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# National selection and recruitment in urology: 2009

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**Summary** In 2009, recruitment into higher urological training changed dramatically to a process of national selection.

This article describes the process used, presents feedback from the assessors and candidates involved, and discusses possible improvements for future rounds.

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## Introduction

The system of selection and recruitment into higher urological training was changed in England and Wales this year from the traditional local Deanery short-listing and interviews to a national scheme appointing to all available posts nationwide. This comes on the back of a series of changes to surgical recruitment over the last 2 years. This article aims to describe how the selection process occurred this year, looks at the methods used and the opinions and feedback of those involved.

## Background

For many years, appointment processes to higher urological training schemes were organised and performed by Deaneries appointing to vacancies on their training scheme. Applications would typically have been sought as vacancies arose and candidates were short-listed and interviewed as required.

This had its advantages: it meant that local Deans and interviewing clinicians had direct input into who was appointed to their region. Application and interview rounds could be closely correlated in time to when vacancies arose. From a potential applicant's point of view the periodic appearance of advertisements meant that if one was unsuccessful at the first attempt, another vacancy would come along elsewhere in the near future. Moreover, the parochial nature of the interviews meant that a poor interview in one region would not adversely

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affect an interview in another. Also, it was likely that at some point one's 'home' region would be recruiting and this might afford some application advantage. Whether or not this last point is true in fact, it is undeniable that the majority of potential applicants believed it to be so.

In 2000, the NHS Plan [1] highlighted perceived problems with the senior house officer (SHO) grade of doctor. Subsequent consultation exercises led to a consensus that this grade had "no clear educational or career pathways, no defined educational goals, no limit to time spent in the grade and a lack of distinction between service and training" [2]. This, it was felt, must be changed.

Modernising Medical Careers (MMC), a national programme aiming to streamline postgraduate medical training, began in 2003 following a consultation process triggered by the Chief Medical Officer's (CMO) paper '*Unfinished Business*' [3]. In 2007, the first Foundation Trainees entered the Specialty Training (ST) programmes intended to replace the old SHO grade. Following the Medical Training Application System debacle, an inquiry was commissioned into the entire process, led by Professor Sir John Tooke [4]. A number of changes were proposed; some were accepted while others have not been. However, in line with this inquiry, several Deaneries began appointing to a 'core' ST programme in surgery. Some of these were 'themed' to a relevant specialty and others were not. They were 2 year appointments with a view to these trainees competing at interview again for ST3 posts.

In 2007 MMC also provided for Deaneries to select people to enter higher urological training at ST3 and Calman-type Specialist Registrar recruitment ended. Some Deaneries also selected trainees for basic surgical training at ST1 on run-through contracts. A proportion of these ST1 run-through posts were urology-specific while other Deaneries left the final specialty open to competition at ST3. The following year, higher urological training (ST3–7) was formally 'de-coupled' from the first 2 years of ST training in England and Wales, insofar as ST1 appointments were no longer run-through and specialty selection was only into ST3. All of these selection procedures were still at Deanery level.

This year, the process was changed again to one of national selection for ST3 posts in England and Wales. In fact, this was a direct recommendation from the Tooke report [4]. Moreover, there was good reason to believe it to be a viable method of selecting into higher training. It works in other health systems, including both those smaller and larger than the UK (e.g., New Zealand and the United States, respectively). It had also worked well in General Practice recruitment here in the UK, and

in 2008 had been used by neurosurgery (appointing from ST1–4) and cardiac surgery. Lastly, it is largely supported by employing trusts: NHS Employers have stated, "Employers agree that a national process, with consistent standards and a more transparent recruitment system is important" [5].

Initially, some Deaneries were going to offer ST1 run-through posts as well (the so-called 'mixed economy') but this proposal was eventually abandoned. Moreover, many Deaneries had no posts at ST3 to offer, partly because of the cadre of run-through ST1 appointees in 2007 now entering higher surgical training and choosing urology as their specialty; these trainees had a contractual right to higher training and they took many or all of the posts in some Deaneries.

