



Royal College
of Physicians

Educational supervisor workshop and RCP accreditation

Resource pack

Copyright © Royal College of Physicians

All rights reserved. No part of this pack may be reproduced or transmitted in any form, by any means (electronic, photocopying, recording or otherwise) without the prior written permission from the Education Department, Royal College of Physicians.

Medical Education Resource Centre (MERC)

The MERC provides a unique information service for educators, leaders and managers within the field of medical education. Although based at the RCP in London many of our resources are available electronically to library members.

We are here to help you with the following:

- **Finding books and e-books** - our collection covers a range of subjects within medical education such as teacher and training strategies, psychology and learning, leadership, communication skills, and assessment.
- **Finding articles** – our journals and e-journals collection includes core titles such as Medical Education, Medical Teacher, Clinical Medicine and Clinical Teacher.
- **Accessing the literature** - we provide access (via Athens) to a range of education, health and medical databases allowing you to identify relevant information and evidence. You can also request a search from library staff.
- **Learning to search for information and evidence** – library staff are happy to advise you on how to search key databases.

For visitors to the MERC we offer a pleasant study space as well as access to PCs and wi-fi. We are open from 9am to 5pm Monday to Friday, excluding bank holidays.

For further information please contact us:

Tel: 020 3075 1490

Email: merc@rcplondon.ac.uk

www.rcplondon.ac.uk/resources/library

Introduction

Welcome to the Doctors as Educators Educational Supervisor workshop. Many of the areas that are covered during the workshop are highlighted in the papers reprinted for this supporting resource pack.

- Paper one is the **AMEE Guide No.27: effective educational and clinical supervision** by S. Kilminster et al., published in *Medical Teacher* February 2007.
- Paper two is **How to be an educational supervisor** by C.S. Evans, chapter 1 in *Essential guide to educational supervision* edited by N. Cooper and K. Forrest (2009).
- Paper three is **Appraisal** by D.Parkin and J. McKimm, chapter 16 in *Clinical teaching made easy : a practical guide to teaching and learning in clinical settings* edited by J. McKimm and T. Swanwick (2010).
- Paper four is **The use of reflection in medical education: AMEE Guide No. 44**, published in *Medical Teacher* August 2009.
- Paper five is **Twelve tips for making the best use of feedback** by R.M. van der Leeuw and I.A. Sloopweg, published in *Medical Teacher* May 2013.
- Paper six is **Supervision and the Johari window: a framework for asking questions** by H. Halpern, published in *Education for Primary Care* January 2009.
- Paper seven is **The 'problem' learner: whose problem is it? AMEE Guide No. 76** by Yvonne Steinert, published in *Medical Teacher* April 2013.
- Paper eight is **The GROW model of coaching** by Sir John Whitmore from *Coaching for performance: GROWing human potential and purpose: the principles and practice of coaching and leadership. People skills for professionals* (2009).
- Paper nine is a guide to the legal framework.
- Paper ten is **Pre-ARCP checklist for educational supervisors and trainees** by JRCPTB (2015).

Paper one

AMEE Guide No.27: effective educational and clinical supervision.

By Sue Kilminster, David Cottrell, Janet Grant and Brian Jolly

Reprinted from

Medical Teacher February 2007; 29(1):2-19

AMEE Guide No. 27: Effective educational and clinical supervision

SUE KILMINSTER¹, DAVID COTTRELL¹, JANET GRANT² & BRIAN JOLLY³

¹University of Leeds, UK, ²Open University Centre for Education in Medicine, UK, ³University of Monash, Australia

Abstract

Background: This guide reviews what is known about educational and clinical supervision practice through a literature review and a questionnaire survey. It identifies the need for a definition and for explicit guidelines on supervision. There is strong evidence that, whilst supervision is considered to be both important and effective, practice is highly variable. In some cases, there is inadequate coverage and frequency of supervision activities. There is particular concern about lack of supervision for emergency and ‘out of hours work’, failure to formally address under-performance, lack of commitment to supervision and finding sufficient time for supervision. There is a need for an effective system to address both poor performance and inadequate supervision.

Supervision is defined, in this guide as: ‘The provision of guidance and feedback on matters of personal, professional and educational development in the context of a trainee’s experience of providing safe and appropriate patient care.’ A framework for effective supervision is provided:

(1) Effective supervision should be offered in context; supervisors must be aware of local postgraduate training bodies’ and institutions’ requirements; (2) Direct supervision with trainee and supervisor working together and observing each other positively affects patient outcome and trainee development; (3) Constructive feedback is essential and should be frequent; (4) Supervision should be structured and there should be regular timetabled meetings. The content of supervision meetings should be agreed and learning objectives determined at the beginning of the supervisory relationship. Supervision contracts can be useful tools and should include detail regarding frequency, duration and content of supervision; appraisal and assessment; learning objectives and any specific requirements; (5) Supervision should include clinical management; teaching and research; management and administration; pastoral care; interpersonal skills; personal development; reflection; (6) The quality of the supervisory relationship strongly affects the effectiveness of supervision. Specific aspects include continuity over time in the supervisory relationship, that the supervisees control the product of supervision (there is some suggestion that supervision is only effective when this is the case) and that there is some reflection by both participants. The relationship is partly influenced by the supervisor’s commitment to teaching as well as both the attitudes and commitment of supervisor and trainee; (7) Training for supervisors needs to include some of the following: understanding teaching; assessment; counselling skills; appraisal; feedback; careers advice; interpersonal skills. Supervisors (and trainees) need to understand that: (1) *helpful supervisory behaviours* include giving direct guidance on clinical work, linking theory and practice, engaging in joint problem-solving and offering feedback, reassurance and providing role models; (2) *ineffective supervisory behaviours* include rigidity; low empathy; failure to offer support; failure to follow supervisees’ concerns; not teaching; being indirect and intolerant and emphasizing evaluation and negative aspects; (3) in addition to supervisory skills, effective supervisors need to have good interpersonal skills, good teaching skills and be clinically competent and knowledgeable.

