional analysis of existing national selection data at a more detailed level including case level analysis by ethnicity and place of medical training and analysis of performance within ethnic sub-groups e.g. 'Mixed' or 'Other' ethnic groups. More in-depth analysis may provide greater understanding of the patterns of group differences currently observed and inform future diversity monitoring or further research.

7.26. Continued equalities impact monitoring on an annual basis and regular reviews of the patterns in group differences in selection performance over time.

7.27. Development of a central resource point which draws together all the relevant information sources from recruitment, deanery and general NHS websites for all applicants, including non-UK qualified doctors, looking to apply for GP speciality training and understand the culture of the wider NHS. The existing national recruitment website may serve as a useful foundation for providing a more holistic, single point of reference for GP-specific and general NHS familiarisation material for candidates, particularly international doctors, looking to work in the GP speciality.

7.28. Facilitation of focus groups and consultation with doctors currently working in the NHS who qualified overseas (and ethnic minority groups if required), to understand their perceptions of the selection process, support received in preparation for selection and the quality and accessibility of information available. Greater insight into the challenges faced, support required and perceptions of GP/medical selection processes within the UK may be useful for informing future guidance provided.

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