## The application process

The posts were advertised in January 2009 and application was through an online form. 112 applications were received. Long-listing removed one candidate because of residency requirements and a further seven did not achieve the minimum person specifications.

There was no short-listing of candidates. Thus, all 104 people long-listed were invited for interview. However, a 'shadow' short-listing was performed by two of the authors, in order to allow subsequent comparison of short-listing scores with final interview results. This process is currently underway and may allow validated short-listing in future recruitment rounds.

Of the 104 invited applicants, 94 attended the interviews.

## The available posts

Each Deanery in England and Wales was invited to submit posts to be filled through the process, having been asked to identify posts which will become available before the end of December 2009. (The Scottish and Northern Irish Deaneries elected to remain outside this process and recruited locally into ST1 posts.) This ensured that all current English and Welsh trainees with a CCT date prior to 30 June 2009 were replaced through this process, allowing for up to a 6 months post-CCT 'grace period'.

Furthermore, any post that subsequently unexpectedly became vacant could be filled through the ranking generated by this process, up to 30 May 2009. Posts which unexpectedly become available after this date could be filled through a local

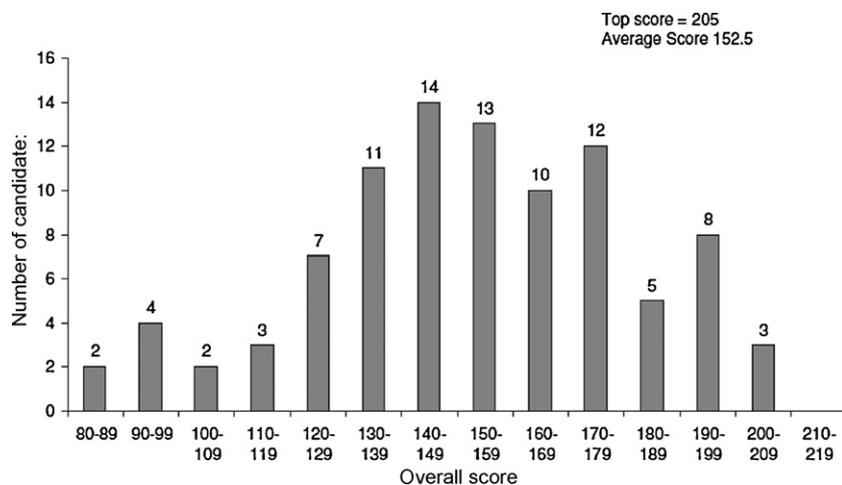


Figure 1 Candidate summated scores.

appointment process but the expectation was that this local process had to be of the same standard as the national one. An alternative was a fixed term locum (LAS or LAT) appointment.

Within these parameters, 22 posts were identified throughout England and Wales. As mentioned above, some Deaneries had no posts to offer due to the effects of the 2007 appointment round to ST1.

## The interviews

Interviews were held in Leeds in early March over one and a half days. Each candidate sat at six interview stations with two assessors at each, and each lasting 12 min. In the ensuing 3 min, interviewers independently scored the candidates' performance. Thus, there was a total of 72 min of face-to-face assessment of each candidate.

There were 42 assessors in total, although not all 42 were present throughout the entire process. This allowed three interview processes to be run in parallel. Moreover, a few 'spare' assessors observed various stations to provide quality assurance.

Each station was designed to assess a selection of attributes, so that these would be repeatedly tested (see Fig. 1). The interview stations were as follows:

**Station 1: Portfolio Assessment** – prior to face-to-face interview, assessors spent 15 min reviewing the portfolio. This station then examined the candidates' portfolios and the candidates on their portfolios. It was aimed to assess communication skills, organisation and planning, learning and development and professional integrity.

