

# the right choice

Professor David Rowley and Professor Fiona Patterson report on a pilot scheme to improve the selection of future surgeons



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Whatever happened in MMC and MTAS this year, there would always have been a need for a programme of quality enhancement of the selection process. Selecting into surgery the right people who are able to do the right thing and do it right is at the centre of patient safety. For young doctors who have set their heart on a surgical career, perhaps since childhood, getting a definitive training place is of course equally important, provided they meet these exacting criteria we expect in a surgeon.

Candidates want to feel that they have been given a fair crack of the whip. They must also surely know that not all of them can be selected because limited training opportunities mean we

must select the best. It is my impression that young doctors are on the whole realistic about the competition and so it is essential we make selection as sound and as safe as possible.

Industry has dealt with this problem for many years and, although not all modern industrial practices are inevitably superior, they recognise that an investment in people requires as much care and attention as anything else, which makes their business successful.

We have been working as a team to refine the application of selection centre practices to surgery. Fiona Patterson and her team have considerable industrial experience of selection and have applied this in other medical disciplines including general practice.

So how does a selection centre work? Firstly, it is not actually a place but a process, whereby very precise selection criteria for the job are laid out and then work-related exercises are designed to assess these criteria. This usually includes carefully constructed interviews but may also involve simulations and written assessments. Candidates are assessed against a range of job-relevant criteria using several different methods. In surgery, these criteria include judgement under pressure, decision-making, and practical skills, among many others.

It is essential that exercises are pitched at the appropriate level, so that all candidates are able to perform to the best of their ability. It is also vital that assessors receive appropriate training

about how to interpret and assess the criteria consistently. Research clearly shows that using multiple assessments enhances the accuracy, validity, and fairness of the selection process. Furthermore, candidates generally appreciate having several opportunities to perform where there is extended contact time rather than a 30-minute encounter in the interview alone. Selection centres generate a large number of scores and detailed information for each candidate, which contribute to an informed expert judgement and ranking as to which candidate best suits the proposed post.

In surgery, we continued with the interviews but added the following set of interactive, written, and practical exercises. Each of these exercises was designed to present a 'day in the life' of a trainee surgeon:

- Telephone consultant: Candidate discusses a clinical case with a consultant assessor by telephone
- Technical examination: Candidate conducts a physical examination of a patient in the presence of a consultant assessor
- Simulated consultation: Candidate conducts a consultation with a medical actor playing the role of a patient's relative
- Case notes: Candidate completes a discharge letter and internal audit based on the case file provided
- Data interpretation: Candidate completes a fluid balance chart and internal audit using information provided
- Technical x-ray: Candidate interprets an x-ray and constructs a written management plan
- Written prioritisation: Candidate prioritises a number of competing issues for action

- Case-based discussion: Written exercise in which candidate explores a clinical case and generates possible diagnoses
- Virtual reality: Practical exercise using a laparoscopic simulator
- Knot-tying and suturing: Candidate ties a surgical reef knot and sutures a simple wound.

All exercises were developed in collaboration between surgeons and psychologists. We endeavoured to design exercises that would be suitable for candidates at various stages of surgical training. Each exercise lasted 10 minutes and assessed candidates against a number of criteria found to be important in surgery. Each exercise was designed to target three or four criteria so in the telephone consultant exercise, we observed communications skills, decision-making, organisation skills, and judgement under pressure. The total contact time for the selection centre (excluding interview) was two hours, involving two consultants, one patient, one medical actor, and several administrators. This makes this process cost-effective and feasible.

### **What have we found?**

We are still conducting a full psychometric analysis of the data from 100 pilot candidates from Trauma and Orthopaedics, and General Surgery. Early indications are that the selection centre demonstrates strong evidence of reliability and criterion-related validity, in that it appears to complement the selection interview. The results show that this process provides additional valuable information with which to make selection decisions. Candidates reported that the selection centre was more closely linked to the job and gave them more opportunity to demonstrate their skills and

abilities than other selection processes they had experienced. Consultants agreed that the exercises were fair and helped them in making choices.

### **What does this mean?**

Candidates told us that the exercises were relevant to their day-to-day work and the two-hour OSCE style test made them feel that they had been examined thoroughly. Consultants agreed that the exercises were fair and helped them in making choices. We are not saying that the selection centre alone is sufficient, as well-constructed interviews by expert surgeons still contribute much to the whole process. However, in a big discipline like surgery with many applicants, the selection centre is capable of filtering and ranking candidates for interview in a fair and consistent manner. The long-term 'proof of the pudding' is whether we have more successful completed training episodes on the long and exacting road to consultant practice.

We do not in any way imply that the current consultant body is less than fully trained and appropriately positioned. But, as we try to improve the effectiveness of selection, it is reassuring to know that we can reliably add information to the process and hopefully train those right people doing the right thing in the right way as efficiently as possible. ■

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