

# An evaluation of the sources and availability of careers advice in UK medical schools

**This article reports a study evaluating the sources and availability of career advice available to students in UK medical schools in order to ascertain the need for an enhanced role for careers information in undergraduate curricula.**

Medicine offers many career possibilities which demand a variety of personal attributes. Currently, in the UK, initial career choice is based solely on personal preference as medical students and junior doctors are not encouraged to take account of their skills, aptitudes or personality traits when making career choices (Thomas, 1996). Traditionally, medical schools have devoted little time to formal careers advice in their undergraduate curricula (Thomas, 1996) and differing student experiences in clinical placements can result in varying exposure to career possibilities. In the UK, the main source of information on career pathways is derived from data derived from questionnaires to qualified doctors (Davidson et al, 1998; Lambert and Goldacre, 1998).

With the introduction of Modernising Medical Careers (Department of Health, 2003), foundation year one doctors are required to take into account their future career specialities when selecting second year foundation posts. Once embarked on speciality training, a change in career choice is difficult as selection for many specialities is so competitive. As a consequence, there are new challenges for any trainee changing speciality choice at a later stage.

The need for comprehensive careers management skills in undergraduate training has therefore increased (Department of Health, 2003). A report from the National Institute for Careers Education and Counselling (Jackson et al, 2003) recommended an enhanced role for careers advice and education with it becoming an essential part of the medical school curriculum. The curriculum for the foundation programme also requires a formal and structured careers and advice component to be delivered to all foundation trainees in the UK (Department of Health, 2003).

Previous articles by MacDonald and Easton (2003) and Lambert and Goldacre (2003) have shown that the majority of medical students and newly qualified doctors are dissatisfied with the careers advice they receive at medical school. The authors have conducted focus groups with medical students in which students have suggested that they have had to proactively seek information from a variety of sources as best they could. They have often been uncertain of the reliability of the advice obtained since it is potentially contaminated by personal biases and prejudices. Factors such as

career prospects and lifestyle preferences also need to be taken into consideration.

The need for adequate careers advice in medical schools has therefore never been greater. Although previous articles have suggested that medical schools can influence career choice in a particular speciality (Campos-Outcalt et al, 1995; Brockington and Mumford, 2003; Goldacre et al, 2004; Morrison, 2004), there is little current information on the amount of careers advice available to students in UK medical schools. This study investigated the current provision of careers advice in UK medical schools to ascertain the need for an enhanced role for careers information in undergraduate curricula. This is key in planning careers education for the future.

## Objectives

The study determined the sources and availability of career advice for medical undergraduates in UK medical schools. Data collection was performed in 2007.

## Methods

Semi-structured questionnaires (*Figure 1*) requesting information on current sources of careers advice to medical undergraduates were sent to representatives of each medical

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**Figure 1. Medical school questionnaire.**

1. Does your medical school give any formal careers advice to your students during their undergraduate course? If so, please give details including year of study or if on qualification
2. How is this advice given? Please give as much detail as possible.
3. Does your postgraduate deanery, university or strategic health authority website supply careers information to medical undergraduates? If so, please give details.
4. Does your medical school keep records of the careers chosen by your students? If so, how is this done?
5. Do you have records of the job applications of your graduates at the end of training, i.e. F1 speciality choice, F2 speciality choice or applications for final career choices at the end of foundation years training? If so, please specify.
6. Do you have a careers department in your university? If so, what input, if any do they have in your medical undergraduate curriculum? Please give details.
7. Do you have any other comments which might be helpful to the study?

school in the UK. They were selected from a list of representatives of Committee of Heads of Medical Schools and were asked to pass the questionnaire to the person most familiar with the curriculum in their medical school for completion.

Non-responders were followed up with a reminder letter.

## Results

### Response rates

Questionnaires were sent to all 30 UK medical schools that existed at the time of the study, and 22 medical schools responded (73%). Three schools were unable to provide data as a result of time constraints. Data were therefore analysed from 19 schools (63%).

### Formal careers advice

All 19 schools which provided data stated that some formal careers advice was given to students as part of the undergraduate curriculum. The amount and timing of this advice was variable. One school volunteered that their careers programme was under development and another devoted one day in the final year to careers advice.