**Station 2: Career Progression and Awareness** – this station assessed the candidates' careers to date and their awareness of the requirements to progress to CCT. This station explored candidates' clinical experience and expertise, situation awareness, decision making, and organisation and planning.

**Stations 3 and 4: Clinical Stations** – these stations assessed candidates' clinical skills in an interactive setting. One was based on an outpatient scenario, the other an emergency case. These stations assessed problem solving, judgement under pressure, situation awareness, leadership and team-working, clinical expertise and experience, and professional integrity.

**Station 5: Communication Skills** – this station had a trained actor providing the interaction while the candidates were assessed by two observers. This assessed communication skills, judgement under pressure, professional integrity, and leadership and team-working.

**Station 6: Technical Skills** – at this station, candidates were asked to suture a wound on a practice rig, tie surgical knots, and perform a flexible cystoscopy on a model bladder. While these were being performed, candidates were asked questions regarding the techniques. This station assessed important basic urological skills and communication skills.

Each candidate received a score from each of the two assessors at each station. Assessor scores were given without conferral. Scores were awarded according to four attributes at each station, with a maximum at each station of 16 per assessor. The scores at the Portfolio station were doubled (for weighting); thus there was a

**Table 1** The selection design.

Station	Attributes	Scores
Station 1 (portfolio)	Communication skills	4
	Organisation and planning	4
	Learning and development	4
	Professional integrity	4
Station 2 (career progression and understanding)	Clinical experience and expertise	4
	Situation awareness	4
	Decision making	4
	Organisation and planning	4
Station 3 (clinical 1)	Problem solving	4
	Judgement under pressure	4
	Situation awareness	4
	Clinical experience and expertise	4
Station 4 (clinical 2)	Judgement under pressure	4
	Leadership and team working	4
	Problem solving	4
	Professional integrity	4
Station 5 (communication skills)	Judgement under pressure	4
	Communication skills	4
	Leadership and team working	4
	Professional integrity	4
Station 6 (technical skills)	Suturing and knot tying	6
	Cystoscopy	6
	Communication skills	4
Attribute	Contribution to final score (includes double weighting for Station 1)	
Matrix		
Communication skills	32	
Organisation and planning	24	
Learning and development	16	
Professional integrity	32	
Clinical experience	16	
Situation awareness	16	
Decision making	8	
Problem solving	16	
Judgement underpressure	24	
Leadership and team-working	16	
Technical skills	24	
Total	224	

maximum score of 224 (see Table 1). Scores were then collated and the candidates ranked accordingly.

## The scores

All interviewee's interview scores were summed and the candidates ranked in order of total score achieved. It was decided before starting that the candidates would be offered posts in rank order,

with the first placed getting the job of their choice, the second getting their first choice, if available, otherwise their second, etc. A threshold score of 112, out of a maximum of 224, was chosen – a score above this being 'appointable'. This score was selected as a score of greater than 2 out of 4 (i.e., 50%) for each attribute was considered 'satisfactory'.

The scores ranged from below 90 to 205. Only 8 were 'unappointable' on overall scoring. A histogram of the scores is shown in Fig. 1.

**Table 2** Candidates overall satisfaction questions.

	Number (total, %) of respondents expressing satisfaction with this aspect
The application form	70 (82, 85%)
Communication prior to the interview day	74 (82, 90%)
Communication during the interview process	77 (82, 93%)
'I have been treated with respect'	81 (82, 99%)
'I feel the process treated me fairly'	77 (81, 95%)
The length the process was 'about right'	77 (78, 99%)

Prior to the interviews, each candidate was asked to rank the available posts. Positions which were not acceptable to the candidate were not to be ranked. Thus, 11 (50%) of successful candidates were appointed to their first choice of Deanery. 4 were appointed to their second choice, 1 to their third, and 6 to their fourth or lower choice.