Introduction

Why the Guide?

What is good educational supervision and who are the good supervisors? Documentation from the UK Department of Health (DoH 1996) and General Medical Council (GMC 2005 (New Doctor), 2006 (Good Medical Practice), 1999) has highlighted the need for good educational supervision, appraisal and assessment in postgraduate education. However, it is not always clear what supervision entails, who should or could supervise, what the effects of supervision are

and moreover, what its benefits to patients and the service in general are. It is clear that some doctors receive excellent supervision. It is also clear that others receive inadequate supervision (Grant et al. 2003).

Effective supervision of trainees involves skills that are different from other more general competences expected of a teacher or trainer (Harden & Crosby 2000; Hesketh et al. 2001). Supervision includes ensuring the safety of the trainee and patient in the course of clinical care; giving feedback on performance, both informally and through appraisal; initial training and continuing education planning; monitoring progress; ensuring provision of careers advice; ensuring an

Correspondence: David Cottrell, Department of Child and Adolescent Psychiatry, University of Leeds, UK; email: d.j.cottrell@leeds.ac.uk

Practice points

- Although supervision is recognized as important and effective, actual practice is very variable and there is a need for a definition and explicit guidelines.
- This guide provides a framework for effective supervision—direct supervision, constructive feedback, structure and the quality of the supervisory relationship are particularly important.
- Helpful supervisory behaviours include giving direct guidance on clinical work, linking theory and practice, engaging in joint problem-solving, offering feedback and reassurance and providing role models.
- There is a need for an effective system to address both poor performance and inadequate supervision.

appropriate level and amount of clinical duties. Supervision features more observation, continual feedback and sharing of clinical judgement. Supervision has been the least researched and supported aspect of medical education and yet is central to the effective training of physicians. This guide is the culmination of a research project designed to investigate the role of educational and clinical supervision and the skills required. It draws on relevant empirical and theoretical work to offer a practical, informative guide to good supervision.

Who is it for?

The Guide is for anyone who supervises others in medical clinical practice settings. It is based on work conducted in the UK but can be applied elsewhere. Although it has been targeted at education in the postgraduate setting it may also have some relevance in undergraduate medical education. It will also be useful for trainees. We have attempted to describe the roles and terms of reference of all the key players, with descriptions of the supervisory tasks necessary at each level of training from newly qualified doctor to Consultant and including the roles of the regulatory and statutory bodies. The Guide should also be of help to those managing, monitoring or delivering training.

What is supervision?

There are various understandings and definitions of supervision; based on the findings of our research project *Good supervision: Guiding the clinical educator of the 21st century* (Kilminster et al. 2000) we define supervision as:

The provision of guidance and feedback on matters of personal, professional and educational development in the context of a trainee's experience of providing safe and appropriate patient care.

We would hope that the trainee's care would be safe and appropriate at all times. However, the definition recognizes that some benefit can be derived from analysis of errors, their management and resultant lessons. The anticipatory element of supervision is necessary to isolate and deal with threats to patients' safety. The 'personal' issue in the definition is an

attempt to acknowledge that many problems with competence can arise from personality-related variables and that these are often the most difficult aspect to deal with for the supervisor and trainee.

Educational and clinical supervision in context

Ensuring patient and trainee safety

Postgraduate medical training is the process whereby newly qualified doctors—in the UK these are pre-registration House Officers (PRHOs)—progress through a series of training stages until they become trained and certified specialists or general practitioners. From an educational point of view, different processes are involved in this progression. Some of the body of knowledge and many of the skills and attitudes that the trainee doctor acquires whilst progressing along this road will come from his/her own self-directed private study; some will also come from the formal educational activities of the training programme on which he/she is enrolled. However the most important element of training for nearly all doctors is the opportunity to undertake medical practice in their chosen speciality under appropriate supervision.

Clinical supervision must have patient safety and the quality of patient care as its primary purposes but must also fit in with the trainee's educational objectives. Clinical responsibility for patient well-being lies with the supervising consultant who is in turn responsible to the chief executive of the clinical service, hospital or Trust.

The nature of clinical supervision will vary from speciality to speciality and from unit to unit. The nature of the speciality (surgical or non-surgical for example), location (primary care or hospital) and the structure of the clinical team providing the service will be the primary determinants of the sort of supervision required, but in all cases the object of supervision will be the same: to provide the patient with the best possible quality service under the prevailing circumstances and to provide the community from which that patient comes with the quality of service which meets its needs. The processes that ensure patient safety are essentially educational and form the backbone of the trainee's clinical learning.

Patient safety. It may be perfectly safe for a highly competent practitioner to see and examine a patient in the home, where conditions are often less than ideal. Put an inexperienced trainee in that same position and it becomes less safe. The role of the supervisor may also be considered at different levels. A senior manager or consultant supervisor may well have responsibility for the working environment, whereas a Specialist Registrar (SpR or senior resident) supervising a Senior House Officer (SHO or junior resident) carrying out an emergency appendectomy will have limited responsibility for the work environment, but does have a great responsibility for ensuring that the procedure itself is carried out safely. It is important therefore that supervisors understand their responsibilities with regard to patient safety.

The practice of medicine has evolved in a way that has left many trainees working with minimal supervision. Whilst this

may be perfectly reasonable, it does place great responsibility on the supervisor to ensure that the trainee is competent and performing only at an appropriate level. Accomplishing this without compromising patient safety may be very difficult. In the absence of a clear, explicit indication of the level of competence of a trainee it will be necessary for the supervisor to ascertain this either by direct observation or enquiry from other staff. Only then can the correct levels for practice and supervision be determined and applied without compromising patient safety. It is important to ensure that appropriately qualified supervisors are available, for example, when trainees are providing out-of-hours care.

