Assessing general (internal) medicine: lessons for trainees, trainers and the deanery

The implementation of specialist registrar training has necessitated a review of the process of assessing trainees. This is particularly the case in general (internal) medicine (G(I)M), where virtually all trainees are seeking dual accreditation in a medical specialty as well as G(I)M.

Methods

Trainees in years one, three and five in the North Thames Region who were seeking dual accreditation in general medicine and a specialty were chosen for assessment interviews. The office of the postgraduate dean provided their names. Every second candidate was invited for an interview by letter, and was assured that the procedure was both informal and confidential. Candidates were assessed in relation to the five categories listed in Table 1.

Categories I and II were assessed by structured interview with two assessors. For categories III, IV and V, trainees were asked to complete an open-ended questionnaire before the interview, and the final grading of 1 to 5 (1 very low, 5 high) was based on the information provided in the questionnaire, together with the assessors' interview. One interviewer concentrated on categories I, II and V, while the other discussed categories III and IV. Record of in-training assessment (RTIA) forms were neither issued nor withheld as a result of these interviews.

Arrangements for acute admission duties

The full commitment consists of a minimum of four days per month with at least 10 patients admitted on each day and continuing care of at least a third of the patients admitted. The lower commitment consists of a minimum of two days per month with 10 patients admitted per day and continuing care of a third of patients admitted.

Proficiency in essential and additional procedures

Essential procedures, shown in Table 2, were graded as follows:

- excellent if all 10 skills were adequate
- good if nine skills were adequate
- satisfactory if eight skills were adequate
- unsatisfactory if fewer than eight skills were deemed adequate.

For the additional procedures shown in Table 2, trainees' attitudes were characterised as either confident, ambivalent or lacking experience.

Data collection

The data were collected and entered on a series of Microsoft Excel 5.0 spreadsheets. This information is available from the authors.

Results

Of the 142 trainees invited to attend, only 90 were interviewed. Reasons for the non-attendance of 52 trainees were as follows: abroad/at conferences/on annual leave (10); not seeking dual accreditation (27); already accredited consultants (3); could not be located (7); and absent without reason (5). Results for categories I–V are based on total numbers of 41 trainees in teaching hospitals and 49 trainees in district general hospitals.

Table 1. Assessment categories for trainees.

| Category | Description |
|----------|-------------|
| I        | Arrangements for acute admission duties |
| II       | Outpatient experience |
| III      | Proficiency in 'essential' and 'additional' procedures |
| IV       | Postgraduate education and quality of supervision from educational supervisor |
| V        | Coronary care unit and intensive therapy unit experience |

Table 2. Essential and additional procedures.

| Essential procedures | Additional procedures |
|----------------------|-----------------------|
| Interpretation of electrocardiogram | Pleural biopsy |
| Central venous wire placement | Fine needle aspiration |
| Temporary cardiac pacing | Joint aspiration |
| Direct current cardioversion | Bone marrow aspiration |
| Pleural aspiration | Liver biopsy |
| Abdominal paracentesis | Pericardial aspiration |
| Intercostal drain insertion | Sigmoidoscopy |
| Lumbar puncture | Lumbar puncture |
| Advanced cardiac life support | |
I – Acute admission duties

Sixty-four percent of trainees were on take more often than 1 in 8, and a further 11% were on a 1 in 8 rota exactly. Therefore, 75% of trainees met the full requirements. Seventeen percent of trainees were on take less often than 1 in 8, but fulfilled the lower requirements. Eight percent of the trainees were not doing sufficient acute admission duties.

Consultant supervision – Consultant supervision of post-take ward rounds was assessed as satisfactory by 80% of the trainees, whilst supervision on routine inpatient ward rounds was deemed a satisfactory educational experience by 89% of trainees.

II – Outpatient experience

Although 84% of trainees had satisfactory consultant supervision with regard to general medical outpatients’ clinics, most outpatient experience relates to follow-up of patients admitted during the general medical take and specialty work. For most trainees in both teaching and district general hospitals, there were too few referrals of new patients to G(I)M clinics for us to be able to quantify or assess this component of training.

III – Essential and additional procedures (Table 2)

Essential procedures – The recommended lists of essential and additional procedures provided a useful basis for determining trainees’ clinical skills. For essential procedures, 56% of trainees were categorised as excellent, 25% as good and 9% as satisfactory. Altogether 93% of trainees at teaching hospitals and 94% at district general hospitals were considered satisfactory or better, while 6% were graded unsatisfactory.

In general, trainees performed well in relation to essential procedures. Twenty-eight percent felt that rigid sigmoidoscopy should not be included in essential training and would be best performed by a subspecialist using a flexible sigmoidoscope. By contrast, 72% felt that rigid sigmoidoscopy was a necessary component of general medical training.

Additional procedures – Competence in additional procedures varied considerably. Most trainees commented that experience in these procedures had been obtained during their general professional training. Their proficiency generally reflected the nature of the senior house officer posts that they had filled. Pleural biopsy, joint aspiration and fine needle aspiration were the three procedures with which most were confident. They had considerable reservations about bone marrow aspiration, liver biopsy, and pericardial aspiration. Sixty to eighty percent of trainees felt either ambivalent about or had no experience in these procedures. We believe that trainees should be confident or experienced in any three of the six procedures.