## Quality assurance

This was built into the design of the interviews. There were three lay observers appointed by the Deanery to oversee the process. They observed interviews in different 'cross-sections' – observing a single set of assessors interviewing a

**Table 3** Candidates assessment of each domain for each station (scores, 1 = 'poor', 5 = 'excellent'). Means shown, and numbers of '1's and '5's, as indicated.

Station (no. of respondents)	Mean score	No. of indicating 'poor'	No. of indicating 'excellent'
<b>Portfolio station (45)</b>			
Relevance	4.2	0	13
Fairness	4.1	0	13
Opportunity	4.0	0	9
Clarity	4.0	0	11
<b>Career progress (45)</b>			
Relevance	3.9	0	10
Fairness	3.8	0	6
Opportunity	3.8	0	10
Clarity	3.8	0	7
<b>Clinical scenario – outpatients (46)</b>			
Relevance	4.3	0	19
Fairness	4.2	0	18
Opportunity	4.2	0	18
Clarity	4.1	0	16
<b>Clinical scenario – emergency (46)</b>			
Relevance	4.4	0	22
Fairness	4.3	0	18
Opportunity	4.1	0	12
Clarity	4.2	0	15
<b>Communication station (45)</b>			
Relevance	4.0	0	13
Fairness	3.9	1	11
Opportunity	3.8	0	9
Clarity	4.0	0	13
<b>Technical skills (46)</b>			
Relevance	4.0	0	15
Fairness	4.1	0	13
Opportunity	4.0	0	13
Clarity	4.1	0	14

series of candidates at some times, while following single candidates around interviews at other times.

There were also three urologists acting as quality assurance observers as well, marking assessors on their interviews and assessments. These were fed back to the assessors afterwards.

## Feedback

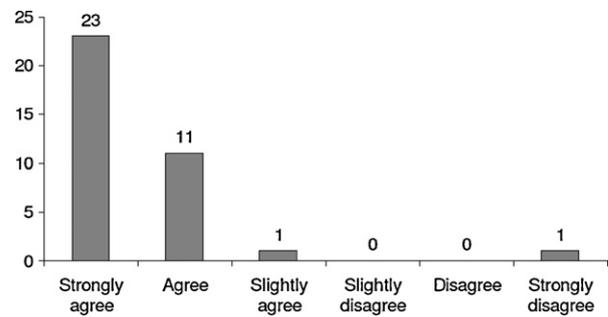
Each candidate and assessor was asked to complete an evaluation form regarding their experience of the interview process.

83 candidate feedback forms were received. Basic demographic questions were asked although not universally answered. The mean age of respondents was 35.6 years old (range 27–43). 69 of 79 respondents were male. 27 respondents were UK graduates, 3 were EU graduates, and 51 were non-UK, non-EU graduates (2 gave no indication). Previous experience of selection centres was given as ‘none’ (17), ‘little’ (7), ‘some’ (25), ‘extensive’ (1), and ‘no response given’ (33).

In general, candidates felt the process was fair and that they were treated with respect. The communication regarding the process, both before and during, was felt to be satisfactory. There were issues regarding the application form, but 70 out of 82 (85%) responding candidates agreed or strongly agreed that they were satisfied with it. The satisfaction rates for various parts of the process are shown in Table 2.

Each candidate was also asked to ascribe a mark (1 = poor, 2 = borderline, 3 = satisfactory, 4 = good, 5 = excellent) to criteria within each interview station. Each station was assessed for relevance to selection, fairness, opportunity to demonstrate ability, and clarity of instructions. While the response rate of this part of the questionnaire was much lower than the overall satisfaction part, results are illustrated in Table 3. It is also notable that many candidates did not separately ascribe a score for each criterion for each station, but seemed to indicate a more ‘global’ score for each station.

