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Recommendations for medical specialist selection: A report commissioned by the Department of Health.

The current selection system.

The concern of the Department of Health over its selection procedure is entirely justified. The fairness of a selection procedure affects all its stakeholders - the potential employees and the recruiter, as well as other stakeholders in the job. In the NHS these include the patients, whose welfare is very likely to be affected if irresponsible decisions are made. The fairness of selection may also influence perceptions of the organization, and will almost certainly influence its profitability (Schmidt and Hunter, 1998). Even in a non-profitable organization such as the NHS, the satisfaction of "customers" is of paramount importance for its legitimacy and survival under the gaze of the public eye.

Under the present system of selection, assessment of candidates for medical specialities is not standardised, and is usually centred around an interview. This differs from hospital to hospital and can be highly unstructured. The validity of unstructured interviews has long been questioned (Schmidt and Hunter, 1998, Dipboye, 1997), and with no evidence for the competencies they will identify predicting specialists' job performance there is no argument for continuing their use.

The procedure may not just be selecting the wrong candidates, but there is also potential for its perceived lack of justice to alienate those who apply. As Carlson et al (2002) note, all a selection procedure can do is select the best from the applications received - and they may not be of the required quality. For example, the smaller proportion of women than men entering surgical and medical specialities (Lambert et al, 1996) may be entirely due to women's tendencies to shy away from impression management (Singh et al, 2002), and their perception that Old Boy-style networking will be needed in a panel interview with established Trust members. It is entirely

possible that the best candidates might be women. This report therefore serves two purposes - firstly giving the recommendations that the Department of Health requires, and secondly making selection transparent, in order to discourage potentially disadvantageous self-selection. In general, education about the selection procedure should be prioritised, to encourage all eligible candidates to apply and generate the best applicant pool possible (Carlson et al, 2002).

The structure of the report.

The main stakeholders in specialist selection are doctors, the patients, and the Department of Health. A clear specification of the competencies required for Paediatricians, Anaesthetists and Obstetrics and Gynaecologists by these groups is therefore vital. Designing a selection process would ideally involve a job analysis in which the needs of a wide variety of these stakeholders were identified (see Patterson et al (2000) for such a competency model). The constraints of the current report unfortunately demand a more economical approach, but a summary of already available material should be an adequate substitute and will form the next part of the report.

Taking into account the problems with the current selection method, and providing a procedure that will adequately assess the identified competencies is equally important, and the penultimate section of this report will be dedicated to identifying an appropriate selection procedure.

Finally, once the competencies and assessment method are identified, they should lead to a set of clear recommendations for the Department of Health. The limitations of the procedure should be clear by this point, and in the conclusion these will be discussed at more depth. The report will end with some practical suggestions for assessing the usefulness of the chosen procedure and an attempt to guide future selection development.

Identifying key competencies for the specialities.

Cognitive ability is the only universally acknowledged predictor of job performance (Smith, 1994), but in a group of high academic achievement such as the medical profession it has limited application for selection. Academic achievement is important in demonstrating cognitive ability and knowledge, but further criteria are needed to discriminate between candidates. What is more, there are some limitations to the use of college achievement as a predictor of future job success, and selection on the basis of this alone should be avoided (Roth and Bobko, 2000).

For additional predictors, studies of patient and peer groups seem the richest source of information on the competencies required in a good doctor. Apart from knowledge, covered previously, communication and empathy are commonly and reliably selected as these characteristics both in General Practice (Lupton, 1997; Patterson et al, 2000) and in more diverse medical professions such as surgery (Baldwin et al, 1999). For assessment of these competencies, it seems logical to take the advice of Robertson (1994), who argues that relating assessment to the job is essential. In other words, the general empathy of a candidate does not matter - it is whether or not they will be empathic in their intended job role.

In-role assessment of in-role traits would have to be qualitative, however, and assessing personality qualitatively can be unreliable (Barrick et al, 2000). In order to provide fair assessment and minimise difficulties, this methodology should be paired with quantitative personality assessment. This allows corroboration of results, and can even add further information about candidates if selection decisions are tricky.