IV – Postgraduate education

We assessed postgraduate education by asking trainees about six items related specifically to G(I)M rather than their specialty: audit topics, grand rounds, case presentations, journal club participation, radiology meetings, and undergraduate teaching. Each item was assessed individually, and trainees were also asked about the supervision that they received from their educational supervisor. An overall score of satisfactory was agreed with 82% of the trainees.

V – Experience

We found greatest dissatisfaction with the standard of training in coronary care and intensive care. Twenty-four percent of trainees were receiving unsatisfactory training and experience in the coronary care unit, and 43% had unsatisfactory training and experience in intensive care.

Discussion

This pilot study assessing G(I)M training was undertaken both to ascertain problems in training and to develop a process of assessment that would operate efficiently and fairly. It was perhaps to be expected that problems would be discovered when the rapidly changing demands and constraints on trainees and trainers are considered.

Review of the North Thames Region database indicated that a number of trainees had not registered for dual accreditation. The North Thames Deanery has therefore contacted all trainees in the medical specialties asking them to clarify whether they wish to seek single or dual accreditation. The deanery has also emphasised that details of trainees’ changes of address must be provided in good time in order to protect the training programmes.

We found that knowledge of the requirements for accreditation in G(I)M remains incomplete. For example, three trainees in the latter part of their training programme were doing no acute admission duties and assumed that they would be eligible for a certificate of completion of specialist training (CCST) in G(I)M. A further four trainees had insufficient acute experience for eligibility for a CCST in G(I)M. This must be addressed by educational supervisors and G(I)M training committees. It is important that the trainees understand that dual accreditation will not be given routinely and may be withheld if they fail to produce good training records documenting the acquisition of the appropriate competencies.

We found that procedures listed as essential clinical skills proved a useful baseline against which to assess trainees. However, we noted that at least a quarter of trainees felt that the inclusion of rigid sigmoidoscopy in this category required further discussion, and, if this were to be regarded as essential, they would need further specific training. Trainees’ experience with additional procedures was varied. Nearly half felt that pericardial aspiration, liver biopsy, and bone marrow aspirations were procedures that should be
performed by specialists. These are issues which we hope the Specialist Advisory Committee in G(I)M will address.

The training area that was clearly most unsatisfactory related to experience in intensive care units. We suspect that this may be a national problem. This deficit will require specific attention, and we will be exploring with consultants in charge of intensive care ways in which training facilities for G(I)M specialist registrars can be improved.

Thrombolysis and primary coronary angioplasty (with or without stenting) have added to the complexity of the interrelationship between general medicine and cardiology in the management of patients in coronary care units. If the coronary care unit is to remain an integral part of general medical training, this area requires further attention. We have developed a view that we hope will be discussed further by the Specialist Advisory Committees in General (Internal) Medicine and Cardiology. We suggest that:

- Coronary care unit ward rounds should be seen as the central focus for cardiology training of G(I)M trainees. Trainees should attend these ward rounds if they are in posts that are accredited for G(I)M training and their patients are under care in the coronary care unit. Patients for whom an intervention or invasive cardiac procedure is the main part of their management will usually be under the direct care of the cardiologist, but G(I)M trainees should be involved in the educational or training aspects of the selection and triage of these patients.
- G(I)M trainees should be involved in treating patients with uncomplicated acute myocardial infarction who are to be managed conservatively.
- Management of complications, such as arrhythmias or heart failure, should be on a shared-care basis.

To achieve these objectives:

- Cardiologists should not exclude G(I)M trainees from the coronary care unit.
- G(I)M trainees will need to accommodate coronary care unit ward rounds within their clinical ward rounds and other duties.

We found that a structured interview, with the same five categories being discussed with each trainee, was extremely helpful in comparing the experience of the trainees across the broad field of G(I)M. Fifteen minutes proved sufficient interview time, especially if all the necessary demographic and practical data have been obtained in advance. The trainee's own training record (which is now available) should be helpful in documenting all necessary information. We found that asking the trainees to attend 20 minutes before the assessment was worthwhile, and this will be of particular importance when both RITA and Joint Committee on Higher Medical Training forms need to be completed.

Conclusions

1. The office of the postgraduate dean needs an accurate and up-to-date database of trainees' home and work addresses, and relevant telephone numbers. This information must also be available to the office of the Joint Committee on Higher Medical Training at the Royal College of Physicians.

2. Both the trainee and the deanery need to address and document whether or not the individual is seeking single or dual accreditation.

3. Trainees and assessors should understand that the G(I)M and subspeciality assessment forms are separate and that both need to be completed if two CCSTs are to be awarded. Both trainees and assessors should be clear at the outset which training year and hospital is being assessed. This may well be the post immediately before the one the trainee is currently holding.

4. In general, training in emergency medicine is well organised and delivered; experience in intensive and coronary care, however, often requires further attention. Unit training directors will find Appendix 2 of the Curriculum for specialist training in general (internal) medicine provides useful guidance for the planning of postgraduate training in G(I)M.

References

1. Joint Committee on Higher Medical Training. Curriculum for higher specialist training in general (internal) medicine. London: Royal College of Physicians, 1997.

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