Trainee safety. Ensuring the safety of trainees in the course of their clinical duties is an essential element of supervision. Trainees are less likely to acquire new competences in environments where they are in fear of being exposed to risk—the major factor in determining levels of psychological distress in trainees is their confidence in carrying out the clinical tasks expected of them (Williams et al. 1997).

Supervisors should ensure that trainees work within their competences and that they are adequately supervised when acquiring new skills. In addition:

- Trainees should receive adequate induction to training placements.
- Opportunities must be made available to reduce stress by ensuring availability of stress counselling and training in communication skills. Trainees must be made aware of these resources.
- Trainees who are required to undertake procedures that may expose them to risk (e.g. handling of surgical equipment or making up toxic drugs) should receive adequate instruction and protection.
- Trainee safety should not be compromised by onerous duty rotas or excessive service commitments.
- Adequate procedures must be in place for prevention and control of transmissible infectious diseases.
- Personal safety from attack must be ensured.
- Procedures in the event of fire and other emergencies must be in place and trainees must be made aware of them.

Overseas trainees have special needs; it cannot be assumed they have the same level of understanding of local healthcare systems as doctors who have trained in the country concerned and therefore they may need more carefully planned induction.

Supervisors themselves need to be competent in the skills to be acquired and in dealing with the complications that may arise from using these skills. Trainees need to have confidence in their supervisors: this is particularly important when responsibility for teaching has been delegated to staff other than the supervisor. Supervisors need to monitor the quality and effectiveness of education and supervision carried out in their name.

Ensuring trainee competence and level of supervision

The content of what needs to be supervised at different levels will change but the level of supervision will vary according to the grade and relevant experience of the trainee. Supervisors need to make judgements as to whether they should be:

- present in the same room as the person being supervised, providing direct supervision (direct supervision);
- nearby and immediately available to come to the aid of the person being supervised (immediately available supervision);
- in the hospital or primary care premises and available at short notice, able to offer immediate help by telephone and able to come to the aid of the person within a short time (local supervision);
- on call and available for advice, able to come to the trainee's assistance in an appropriate time (distant supervision).

Training log books can be useful tools in helping to determine the level of supervision required.

Supervision in clinical teams

Clinical teams are hierarchically structured and the responsibility for clinical supervision does not lie solely with the consultant or general practitioner principal who is at the head of the team. For example the main responsibility for the clinical supervision of a medical team on emergency take usually lies with a specialist registrar or senior resident who will directly supervise the activities of the more junior staff who are delivering the care. This produces a system of great complexity for all the team members. Responsibility is distributed in an uneven fashion throughout the team. The consultant has responsibility for the overall functioning of the medical team and for the individual clinical performance of all the team members. The consultant has clinical responsibility for the decisions that lead to individual team members working without direct supervision. It is clearly not possible, nor would it be appropriate, for the consultant to allocate work on a case-by-case basis. However, it is essential for the consultant to understand and orchestrate the process by which individual team members are working with more or less direct supervision in different clinical areas. The processes whereby this may happen and how they need to be negotiated also needs to be understood within the team. It is important for the development of even the most junior team member that he/she has areas of clinical activity for which he/she takes direct responsibility and only reports back to a more senior member when he/she judges the need to do so. It is self-evident that the extent of the less directly supervised domain will be large for experienced senior trainees and much smaller for junior trainees. Senior trainees require instruction in, and experience of, supervising more junior staff. Although a junior trainee may refer to them as their first line of advice and assistance, both the junior and senior trainee will be subject to supervision from a designated consultant. There will be some occasions during highly specialized training when it will be inappropriate

for senior trainees to act as supervisors—they may themselves require direct supervision.

The situation becomes further complicated in teams with more than one consultant supervisor, now the norm rather than the exception. A single named consultant may take on the role of 'educational supervisor' for the team. This role concerns arranging appropriate educational support for trainees and ensuring that they are exposed to appropriate clinical experience and responsibility. The task of clinical supervision and the process of taking vicarious responsibility for patient care delivered by trainees will fall to each of the consultants whose patients are looked after by the clinical team in question.

Employers' responsibility for supervision

Employers need to ensure that the arrangements for the delivery and monitoring of supervision are practical, robust and transparent although, ultimately, designated supervisors are responsible for ensuring that clinical supervision takes place in accordance with local clinical guidelines and external advice (in the UK from regional training committees, Royal Colleges and the General Medical Council).

Individual trainers have to manage the conflict between the need to provide a clinical service and the need to provide adequate supervision for the trainees for whom they are responsible. Within healthcare organizations, the lines of responsibility are through clinical directors and medical directors to the chief executive. In all cases, the trainee–trainer interface is the local level of accountability. Trainer and trainee have at their disposal advice and support from the local course organizers, speciality training bodies and external regulatory bodies. (In the UK this includes, Directors of Postgraduate Medical Education, College tutors and programme directors, Royal Colleges and the Specialist Training Agency.)

In addition to ensuring that all doctors in training receive adequate supervision in an appropriate environment, employers (Trusts in the UK) will need to ensure that they have in place systems that can deal with:

New doctors who have not worked in the hospital or practice before:

- How is an assessment of competence made?
- How much direct supervision is needed before allowing the person 'clinical freedom'?
- How much trust can be placed on the appointment process to select doctors who can be relied upon to perform at an appropriate level of competence?

Locum doctors:

- Who has responsibility for the clinical performance of locums?
- How much direct supervision should occur before allowing the locum 'clinical freedom'?
- How much reliance can be placed upon the agencies that provide the locums?

Non-consultant career-grade doctors:

- Who is responsible for supervising the clinical performance of staff-grade doctors?
- Who is responsible for ensuring that staff-grade doctors avail themselves of educational opportunities and keep up to date with developments and current practice in their speciality?