Scales currently available to measure relevant competencies (e.g. the Jefferson Scale of Physician Empathy, Hojat et al, 2002a, 2002b) are untested at this level of selection. Their use would be mostly speculative, and is not recommended. While the traits that will be qualitatively assessed are not directly elicited in the Big Five, the usefulness of this scale in selection decisions is established in research (Salgado,

1997) and in the absence of a closer-fitting personality trait scale, it should provide adequate information. Empathy and communication skills are not directly measured by the Big Five, but agreeableness relates to empathy as measured by the Comrey Personality Scales (Caprara et al, 2001) and extraversion predicts success in jobs where interpersonal skills are important (Salgado, 1997). For differentiation between comparable candidates, the five-factor model also provides additional selection information - conscientiousness has been linked skills that may be key in medical competency (Ferguson et al, 2000). More generally, conscientiousness and emotional stability predict job performance in a variety of job types, and openness to experience predicts training proficiency (Salgado, 1997), which is of obvious use in junior doctors.

At present there is a lack of research to inform differentiation between these competencies for the specialities. However, future study might investigate such studies as Hojat et al (2002a), where substantial differences in empathy were found among specialists. Amongst the groups currently relevant, paediatricians were the most empathetic and obstetrics and gynaecologists were in the mid-range of empathy. Anaesthetists had the lowest empathy scores of all specialities. This echoes guides to speciality choice (Richards, 1990) where practicality is emphasised as a desirable trait in anaesthetics and obstetrics and gynaecology, whereas emotional coping, which may be related to empathy, is highlighted in paediatrics and obstetrics and gynaecology. Validation of these competencies would greatly improve future specialist selection and at present it may be worth using this information to weight the importance of the characteristics in individual specialities' selection procedures.

Choosing selection methods.

This report has already established that the selection method must not alienate candidates, and must accurately assess the identified competencies, but specification of the competencies will also direct what forms of assessment can be used. The easiest way to narrow down candidates at the start of the procedure is clearly to elicit

academic information by application form, and the Big Five personality test is only available in standardised format. This means that the only decision to be made is on the timing of the test, but as the candidates will be gathered for the qualitative stage, this can be administered then for convenience. The Big Five must be administered first to avoid key competencies identified in the qualitative procedure biasing questionnaire answers.

Qualitative methodology also limits choices - for example it discounts "soft" biodata scales which can be used to elicit subjective information about characteristics related to competencies like those required in professional jobs (Harvey-Cook and Taffler, 2000); and which may even provide a more detailed account of cognitive ability and personality than more specific measures (Mount et al, 2000).

Narrowing down the type of selection procedures available in this way is not necessarily detrimental, however. In addition to the advantages already identified in choosing a qualitative methodology, i.e. the richness and job relevance of information gained, evidence suggests that stakeholders in the procedure may prefer it. Candidates are used to being able to "sell themselves" in selection procedures (Dipboye, 1997), and there is evidence that professional organizations such as hospitals prefer less rigid selection procedures, as they feel that too much formality may prevent candidates from applying and reduce the emphasis on interpersonal skills (Harris, 2000; Scholarios and Lockyer, 1999).

Among reasonably loose qualitative tests, the only selection procedure that has been established as a reliable predictor of job performance is the interview (Schmidt and Hunter, 1998; Robertson and Smith, 2001). This is therefore the logical choice for selection, and it is fortuitous that this only represents a small departure from the previous selection method. While the format must be changed to add structure, and standardise questioning and the rating of responses to ensure fairness, and avoid compromising predictive ability (McDaniel, 1994; Robertson, 1994), there is scope for maintaining some of the previous structure used in interviewing. Preserving the involvement of Trust interviewers would be ideal. If proper training was given and

adhered to, and procedure centralised as part of the standardisation procedure, then retaining the interview would avoid changes in responsibility for recruitment decision-making. This could otherwise raise major political issues within the organization. It should be noted that centralisation of procedure is necessary, as training and standardisation have beneficial effects (Dipboye, 1997; McDaniel, 1994); however, centralisation of location should not be considered a necessity, if interviewers are available to travel.