Four schools organized careers fairs directed mainly at fourth and fifth year undergraduates but with open access to all students.

### Sources of advice

Thirteen (68%) stated that most of the careers advice was given by the postgraduate deanery, university postgraduate department or strategic health authority (Figure 2). One school was considering the development of a dedicated careers service, one had a careers project manager and another said that a specific careers website for students was under construction.

### Records of career choices

Only two of the 19 medical schools kept records of the career choices of their students after qualification. One of these schools commented that they were uncertain of the accuracy of their database. A third school was in the process of constructing such a database.

Four of the schools (21%) kept records of foundation (F1 and F2) job applications of their students with another two keeping records of location of applications only with no detail of speciality.

Four of the responding medical schools (21%) were newly established and therefore had not had any students graduating at the time of the study. They did, however, provide some careers information to students in the early years of the course.

Careers advice was offered to students from a variety of sources (Figure 2).

Some of the recently established medical schools had not reached full capacity and did not have students in the more advanced years of the course. In some cases, split site medical schools offered varying careers advice at different campuses. One medical school had a dedicated part-time careers adviser.

### University careers departments

All medical schools had student access to university careers departments but the input of these departments was often limited to general careers information. Only one university careers department had a specific adviser for medical students, and two medical schools had regular meetings with colleagues from these departments.

One school offered psychometric testing to students via Sci45 (specialist choice inventory based on 130 items and designed for self completion) (Gale and Grant, 2002) and another planned to do so.

### Ad hoc information

Ad hoc (opportunistic) careers information was offered by all except one medical school to students of all years. The least amount of advice was offered in the first

foundation year. However, one school did not offer any careers advice to students in the first 2 years of the course as it was considered to be too early. Most advice was offered on specific demand from students. One school offered open access to a dedicated careers tutor and another offered 'careers clinics' to all students. Advice on careers was provided via an academic progress committee by one medical school.

### Personal tutors

Personal tutors offered careers advice in 16 (83%) medical schools – mainly in years 3, 4 and 5 of the course (Figure 3) and in four schools careers advice was incorporated in the appraisal procedure.

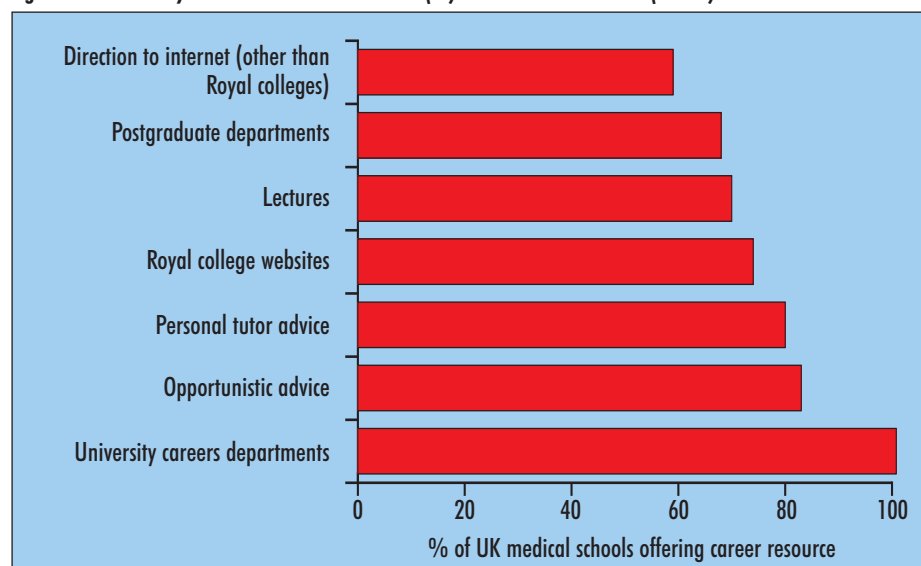
### Websites

Fifteen (79%) schools directed their students to various websites for careers information (Figure 3). Websites most commonly recommended were those of the Royal colleges (74%) and local postgraduate deaneries. Students were more actively directed to these and other websites in the latter years of the undergraduate programme.