Some lines of accountability within individual organizations are relatively straightforward as clinical activity is delivered either by clinical teams or by individual departments or practices. The main line of accountability will involve doctors within the same speciality or practice, some of whom will have a designated supervisory role. However, there will also be circumstances in which accountability involves doctors from another speciality. An example would be a consultant anaesthetist supervising aspects of a trainee surgeon's work. The consultant anaesthetist might be expected to carry some responsibility for ensuring that the trainee surgeon performs at an appropriate level. There are also inter-professional lines of accountability involving other healthcare personnel, for example, nurses, technicians, operating department assistants.

The quality of clinical supervision of trainees is therefore a central problem for clinical governance organizations within the medical management structure, and these organizations need to assure themselves that appropriate supervision is being undertaken. The complexity of lines of responsibility for trusts and individual consultants is shown by the example in Box 1.

Box 1: The outpatient treatment of varicose veins by injection

What if the patient has a cardiac arrest during the injection of varicose veins? Resuscitation equipment must be readily to hand, in good working order and the staff trained to use it. There is a management role here in 'supervising' facilities and in ensuring the training of nursing staff. The consultant or competent specialist registrar supervising a junior doctor in training has a duty to ensure that the training of the junior doctor encompasses the possibility of a cardiac arrest. Does the junior doctor know where the equipment is kept? Is she/he competent in resuscitation techniques? If the answer is 'no' to either of these questions, it is surely the duty of the trainer as a supervisor to see that these deficits are rectified. It should be appreciated that the supervisor does not necessarily need to train the junior doctor in resuscitation, but *does* need to ensure that proper induction has been organized and that the necessary training takes place.

Within the UK, the responsibility for good clinical governance in Trusts lies with chief executives and through them medical directors, clinical directors and individual consultants. The General Medical Council has emphasized that Trusts must ensure that the time and resources necessary for encouraging and sustaining a culture of education are available, and that the environment is adequate.

Poor performance

Every employer will have to create a system for identifying and dealing with doctors who exhibit a persistent pattern of poor performance. The concept of Clinical Governance has encouraged the creation of clinical standards committees and/or clinical governance committees, which carry out their functions with clearly defined lines of accountability to the Trust Board and Chief Executive. The educational system has a role when poor performance relates to educational issues and a failure to progress, with increasing competence, in a placement. The Education Supervisor would then discuss this with either the Clinical Tutor or College Tutor, and might then refer on to the Deanery, particularly if the trainee is in a managed scheme. The Trust would be involved when issues of personal conduct such as lateness, rudeness or neglect of clinical responsibilities were the reason for poor performance.

What is known about current supervisory practice?

The literature

This section summarizes the literature on supervision in practice settings in order to identify what is known about effective supervision. Relatively, there is a limited amount of published medical literature addressing supervision; particularly, there are few empirical studies (Kilminster & Jolly 2000). Supervision is a complex activity, occurring in a variety of settings, and has various definitions, functions and modes of delivery. It usually includes an interpersonal exchange. This complexity means that research into supervisory practice presents methodological problems and adequate research methodologies have yet to be established.

What are the understandings and definitions of supervision and its purposes?

There appears to be general agreement that the essential aspects of supervision are that it should ensure patient/client safety and promote professional development. Clearly, there may be some occasions when these two aspects are in opposition.

There is also agreement in the general literature that supervision has three functions—educative, supportive and managerial or administrative. In medicine, this would include guiding patient management.

What are the theoretical models of supervision?

Various models are presented in the psychotherapy, social work and nursing literature. Common features of these models include the idea that supervisory behaviours can be categorized and that supervision needs vary according to the recipient's level of experience. Most models stress the need to use supervision approaches that are appropriate to the trainee's level of experience and training.

There is some limited empirical support for the proposition that supervision needs vary according to the trainee's experience and level of training.

There are no adequate theoretical accounts of supervision in medicine; such an account of supervision in medicine might draw on ideas developed in adult learning theories, experiential and work-based learning as well as understandings about apprenticeship and development of expertise (for example, Kolb 1984; Patel & Groen 1990; Lave & Wenger 1991; Boud et al. 1993; Eraut 1994; Tenant 1999) but would also need to connect with educational strategies used throughout medical education, including the problem-based learning approach, skill development and apprenticeship.

How is supervision delivered—what is its structure and content?

The evidence indicates that there are wide variations in the frequency and amount of supervision that trainees in the UK receive (Kilminster et al. 2000). In particular, there are marked variations across and between specialities. Where guidelines exist they are not always met. The variation is so great that it cannot simply be explained by variations in individual learning. Problems with the extent and availability of supervision have been identified across the professions. The quality of supervisory interactions remains to be investigated in depth. Supervision can occur 'on the job', usually whilst a practical task is being carried out; informally; in a one-to-one meeting; in peer supervision; in group supervision; and in networking. There is empirical evidence (including some of our own work) indicating that finding sufficient time for supervision can be a problem; some strategies have been suggested to address this but more are needed.

Is supervision effective and how can this be determined?

There is some convincing quantitative evidence, across health and social care professions, that supervision has a positive effect on patient outcome and that lack of supervision is harmful to patients. In particular, empirical evidence shows that direct supervision is very important and can positively affect patient outcome and trainee development, especially when combined with focused feedback.

Review evidence suggests that increased deaths are associated with less supervision of junior doctors in surgery, anaesthesia, trauma and emergencies, obstetrics and paediatrics (McKee & Black 1992). These authors argue that the balance of evidence shows that patient care suffers when trainees are unsupervised even though some trainees claim to benefit from the experience that lack of supervision gives them. However, they also argue that unsupervised experience can lead to the acceptance of lower standards of care because the trainee may not learn correct practice without appropriate supervision.

In the USA, strong evidence for the importance of direct supervision was obtained by comparing attendings' (senior doctors equivalent to UK consultants) own findings regarding patients with their ratings of residents' (equivalent to specialist

registrars) reports and history taking, assessment of severity of the patients' illness, diagnoses, treatment and follow-up plan (Genniss & Genniss 1993). The researchers found that the attendings' assessments of the residents were more critical after seeing the patients and that they considered seeing the patients themselves to be important for both teaching and management. The patients were seen as more seriously ill, and there were frequent changes in diagnosis and management. The authors indicate that there were some weaknesses in the study design (it was not a randomized trial so the results could be due to the order of evaluation and changes in treatment were often minor and therefore could be due to differences in opinion). They do conclude, however, that, when supervisors see the patient themselves rather than relying on trainees' reports there is a significant difference in their assessments of residents' skills and patient management.

