

# The attributes of a good medical trainee: how to build your portfolio

## Introduction

Never before have medical trainees been asked to select a specialty at such an early stage in their careers. It has therefore become imperative that both medical students and junior doctors are wise to the competition they will face. They should aim to develop a medical portfolio that will provide the evidence required to excel, both at the application form and interview stages of the selection process.

## Background

It is necessary to build a portfolio to reflect the post to which you are applying. Keep in mind that the posts that trainees need to prepare for, apply to and attend interview for are primarily educational. Therefore, one thing that the selectors need to be assured of is that the candidate is trainable. There are, according to Bloom's taxonomy that describes the domains of learning theory, three types of learning: cognitive (knowledge), psychomotor (skills) and affective (attitudes).

The Royal Surgical Colleges have developed the Intercollegiate Surgical Curriculum Programme (2007). This details the syllabus that trainees at different stages follow and against which they are assessed in the current era of competency-based (as opposed to time-based) progression. The curriculum philosophy mirrors to some extent the domains of Bloom's taxonomy, being set around four broad areas: knowledge, technique, judgment and professionalism (Figure 1).

Exploring the Intercollegiate Surgical Curriculum Programme further reveals

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that it has adopted a more detailed structure that has been modelled upon a framework for medical education called the Canadian Medical Education Directives for Specialists (Frank et al, 1996) (Figure 2). This framework of essential physician competencies was developed by the Royal College of Physicians and Surgeons of Canada, fundamentally as an initiative to improve patient care. The Canadian model has been adapted in a number of countries worldwide, both inside and outside of medicine, including Australia, New Zealand, Denmark and the United States.

## Evidence-based medicine, evidence-based selection

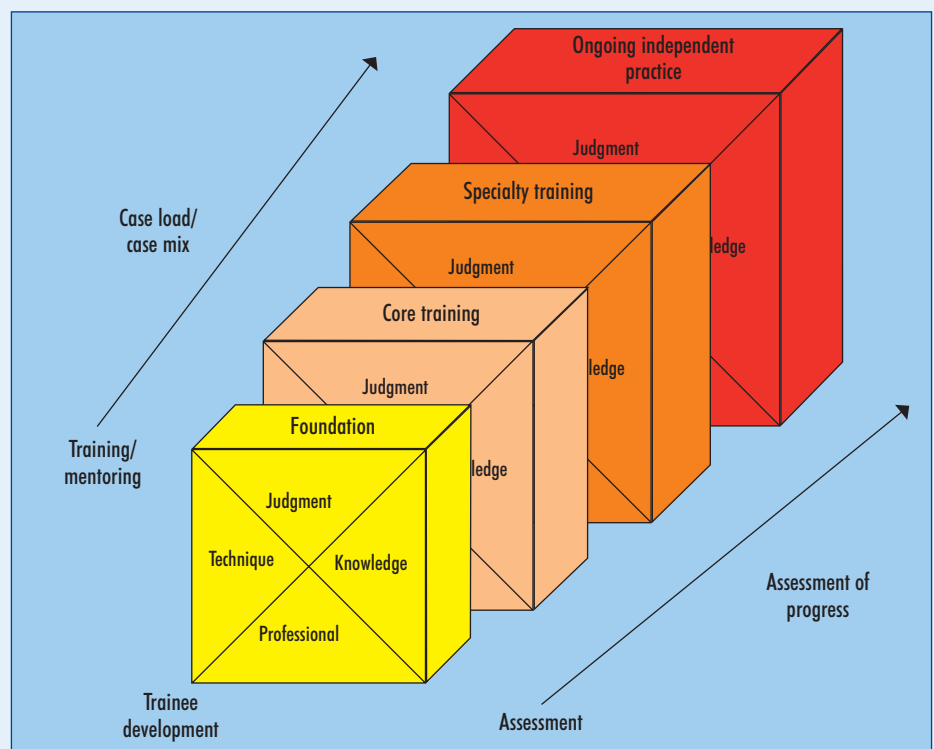
In this era of evidence-based medicine, there needs to be evidence-based selection into medical training. The evidence that selectors use includes your application form, your performance at interview and your portfolio. The trainee can structure