### Formal lectures

Fourteen schools (73%) incorporated careers lectures into their formal curricula. Ten schools (53%) timetabled the lectures in year 5 (Figure 3). These lectures were sometimes provided by local NHS consultants rather than academic staff and

Figure 2. Availability of careers advice resources (%) in UK medical schools (n=19).



sometimes were given jointly by undergraduate and postgraduate deans. One school offered fortnightly lunchtime lectures in year 3, another provided a lecture focussed specifically on the first foundation year and a third school incorporated careers advice into a lecture given as part of a professional awareness day in years 3 and 5.

### Written information

Only five schools provided written information on careers to students. One school planned to devise its own on-line careers booklet.

### Courses

A career planning week ('discussion of placements in chosen clinical environments') was offered in year 5 by one school while another offered a 2-day course on becoming an F1 doctor after the final exams.

Medical schools differed in the timing of careers advice to their students (*Figure 3*). Least information appeared to be available in the first foundation year. However, there were difficulties in gathering information regarding careers advice in the foundation year since this was often not the responsibility of the undergraduate medical school.

### Discussion

This study set out to gather specific information about timing and content of careers programmes in UK medical schools. The questionnaire was satisfactorily completed

by all responders but some medical schools were clearly very proud of their careers programme and included a great deal of additional information in their replies. A verbal data collection method (such as a questionnaire administered by telephone) may have yielded more information since there would be more scope for spontaneous comment and may prove valuable in future work. However, it was often difficult to identify the most appropriate contact in a medical school to provide information on careers advice to students. The authors suspect that additional information might be supplied by postgraduate departments and was therefore not considered to be the remit of the undergraduate medical school. The written questionnaire had the advantage of being easily transferred from the recipient to a more appropriate member of staff.

These findings show that there is great variation in the amount and format of careers advice (and information) offered to students in UK medical schools. The authors suggest that more standardized careers guidance is needed for medical students throughout the UK. This will enable all medical graduates to be better equipped with basic information to help them to choose a suitable speciality. Currently, the system of careers advice favours proactive students and disadvantages more passive students who may be in danger of drifting into an unsuitable career.

University careers departments, postgraduate deaneries and undergraduate medical schools play varying roles in pro-

viding this advice. In some schools there are timetabled careers lectures and in others students are directed to specific websites. This study has not attempted to verify the accuracy or level of detail of information available on specific websites. A study in the USA (Patel et al, 2008) concluded that websites can be helpful in disseminating medical school-specific careers information. However, the authors suggest that further studies are required to assess the overall effectiveness and student satisfaction with this method of imparting information.

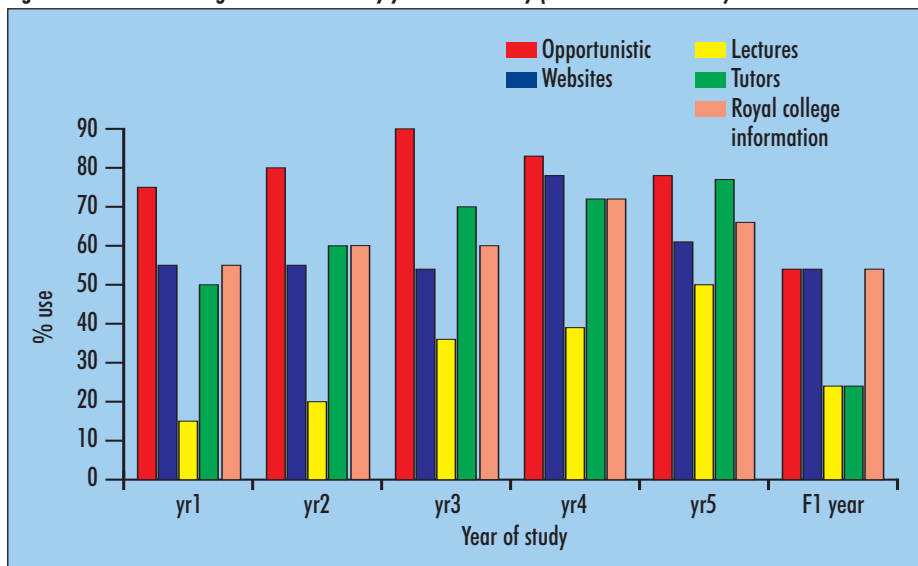
In a small minority of schools, careers advice forms part of students' appraisals. In most medical schools careers advice is concentrated in the later years of the course. There appeared to be a paucity of information available in the first foundation year. However, the authors suspect that information given to first year foundation doctors would be supplied by postgraduate departments and would therefore not be considered to be the responsibility of undergraduate medical schools.