The effects of supervision on quality of care were examined in five Harvard teaching hospitals (Sox et al. 1998). A range of measures was used—residents' compliance with process-of-care guidelines (assessed by record review), patients' satisfaction and patients' reported problems with care. Over a seven-month period all 3667 patients presenting with abdominal pain, asthma/COPD, chest pain, hand laceration, head trauma and vaginal bleeding were included; residents were unaware of the purpose of the study. All patients were given a questionnaire to complete on site and some were randomly selected for a 10-day follow up interview. Analyses were adjusted for case mix, degree of urgency and chief complaints. Using these measures the researchers found that the quality of care was higher when the resident was directly supervised, i.e. when the attending also saw the patient. The benefits of direct supervision of residents applied regardless of the level of training and urgency of the cases. The authors point out that there are limits to the generalizability of the study because the five hospitals did not have emergency medicine training programmes, there may be between-hospital variations in quality and frequency of supervision, patients were not randomized to different groups and there was no control for the speciality of the attending physician.

Faculty involvement was investigated, over a 12-month period, for each surgical procedure and all resuscitation and operations in the trauma service in one hospital (Fallon et al. 1993). Faculty involvement was ranked on a five-point scale and these data were matched to outcomes of death or complications that were reported in the weekly departmental complications conference. The results suggested that supervision had a greater impact where the trainee was less experienced. The authors acknowledge a number of limitations to their study but conclude that close supervision of general surgical residents during their rotations to subspecialties is important and that the effect of supervision can be evaluated by using probability of survival data in trauma. They also argue that there is a need to establish measurable standards of supervision.

Griffiths et al. (1996) compared tests (X-rays, arterial blood gases (ABG) and electrolytes) ordered in the neonatal intensive care unit by staff with different levels of experience. They found that as workload increases newly qualified doctors order more ABG, especially when they are less supervised.

To summarize, empirical evidence from the literature review shows that:

- Direct supervision seems to help trainees gain skills more rapidly.
- The quality of the supervisory relationship strongly affects the effectiveness of supervision. Particularly important aspects are continuity over time in the supervisory relationship, the trainees having some control over the supervision (there is some suggestion that supervision is only effective when this is the case) and that there is some reflection by both participants.
- Behavioural changes can occur relatively quickly as a result of supervision whilst changes in thinking and attitude take longer. This is particularly important because there may be relatively frequent changes of supervisor due to rotations.
- Self-supervision is not effective; input from a supervisor is required.

The supervision environment is extremely important because medical students have strategies to appear as competent as possible, which can conflict with opportunities to learn (Jolly & MacDonald 1986). In addition, trainees can perceive 'one to one consultations as problematic and risky situations in which they struggle[d] for a balance between the opportunity to learn and the need to perform in and manage the consultation process' (Somers et al. 1994, p. 587). There is compelling evidence that postgraduate trainees engage in similar behaviours (Arluke 1980). Clearly, such defensive behaviours are likely to have an effect on the supervision process and, ultimately, that may not be beneficial to patients.

What skills and qualities do effective supervisors need?

Empirical and review evidence indicates that, to be effective, in addition to supervisory skills supervisors need to have good interpersonal skills, good teaching skills and be clinically competent and knowledgeable. The distinction between supervision and teaching is not easily made. However, empirical and review evidence indicates that:

- (1) *Helpful supervisory behaviours* include giving direct guidance on clinical work; linking theory and practice; engaging in joint problem-solving and offering feedback, reassurance and providing role models.
- (2) *Ineffective supervisory behaviours* include rigidity; low empathy; failure to offer support; failure to follow supervisees' concerns; not teaching; being indirect and intolerant and emphasizing evaluation and negative aspects.
- (3) *Good interpersonal skills* include involving trainees in patient care; negotiation and assertiveness skills; counselling skills; appraisal skills; self-awareness; warmth; empathy; respect for others; listening skills; expressing one's own emotions appropriately; offering support; being positive; having enthusiasm.
- (4) *Clinical competence* includes being seen as a good clinician and having up-to-date theoretical and clinical knowledge.

- (5) *Teaching skills* include offering opportunities to carry out procedures; giving direction; giving feedback; having knowledge of teaching resources; knowledge of certification requirements; individualizing the teaching approach; being available and having evaluation skills.

Studies reporting on characteristics of effective clinical teachers have some relevance for supervisors. The characteristics include having clinical credibility; having knowledge of context, learners and general principles of teaching including the importance of feedback and evaluation; being a positive role model and appearing to enjoy teaching.

In addition trainees need clear feedback on their errors; corrections must be conveyed unambiguously so that trainees are aware of mistakes and any weaknesses they may have.

How these skills should be assessed and how supervisors should be selected is not discussed in the literature. Some empirical and review evidence suggests that race and gender dynamics are areas of potential difficulty in supervisory relationships.

What training do supervisors need and how can its effectiveness be determined?

The need for training is widely accepted and there is some evidence that it can be effective. There is agreement that training probably needs to include at least some of the following: understanding teaching; assessment; counselling skills; appraisal; feedback; careers advice; interpersonal skills. Course content should emphasize the importance of understanding the concept and purposes of supervision; understanding the content and type of training undertaken by the supervisee; understanding the structure and types of supervision including the importance of a supervision contract, giving and receiving criticism, counselling skills and interpersonal dynamics.

Some commentators consider there should be some criteria regulating entry into supervisor training courses or for acceptance as a supervisor.