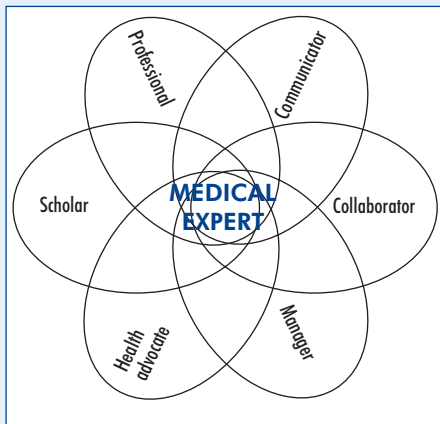
his/her portfolio around the qualities the selectors should be looking for when assessing the potential of a candidate to be trainable. National person specifications comprising essential and desirable personal attributes for each specialty can be found on the Modernising Medical Careers website ([www.mmc.nhs.uk](http://www.mmc.nhs.uk)). Moving beyond the structure of the portfolio to the content, the trainee needs to provide evidence for statements he/she has made in his/her application and at interview. Therefore, the portfolio sections need to be filled with documents that reassure the selectors of both the quality but also the honesty of the candidate. Furthermore, the evidence provided needs to be as objective as possible.

## The attributes of a good medical trainee and how to prove you possess them

The Canadian Medical Education Directives for Specialists model makes

**Figure 1. Curriculum philosophy of the Intercollegiate Surgical Curriculum Programme. This is based around judgment, technique, knowledge and professionalism. Adapted from Intercollegiate Surgical Curriculum Programme (2007).**





**Figure 2. The Canadian Medical Education Directives for Specialists framework organized around seven roles, with that of the medical expert lying centrally. From Royal College of Physicians and Surgeons of Canada (2005).**

explicit the abilities that have long been recognized in highly skilled physicians, and the attributes that are now sought in medical trainees.

### Medical expert

Workplace-based assessments should be completed and have a place within the portfolio. For all specialties, these include case-based discussions, clinical evaluation exercises and direct observation of procedural skills. Surgical specialties have also emphasized the importance of procedural skills and leading a surgical team, which is assessed within procedure-based assessments. Medical specialties have emphasized the importance of dealing with multiple problems on an acute unselected take, which is assessed in the Acute Care Assessment Tool. Further evidence of commitment to becoming a 'medical expert' should be provided in the form of records of attendance of organized teaching sessions and educational meetings.

It is important to chart your overall experience, stating the numbers and breadth of procedures you have been involved in, while stating your personal level of involvement. This can be achieved using a logbook, which should be verified with the supervisor's signature upon completion of an attachment. There are a variety of logbooks, from the simple tabulation of procedures in a regularly updated spreadsheet, to the use of available on-line logbooks that have the facility to create summary reports on demand. Start as early

as possible, including medical school, and be diligent in keeping this up to date. At application form and interview stages, the logbook will be invaluable in making clear your 'expertise' in the understanding and undertaking of procedures. It will help you progress from the stage of saying, for example, 'I have inserted central lines', to 'I have, under appropriate supervision and with ultrasound guidance, successfully sited four central venous lines (two right internal jugular vein, one left internal jugular vein, one right subclavian vein) during my foundation training'. Such objective statements, backed by documentary evidence, empower the selectors to favourably compare your abilities to those of other applicants.

As competition increases, postgraduate examinations are being sat earlier and earlier by junior doctors. This is not what was intended for the various postgraduate medical diplomas, and it is neither required nor expected. However, eager juniors are pushing themselves to complete within foundation years part or all of one or more memberships in the hope it will facilitate their applications into core training. This is the exception rather than the rule at the moment, but there is a trend towards it being commonplace.

Completing courses is a sound way of demonstrating that you have medical expertise in areas for which you have obtained certification. Courses include: acute life-threatening emergencies recognition and treatment, intermediate life support, advanced life support, advanced trauma life support, advanced paediatric life support, basic surgical skills, care of the critically ill surgical patient or training the trainees, as well as various other teaching, teamwork, leadership and communication courses to name but a few.