The last consideration in using the structured interview for qualitative assessment of empathy and communication skills, is whether or not it can adequately assess them. Intuitively, in-role personality information should be easy to assess with relevant questioning, but the reality of selection and assessment (Schmidt and Hunter, 1998) is that perfect prediction of job performance will not occur.

On the other hand, there is good evidence to suggest that more specific information about the competencies under investigation will be available through interview. Huffcutt et al (2001) found that interpersonal skills such as rapport, tact and co-operation could be reasonably predicted through structured interview. Such competencies as social skills have also been convincingly assessed by structured interview, as has job knowledge, which speaks well for the argument that qualitative assessment will predict in-role behaviour (Robertson and Smith, 2001). More specifically, Cliffordson (2002) found that empathy could be judged with quite high inter-rater reliability in interview, and that this ability was greatly enhanced by training.

The predictive validity for interviews overall are encouraging enough to recommend structured interviews for most job selection (McDaniel et al, 1994). They are one of the best predictors of overall work performance, especially when linked with an assessment of cognitive ability, as recommended here (Schmidt and Hunter, 1998). Huffcutt et al (2001) also found that discrimination could be minimised in structured interviewing, with low racial and sex differences in assessment.

All these advantages, combined with the aforementioned appropriate competency measurement and their popularity show the structured interview as the most rational selection method for speciality choice. For both fairness and accuracy, the type of interview recommended is "highly structured" (Dipboye, 1997). This includes situational and patterned behaviour questions which require participants to demonstrate the key competencies in hypothetical scenarios or recall using them in previous situations, both of which can be highly job specific.

Summary of the assessment procedure.

For the sake of clarity, the entire format for the recommended selection procedure is given below. Any details of the procedure not specified here are undirected by research, and are open to Department of Health interpretation. For example, the lack of conclusive research on the benefits/detriments of panel interviews (McDaniel et al, 1994) has prevented any recommendation as to the number of interviewers.

Stage 1

Education of candidates about the possibilities of work in the specialities, and encouragement to apply, coupled with and backed up by information about the fairness of the procedure. This should avoid bias in selection of the candidate pool.

Stage 2

Interested candidates send in application forms, which are sorted so that those with minimum specified academic qualifications (exact details to be obtained from the Department of Health) are invited to the interview stage. This should assess the cognitive ability and knowledge of applicants.

Stage 3

On arriving at the interview site, candidates complete the personality questionnaire and undertake a structured interview, with questions designed to assess their capacity for empathy and communication skills in context. These assess participants for the competencies of empathy and communication skills, with some variation as to their importance in each speciality.

The notes of the interviewers should be prioritised in decision-making about candidate selection, with the personality scales used as reference points for more in-depth discussion.

Concluding remarks.

The lack of research specific to the selection procedure under study is still a matter for concern. This drawback should not be seen as a negative, however, but as an avenue for further research. Basing the competencies and procedures on relevant literature allows for some degree of construct validity - the capacities measured do appear related to job performance. Nonetheless, the Department of Health is urged to trial the procedure before applying it to candidates - instead of validating its predictive power, it is more ethically sound to concurrently validate the procedure by applying it to job incumbents, and using it to predict how successful they will have been in the job.

This report can best be seen, therefore, as a starting block for the selection and assessment of doctors into specialities. Should the structured interview system described above be a perfect predictor of job performance - an achievement not yet boasted by any such procedure, this should still be the case. Sparrow (1997) notes that the competencies involved in any job will change over time, with some fading in importance, and others achieving prominence - see Lupton (1997) for some competencies that previous generations of doctor demonstrated. This means that any

set of competencies will change in importance, and best practice is to constantly update a selection procedure for relevance and fairness.

To enhance relevance it is also recommended that changes in the research information available, as well as the job, are important. The emergence of speciality competencies (Hojat et al, 2002a) is still in an embryonic stage, but is definitely an area in which advances are due, and many other advances in research and theory may have wider consequences for selection. It is clear that speciality selection can be practical, and may even be transformational for the Department of Health, although this is likely to be a gradual process. Hopefully this report will be the starting point for such a transformation, and a positive step in improving hospitals, both for doctors and patients.

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