Supervision research project: empirical findings

Supervision, both educational and clinical, is an essential part of Specialist Registrar (SpR) training (DoH 1996) although there is relatively little guidance as to how and where this should take place. There are no large-scale studies describing supervision practices in medical education (Kilminster & Jolly 2000) and so relatively little is known about how supervision takes place in different specialities. Therefore, as part of a Department of Health funded project investigating supervision (Kilminster et al. 2000), we undertook a national questionnaire survey to identify the range and effectiveness of supervisory methods for SpRs in current usage. The purpose of the survey was to establish what supervisory methods were being used and to determine how effective, particularly in relation to effects on patient care, education supervisors (ESs), specialist registrars (SpRs) and medical directors (MDs) perceived these

methods to be. We were interested in the general situation rather than a detailed examination of one particular area (geographic and/or speciality) and intended to evaluate the findings in the context of clinical governance. We also undertook an exploratory critical incident study to identify key features of effective supervision from the perspectives of SpRs and ESs (Cottrell et al. 2002).

Our findings suggest that whilst supervision is considered to be both important and effective, practice is highly variable (Grant et al. 2003). This would not necessarily give cause for concern except that there are clear indications that there is inadequate coverage and frequency of supervision activities (although supervision is considered to be effective), together with significant differences in the perceptions of SpRs and ESs particularly in relation to monitoring performance, feedback, planning learning and support of the trainee. At the least this indicates there is a need for more explicit guidance for ESs and SpRs.

Purposes of supervision

Respondents were asked about educative, managerial and supportive functions of supervision because these three functions are frequently identified as the purpose of supervision in much health, social care and education literature. Activities reflecting each of these functions were considered to be of significant importance to the purpose of supervision in medical education (see Box 2).

Box 2: Supervision activities rated as of significant importance

- (1) Ensuring patient safety/care.
- (2) Educating the trainee.
- (3) Promoting high standards.
- (4) Identifying trainee problems.
- (5) Supporting the trainee.
- (6) Monitoring trainee progress.

Respondents were asked to rate each suggested purpose on a five-point scale (where 1 was not important); each purpose was rated as at least important (3 or more on the scale) by all respondents but where there were significant differences in the ratings SpRs placed more emphasis on educative functions of supervision whilst the educational supervisors prioritized managerial and supportive functions. This difference probably reflects different priorities and concerns of trainers and trainees in an environment where there can be a tension between service and education.

Organization of supervision

In the UK, approximately 90% of SpRs reported having a named supervisor, a similar number to those reported in other studies (for example, Bools and Cottrell 1994; Davies et al. 2000).

Traditionally, there has been an expectation that all consultants should be supervisors. However, in our study,

the majority of ESs and MDs considered that there was a difference between an educational supervisor and a consultant to whom the trainee is answerable although only slightly less than half (47%) of SpRs recognized this difference. However, apart from general practice and psychiatry, it is clear that this practice is not systematic. It varies between departments, hospitals and specialities. Furthermore, almost all the respondents indicated that only those consultants with an interest and commitment to supervision should be supervisors, rather than all consultants. Most SpRs would like to be able to choose supervisors, although they only rated this issue as of 'some importance' in factors that support good supervision. These views probably reflect a change in perceptions regarding roles of supervising consultants, which may be a result of the relatively recent changes in UK specialist training.

Although four out of five SpRs report that they have regular supervision meetings there is a wide range in the length (10–240 minutes) and the frequency (daily–six monthly) of these meetings. GP trainees and psychiatry SpRs have a mandatory requirement for weekly meetings/supervision meetings. In those specialities (anaesthesia, laboratory science, medicine, paediatrics and surgery) where there is no such requirement meetings are shorter and less frequent. Again, practice is highly variable, as has been reported elsewhere (Davies & Campbell 1995; Panayiatou & Fotherby 1996).

There were also consistent differences between ESs and SpRs in ratings in relation to the frequency of supervision, those activities that are supervised and the effectiveness of this supervision. SpRs reported lower frequency and effectiveness of supervision. It is not simply that SpRs consistently under-report all meetings—they reported receiving more frequent tutorials than the ESs reported giving. Also both groups rated supervisor and trainee availability as good (although there was a significant difference on ES and SpR ratings of ES availability). Both considered ESs to have good approachability. Therefore, the difference in SpR and ES perceptions are probably not due to availability or approachability of supervisors although availability was reported as a problem in the critical incident study. The reasons for this disparity are not clear; it may be that activities ESs recognize as supervision are not recognized as such by SpRs. Other studies have reported trainee dissatisfaction with supervision but most concentrate on trainee perceptions and/or experiences rather than comparing trainee and supervisor perceptions.

Supervision practices

The questionnaire data relating to supervision activities (see Box 3) give some cause for concern. None of the activities, including ensuring patient safety, was rated as receiving significant or full coverage either by SpRs or ESs. In other words, none of the activities was rated as occurring to a sufficient extent or with sufficient frequency. Almost all the activities showed a significant difference between SpRs' and ESs' ratings. ESs thought there was more coverage than did SpRs. Some of the largest differences occurred on items dealing with monitoring performance, feedback, planning

learning and support of the trainee. These activities might be seen as particularly important with regard to trainee development. Although this difference between ES and SpR perceptions is not explained in our findings, the most important aspect is that neither group rated any supervision activity as receiving significant or full coverage.

Box 3: Supervision activities (shown in decreasing order of extent and frequency of occurrence)

- (1) Discuss individual patients.
- (2) Ensure patient safety.
- (3) Provide informal feedback.
- (4) Monitor the trainee's performance.
- (5) Discuss (away from the bedside) the management of specific disorders.
- (6) Ensure that the trainee has an appropriate level and amount of clinical duties.
- (7) Provide feedback through appraisal.
- (8) Give advice relevant to personal and professional development.
- (9) Give support relevant to personal and professional development.
- (10) Address successes/problems in trainee performance.
- (11) Give career development advice.
- (12) Develop teamwork skills.
- (13) Ensure the safety of the trainee.
- (14) Discuss/review the process of supervision.
- (15) Teach specific techniques and procedures.
- (16) Plan the trainee's learning.
- (17) Develop interpersonal skills.
- (18) Develop communication skills.
- (19) Develop presentation skills.
- (20) Bedside teaching.
- (21) Use videotaped consultations.