Record in your portfolio, contemporaneously, clinical cases which you have found memorable, interesting or of particular educational value. This charts your exposure to such cases and acts as proof of reflective practice; something that is strongly encouraged of trainees.

### Scholar

Emphasis is given to academic achievement throughout the course of the selection process for any post. However, this is particularly the case when applications are

being made to the academic clinical pathway as described by the Walport Report (Modernising Medical Careers and the UK Clinical Research Collaboration, 2005), including academic foundation and academic clinical fellow posts. Such posts create time for academic endeavour and include formal academic supervision, although some applicants are deterred by the lack of pay banding supplements during the academic parts of the appointment jobs, while critics of the pathway worry that academic progression may be at the cost of clinical development.

Addressing these latter issues briefly, as August 2009 approaches and with it compliance with the European Working Time Directive 48-hour weekly working time ceiling, pay banding supplements are set to vanish from most appointments, academic or not, and with a competency-based curriculum trainees' clinical progress will be determined by their ability and not how long they have spent in clinical posts. This demands an 'efficiency' within the system to derive the most, in terms of competency, regardless of the time periods allocated.

This having been said, do take time to get involved in research. Disseminate the fruits of this research by publishing a paper or an abstract, or presenting your work. Your presentations may be at a number of forums, including local, national and international, and may take a number of forms including printed poster, electronic poster or oral presentation. Prizes and awards are available at these meetings, which will underline the quality of your work. In the same vein, awards, prizes and scholarships at medical school will also look impressive in the portfolio.

In terms of getting involved in research, revisit the supervisor of your intercalated degree project to see if you could be involved in the development of this work. Ask your consultant if you can present a technique he or she uses at a local or regional meeting or write a case report on an interesting patient. Helping with a research ethics committee application or a grant proposal will give you considerable insight into the complex machine that is research and, if done well, will give the investigators the confidence to involve you in their work.

There is ongoing debate as to the role of research: whether this should take the form of ongoing projects or whether trainees

should undertake a formal dedicated period of research towards a higher degree. There is little doubt, however, that research is important in the development of roles key to a trainee becoming a medical expert, and other favourable attributes, such as being a self-motivated self-starter.

Undertaking audit may be an alternative to research, but preferably an addition, as audit projects may be possible in shorter periods of time than research. It is worth remembering that audit is one of seven key pillars of clinical governance.

Teaching is another area to be addressed under the role of 'scholar'. Include in your portfolio evidence of formal teaching commitments. Informal teaching, although commonplace on application forms, is unlikely to be sufficient to gain top marks in the application or interview setting. Include materials from formal teaching sessions, such as slides from lectures, hand-outs or lesson plans with learning outcomes. Anatomy demonstration is an excellent way of improving your anatomy knowledge, facilitating your passage through postgraduate examinations, and formalizing your teaching role. Keep a teaching log in a similar way to your procedural and operative log. Finally, the assessment of students is an important part of their education, which trainees can be involved in. Trainees may be able to act as examiners at their local medical school.

### Professional

Evidence of commitment to specialty is essential. This can be reflected in the choice and successful completion of postgraduate medical examinations and courses. Other ways of demonstrating commitment include joining relevant trainee organizations, e.g. the Association of Surgeons in Training or the British Orthopaedic Trainees Association. In addition to showing your commitment, these organizations will help keep you updated as to current trends in your specialty so that you can adapt your portfolio in line with these. You will also have the opportunity to respond to issues which are affecting your specialty, attend and present your work at conferences, attend courses, apply for awards and scholarships, and consider standing to become a council member.

Trainees must reassure the selectors that they have professional values. Reflective

practice as evidenced by clinical cases documented in the portfolio can be used to demonstrate essential skills such as dealing with medical error, handling a poorly performing colleague or working as part of a multidisciplinary team. Probity is confirmed by the inclusion of documentary evidence for all responses given in applications and interviews, and by signed assigned educational supervisor records of regular review meetings. Probity may also be addressed through the attendance of workshops relating to such aspects as maintaining confidentiality and ethics.