Candidate feedback forms also had free text fields and 33 candidates used these to respond. In general, the feedback was positive (e.g. ‘Excellent methods for testing the generic skills required for the specialty’). Criticisms were also offered and were almost exclusively related to the application form and sometimes contradictory. Notable ones were as followed:

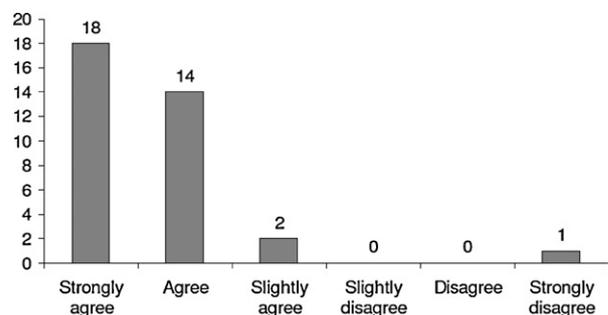


**Figure 2** Assessors’ feedback. Numbers of assessors replying as shown to the question, ‘I was satisfied with the organisation on the day’.

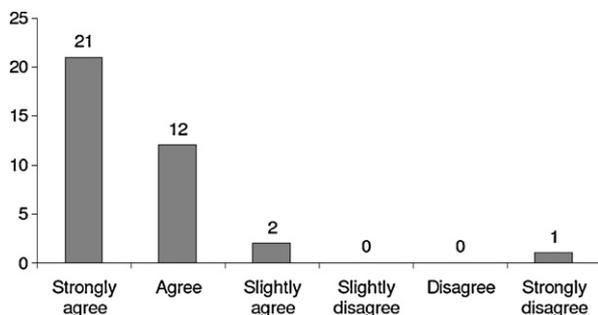
- ‘Application form was too weighted towards higher degree and research’.
- ‘In application, please include a place for research’.
- ‘Application form was insufficient and poorly structured’.
- ‘ICAMS is not easy to negotiate and it would be better if you got a PDF of your application after’.

The assessors were similarly satisfied. There were 36 feedback forms returned from 42 assessors. There was a single assessor who provided negative feedback on the ‘tick-boxes’ throughout but then went on in the free text parts of the feedback to offer very positive views, so it is not clear if there were any true ‘dissenters’. The results of the assessors’ questionnaires are shown in Figs. 2–5.

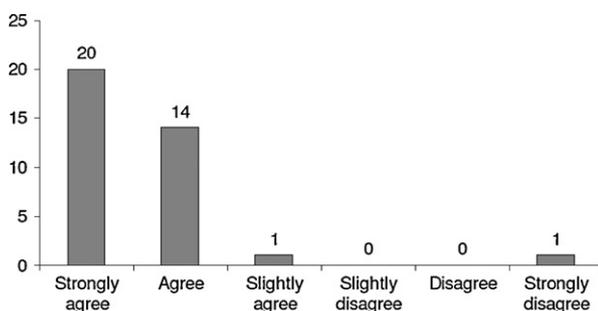
Even counting these as marked, all but 2 assessors agreed or strongly agreed that the organisation of the day was satisfactory (Fig. 2) and all but 3 felt similarly about the communication beforehand (Fig. 3). All but 2 agreed or strongly agreed that the process was fair to candidates (Fig. 5). All but 3, having been involved in National Selection, agreed or strongly agreed with the principle (Fig. 4). On this last point, it must be noted that this was assessing a self-selected group of people who volunteered



**Figure 3** Assessors’ feedback. Numbers of assessors replying as shown to the question, ‘I was satisfied with the communication before the interview’.



**Figure 4** Assessors' feedback. Numbers of assessors replying as shown to the question, "Now that I've been involved in National Selection, I support the principle".



**Figure 5** Assessors' feedback. Numbers of assessors replying as shown to the question, "I am satisfied that the selection process was fair to candidates".

to take part in the process but the experience did not seem to put many off.

## Discussion

This was the first attempt in our specialty to recruit nationally for any post. The process was designed to be as robust as possible – for example, the absence of any validated short-listing system available meant that no short-listing was done. This ensured no one was 'falsely' excluded. Moreover, domains considered relevant to surgical training were chosen and an attempt made to assess them.