SpRs, ESs and MDs all considered that supervision activities were at least moderately effective. Again, where there was a significant difference in perceptions of effectiveness, then SpRs rated the activity as less effective. ES reported giving significantly more feedback than SpRs reported receiving. ESs also considered this feedback to be more effective than did SpRs. There is considerable scope here for training courses aimed at creating more congruence concerning feedback.

Although both SpRs and ESs considered supervision during specific procedures/tasks (for example, outpatient clinics, ward rounds, tutorials and informal supervision) to be important, it occurred infrequently. Evidence from our literature review demonstrated the importance of supervision in relation to patient care and that direct supervision is effective but is often insufficient. The critical incident study had similar findings. Whilst quantity does not necessarily equate directly with quality, these data do suggest that existing supervision is insufficient. It is clear that SpRs think they need more feedback and direct supervision than they report receiving.

Good supervision

Generally, we found consensus regarding good supervision between SpRs, ESs and MDs. The attitudes and commitment of supervisor and trainee, the relationship between them, protected time, importance of positive feedback and regular meetings were rated as of significant importance in supporting good supervision and this is supported by the literature. Although there appears to be general agreement on what good supervision is, other findings indicate that it is not always practised. Finding time for supervision is clearly important but there would appear to be other factors involved.

SpRs rated the relationship between supervisor and trainee as of significant importance. SpRs also rated the need for guidelines, a definition of supervision and choice of supervisor higher than did ESs. These items all relate to control of the supervisory process and relationship and suggest that SpRs want more control over this. In the remainder of the survey SpRs consistently made lower ratings than ESs. There were only three speciality-specific significant differences in views concerning factors supporting good supervision. General practice gave highest ratings to the importance of the supervisor's teaching skills and the need for training, assessment and monitoring whilst psychiatry gave highest rating to 'trainee having regular meetings with the supervisor'. These ratings are noteworthy because training is mandatory for GP supervisors and supervision meetings for psychiatry trainees. The lowest rankings for all aspects of supervision were in medicine, where there was also least supervision.

Difficulties in supervision

Respondents were concerned about lack of supervision for emergency and 'out of hours work', failure to formally address underperformance, lack of commitment to supervision and finding sufficient time for supervision. These problems have serious implications in the context of clinical governance and audit. There is a need for an effective system to address both poor performance and inadequate supervision. Where there were significant differences, across specialities, in ratings of difficulties it is interesting to note that time, supervisor availability and lack of training of the supervisor caused the greatest difficulty in anaesthesia and medicine, and least difficulty in general practice where supervisors have to be trained and weekly meetings are mandatory. The large numbers of trainees in anaesthesia are perceived to be causing problems although it is not clear why this should be so. Where respondents gave figures there did not appear to be a severe imbalance between numbers of trainees and numbers of consultants. It might be expected there would be a similar problem in surgery but this was not apparent.

A framework for effective supervision

In this section we suggest a framework for effective supervision, which is based on our research findings and the literature. This framework must be understood as located in

the external framework for training and the guidance provided on necessary training experiences by bodies responsible for postgraduate training. Training is a partnership between supervisor and supervisee and requires the active involvement of both—it is not something that trainers 'do' to trainees. Within this partnership trainers and trainees both have obligations and responsibilities.

Early planning meetings, agreement about learning objectives, written contracts and review of trainee placements and progress by the programme director are an essential component of well-run training programmes and will prevent many problems arising. The differences between specialities in their ratings regarding difficulties in supervision and factors supporting good supervision suggest that having minimum requirements for supervision and training of supervisors reduces problems and promotes good supervision.

Our work has demonstrated that there is a need for a clear definition of supervision (which we have provided) and guidelines concerning supervision. In the following paragraphs we identify the features and mechanics of effective supervision.

Features of effective supervision

- (1) Direct supervision—trainee and supervisor working together and observing each other—positively affects patient outcome and trainee development.
- (2) Constructive feedback is essential and should be frequent.
- (3) Supervision should be structured and there should be regular timetabled meetings. The content of supervision meetings should be agreed and learning objectives determined at the beginning of the supervisory relationship. Supervision contracts can be useful tools and should include details of frequency, duration and content of supervision; appraisal and assessment; learning objectives; and any specific requirements.
- (4) Supervision should include clinical management; teaching and research; management and administration; pastoral care; interpersonal skills; personal development; reflection.
- (5) The supervision process should be informed by a '360 degree perspective'. This includes patient feedback, inter-professional supervision and training as well as reviewing written work and records. This will be supplemented by formal processes such as appraisal meetings and the results of examinations and formal assessments.

The quality of the supervisory relationship strongly affects the effectiveness of supervision. Specific aspects include continuity over time in the supervisory relationship, that the trainees control the content of supervision (there is some suggestion that supervision is only effective when this is the case) and that there is some reflection by both participants. The relationship is partly influenced by the supervisor's commitment to teaching as well as both the attitudes and the commitment of

supervisor and trainee. Supervisors (and trainees) need to understand that:

- (1) *Helpful supervisory behaviours* include giving direct guidance on clinical work, linking theory and practice, engaging in joint problem-solving and offering feedback, reassurance and providing role models.
- (2) *Ineffective supervisory behaviours* include rigidity; low empathy; failure to offer support; failure to follow supervisees' concerns; not teaching; being indirect and intolerant and emphasizing evaluation and negative aspects.
- (3) In addition to supervisory skills, effective supervisors need to have good interpersonal skills, good teaching skills and be clinically competent and knowledgeable.
- (4) *Training*: There is agreement that training for supervisors probably needs to include at least some of the following: understanding teaching; assessment; counselling skills; appraisal; feedback; careers advice; interpersonal skills.