The peer assessment tool is an anonymised means by which a 360 degree appraisal may be completed. This workplace-based assessment highlights the professional relationship a trainee holds with colleagues of all disciplines and seniorities. The rapport a trainee builds with his/her patients and students may be evidenced by thank you cards and letters included in the portfolio.

### Communicator

In addition to your professionalism, the peer assessment tool will give an indication of your communication within the multidisciplinary team. Communication is also exemplified by presentation including at grand rounds and journal clubs, in addition to scientific conferences. Your understanding of the importance of communication while explaining complex procedures can be shown by including an anonymized copy of a consent form you have completed. How to handle a complex case, breaking bad news and dealing with bereavement are all important examples of the role of communicator, which can be described through reflective pieces.

### Collaborator

Regular attendance of multidisciplinary team meetings, leading when possible, is a practical way to show your ability to collaborate. Evidence of collaborative research and audit should be included in a trainee's portfolio. Again, reflective practice can be a good way of showing these skills in relation to specific challenging cases, with the peer assessment tool providing the evidence to show that you do this well.

You need to be able to prove to the selectors that you can support and motivate, lead when appropriate, compromise and delegate.

### Manager

Adopting the role of manager includes managing people, managing resources and managing time. Managing people can be demonstrated by evidence of the trainee leading a research or audit project. With regards to managing resources, has the trainee been involved in the running of the doctors' mess, a sports team or the higher echelons of a trainee organization or committee? Successfully undertaking research and making time for a life outside medicine describe good time management. Good time management may also be shown by swapping shifts to allow the undertaking of clinical and teaching commitments (such as anatomy demonstration sessions). Taking charge of junior doctors' rotas is another example of management. By completing a management course, the trainee can also provide solid evidence of his/her management skill with a certificate in his/her portfolio.

A comprehensive personal development plan in a trainee's portfolio shows good self-management with a clear career path set out.

### Health advocate

Completion of a period of elective study in a developing country or time spent working with a non-governmental organization, such as Médecins Sans Frontières, can act as evidence of a trainee's promotion of health for all. Educating pupils at a local school about sexual health or the dangers of alcohol or illicit drugs is also a good example of health advocacy which can be done closer to home.

Trainees should recognize the potential in every consultation as an opportunity for a positive health intervention. This should include advice regarding modifiable cardiovascular risk factors, particularly stopping smoking, or limitation of excessive alcohol consumption by 'brief intervention' (Crawford et al, 2004) or the 'teachable moment' (Williams et al, 2005). This could be exemplified by involvement in research or audit which includes an intervention in which one could measure the use or effect of a questionnaire which incorporates a teachable moment (e.g. the Paddington Alcohol Test).

Awareness of the welfare of medical students can be evidenced by trainees being prepared to take on a pastoral role.

Completing a relevant course and being a formal personal tutor for a group of medical students is an important reflection of being a health advocate.

## Conclusions

Compose your portfolio around the seven key roles of the Canadian Medical Education Directives for Specialists model, and be innovative when filling each section with concrete examples. Use reflective practice of clinical cases also as further evidence. Do not underestimate the importance of logbooks, for both procedures and operations, and as a record of formal teaching undertaken. Go beyond the minimum requirements at medical school and stretch yourself when addressing the competencies for progression through the medical curricula.

Use on-line resources, including courses relevant to the areas discussed above, have a clear career plan to aim for, and choose your role models and mentors carefully. Make patient care and clinical excellence your priority, and start now. It will be hard work but hopefully the

rewards will balance the sacrifices for you in the long run. **BJHM**

*Conflict of interest: none.*

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## KEY POINTS

- A good medical trainee is required to adopt, in differing proportions, a number of key roles, central of which is the role of the 'medical expert'. Your portfolio must, in turn, reflect this.
- The trainee should begin constructing his/her portfolio as early in his/her career as possible, ideally during undergraduate life, and it should be tailored according to the trainee's future plans and choice of speciality.
- A comprehensive and contemporaneously completed procedural, operative, teaching and reflective practice logs should be included in the portfolio, and should be commenced as soon as possible.