The domains assessed are as listed in Table 1. It is not known exactly what measurable attributes are best for selecting potential surgeons – some are not specific to surgery (e.g., honesty and probity) while others perhaps are more so (such as technical skills and hand/eye coordination). The domains selected are very similar to those suggested elsewhere as potential attributes important in surgical trainees [6].

The matrix shows that they are all relatively evenly weighted throughout the process, with roughly the same number of potential points attributed to each. Some were weighted more

heavily than others but it is very difficult to achieve absolute equality, but at least each domain was addressed and no one domain was predominant. The scores for each of these attributes and the subsequent selection are being analysed separately, but others have found similar domains are able to find correlation between similarly assessed attributes with good internal reliability and some statistical power [7].

Another issue is validity. This process has face validity insofar that the interviewers (who are, arguably, experts in selecting urological trainees) are satisfied that the selection procedure on the whole selected for the attributes it set out to, and that these are the attributes best sought in urological surgeons. Content validity of the selection process is harder to demonstrate. This has been defined in US law as "a selection procedure [that]... show[s] that the behavior(s) demonstrated in the selection procedure are a representative sample of the behavior(s) of the job in question or that the selection procedure provides a representative sample of the work product of the job" [8]. The authors feel it is not possible to prove that at this stage and content validity may only be evident after the selected candidates prove themselves (or otherwise) in the future.

The process might be refined further though in future rounds. In this round, the portfolio station was double-weighted to make up for the lack of any short-listing. However, if a reliable and valid short-listing structure is available, the short-listing score itself could form part of the overall selection score. Thus, it would be a summative component of selection and obviate the need to double-count the portfolio station. This method would differ from the traditional approach, wherein short-listing is merely a 'hurdle' to exclude unsuitable candidates but the short-listing score does not, *per se*, select in the final stage.

In conclusion, for the most part the entire process was well-received by the trainees and the assessors present. Various changes have been proposed in light of the experience, but the Specialty Advisory Committee (SAC) for Urology has elected to continue with National Selection in the future. In future, there are likely to be more posts available as there will not be a repeat of this year's unique situation, where previously appointed ST1s took a significant number of potential posts. For example, the largest Deanery (London) did not have any posts for this round.

There are a number of potential modifications that might streamline the process. If short-listing criteria can be validated to predict those who are unappointable, then the process could be stream-

lined. Ideally, interviews would run over a single day and this, in turn, might allow the process to be run more than once per year.

Running interviews more than once per year has several advantages – no ‘big bang’ start (and, presumably, finish) dates – a considerable concern to employing Trusts [5]. Also, candidates who were unsuccessful would not have to wait 12 months to re-attempt and likewise, those who, by the vagaries of exam dates, etc., are ineligible at the time of interview will get an earlier opportunity. Lastly, ‘stop-gap’ LAT/LAS posts could be shorter.

The Scottish Urological Association and the Scottish Training Board have found it possible to include Scottish posts in the 2010 round (personal communication), thus extending the selection process. If it continues to run well, Northern Ireland might also be persuaded to join in. Also, it might be possible to appoint Academic Fellows through a modified version of the same process (there would need to be a station dedicated to assessing research candidates).

The authors suspect that all of these objectives are achievable if appropriate investment of time and effort is given. If the process is to be repeated and expanded, then a bank of scenarios needs to be collated and, ideally, a Board of Selectors appointed. Both of these are being explored by the SAC.

In all, the authors feel the process was generally successful and worthy of being repeated. Lessons have been learnt and it is expected that future rounds could be improved in light of this. In addition, analysis of data collected in this round (e.g., the ‘shadow’ short-listing) will further inform any improvements. We will report these as they become available.

## Conflict of interest

None of the authors has any conflict of interest relevant to this manuscript or its contents.

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