The authors believe that further work should be carried out to examine models of delivery of careers advice to medical students in more depth. Responses to this study did not give a clear picture of the best role for university careers departments. The authors suggest that the role they play in offering appropriate psychometric testing should be investigated. Clearly when making careers choices students need readily accessible, up-to-date information. In the 21st century dedicated deanery-approved websites may offer the best way of delivering this type of information. While timetabled careers lectures might provide important information, websites can provide information when each student needs it.

The results of this study confirm that much information is provided to students on an opportunistic basis and that students need to be proactive in order to maximize access to careers advice.

Furthermore, the study would suggest that many university careers departments have little or no contact with medical students. On one hand, it is surprising that there is not more liaison between the staff of medical schools and their university careers departments in generic areas of common interest such as giving advice on

**Figure 3. Careers advice given to students by year of the study (% of medical schools).**



interview techniques, writing CVs and guidance on how to make career choices. However, medically qualified postgraduate medical careers advisers are required to undergo additional training in order to advise young doctors so it may be inappropriate for such specialist advice to be the remit of university careers departments.

There appears to be a gradation of careers information supplied to undergraduates by medical schools, with more information being provided in the latter years of the course. Careers fairs (which can be a very useful source of information for medical students) are mainly directed at students in their fourth or fifth year of studies. Disciplines studied early in the course may therefore be disadvantaged when students start to consider career choices. Furthermore, the amount of information reported to be provided in the first foundation year (when definitive career choices are being made) is less than in the undergraduate years. Since responsibility for postgraduate education falls to postgraduate rather than undergraduate educators, this study suggests that the undergraduate educators are unaware of the careers advice given to their graduates after qualification. This is a matter of some concern.

The paucity of formal careers advice in the undergraduate curricula needs attention as the introduction of Modernising Medical Careers has encouraged young doctors to make career decisions soon after qualification.

An analysis of the most recent General Medical Council Quality Assurance of Basic Medical Education reports relating to each UK medical school found that the final report cited careers advice as an area of good practice in only one school. However, the description within the report does not seem to include more than the general response in this study. It is therefore not possible to identify good practice or a curriculum framework for careers information or guidance. The 2003 version of *Tomorrow's Doctors* (General Medical Council, 2003) did not contain a reference to careers advice but it is gratifying to see that the 2009 draft states that schools must have a careers guidance strategy including generic careers skills resources and specific guidance for students to access personalized career planning.

Medical students have already identified a need for more careers advice during their undergraduate years (Wilson and Reece, 1995; Patwary, 2001). It is interesting that the majority of medical schools do not keep records of the career choices and final career paths of their students since trends in career choices could be used to inform gaps in speciality career information. This is in contrast to the situation in some parts of the USA where medical schools have been awarded grants to track students' career pathways (Rabinowitz et al, 1999).

## Conclusions

The authors have found limited evidence to suggest that the recommendation of National Institute for Careers Education and Counselling that careers education becomes an integral part of medical school curricula is being implemented in the majority of medical schools. The authors suggest implementation of:

- Standardized formal careers advice as a part of all medical undergraduate curricula
- Increased curricular time with a minimum of 5 hours devoted to careers advice over the duration of the undergraduate course
- Improved liaison with university careers departments.

While recognizing that undergraduate medical curricula are already overloaded, it is suggested that this important area should receive more attention when planning courses. It is hoped that this information will assist in a feasibility study regarding the inclusion of careers advice in professional university courses. **[BJHM](#)**

*Conflict of interest: none.*

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## KEY POINTS

- It has become more difficult to change chosen career pathways since the introduction of Modernising Medical Careers.
- This study has evaluated sources and availability of careers advice in UK medical schools, and had a response rate of 73%.
- There is variation in the amount and format of careers advice offered to students in UK medical schools.
- It is suggested that careers advice should receive more attention when planning undergraduate courses.