In addition, our research evidence indicates that there are two areas of particular concern:

- It might be expected that there would be particular difficulties in supervision with regard to time, availability and approachability of supervisors. However, these issues appear to present fewer problems in specialities where there is a formal requirement for weekly supervision meetings than those where there is no such requirement. There is therefore a strong argument that all specialities should have a formal requirement specifying the frequency of supervision meetings.
- There are problems with 'out of hours' supervision and formally addressing underperformance and inadequate supervision. There is an urgent need for effective systems to resolve these issues.

Continuity of supervision

Continuity is a vital element in effective supervision of training and the delivery of a safe and effective service. It is essential for trainees who rotate through different placements. Establishing the level of competence of the trainee (for example, by direct observation or enquiry of others) is an essential first step in supervision otherwise training cannot commence and judgements cannot be made concerning the closeness of supervision needed to ensure patient safety.

Continuity of supervision needs to start early. Ideally, foundation trainees should have a portfolio documenting their strengths, weaknesses and achievements as an undergraduate. Training schemes need to organize themselves in such a way as to ensure accurate information about trainees is communicated effectively to supervisors as trainees rotate from post to post. Regardless of whether undergraduate or previous training information is available or not, an early meeting with the trainee (within the first two weeks of starting the post) needs to take place. At this meeting the structure and ground rules need to be agreed. These should indicate agreement on time and place of future meetings, issues of

confidentiality and accessibility of supervisor outside normal meetings.

A suggested format for this early meeting is shown below:

- Review progress to date (and any hand-over information).
- Review together speciality training guidelines.
- Formulate/review educational/training contract with timescales.
- Identify methods of achieving objectives or goals (the subsequent meeting should be used to review progress).

At the final meeting at the end of any training placement, an overall review should be undertaken to ensure that the trainee is able to progress to the next level and to identify in which area training should now take place. This information needs to be communicated to trainers in the next placement.

The issue of who should provide continuity of supervision is difficult and different specialities may adopt different solutions. For training to occur in a planned and coherent way, supervision of a trainee is best overseen by a single individual who will be involved with the trainee for a significant amount of time. Additionally, if problems are identified, they are more likely to be addressed by a supervisor who has responsibility for the trainee over, say, two years, than by someone who only sees the trainee for six months.

In some disciplines a programme director or the post-graduate tutor may be best placed to provide this overseeing role. In others where there are large numbers of trainees, this may be logistically impossible and here an individual consultant may take responsibility for a trainee throughout his/her time in the training programme. Irrespective of who takes on this role, it is essential that trainees and trainers are aware of the roles and responsibilities of the various people involved in providing training and who has ultimate responsibility for the trainee's progress.

Trainees

Trainees should be familiar with the overall training objectives for their chosen speciality and the agreed objectives for any particular placement. They should keep a record of their training experiences and achievements in relation to agreed objectives that can be used to inform discussions on future training. Different specialties require different recording procedures but, increasingly, trainees are being encouraged to keep detailed learning portfolios.

Trainees should attend supervision meetings punctually and should have prepared for any agreed tasks.

Supervision sessions should be trainee led, with trainees taking responsibility for their learning by suggesting topics for discussion. This does not preclude consultant supervisors from also suggesting topics.

Trainees must be prepared to develop a capacity for self-awareness and reflection on their practice that will enable them to identify, and bring forward for discussion in supervision, any areas where they feel their performance needs improving. They also need to be able to constructively criticize

local services where service organization issues interfere with delivery of training.

Trainee needs

Trainees also have certain specific needs in relation to supervision:

- graduated responsibility over time with direct supervision of assessment and management of patients, prescribing, practical procedures, administrative duties etc. shifting to less direct supervision over time;
- regular constructive feedback;
- establishment of learning objectives at the outset of each placement and identification of strategies for achieving them;
- periodic assessment and appraisal;
- time to attend specialist courses and specific instruction for examinations;
- supervision of their teaching/supervision of others;
- development of management, audit skills and involvement in the processes required by clinical governance;
- pastoral care and the provision of appropriate role models;
- provision of a safe environment for training and clinical work;
- career planning and advice based on the best workforce data available.

Supervisors

Supervisors must contribute to the provision of a well-organized and comprehensive training programme and ensure that trainees placed with them have the necessary opportunities to achieve agreed objectives.

Supervisors must be accessible and should arrange regular uninterrupted meetings with trainees for supervision as well as being clear about how and under what circumstances they can be contacted between meetings.

Supervisors must observe their trainees in practice and make arrangements to gather information from others who have observed the trainee.

Supervisors must provide a safe environment in which trainees feel able to discuss their own perceived deficiencies and empowered to make any relevant constructive criticism of their training, including the supervision process. Trainees should see that action has been taken on problems they have identified. Supervisors need to cultivate an atmosphere of openness throughout the departments for which they are responsible.

Supervisors must be able to provide honest, fair and constructive feedback on trainee performance at regular intervals (see Box 4).

Box 4: How to give constructive feedback

Constructive feedback aims to improve performance. It should identify and reinforce the strengths of a person's performance and identify the weaknesses *whilst suggesting ways to improve them*. Feedback is most effective when it is *timely*—close to the event.

Giving feedback:

Ask the trainee to comment first and to identify which aspects of his/her performance went well. Then let him/her identify areas of difficulty and possibilities for change or development.

Respond to his/her comments before offering your own comments.

Again, begin with the positive. Be specific and descriptive, for example, 'The way you analysed the patient's problems and arranged appropriate investigations was excellent' rather than simply saying 'Very good'.

Prioritize and do not give a lot of negative feedback in one big bundle. Refer to behaviour that can be changed; for example, 'I know you are nervous but you will make the patient more comfortable if you make eye contact while you are talking to him'. Offer alternatives—try not simply to criticize but offer an alternative way of doing it. 'I think the patient was uncooperative partly because you did not explain what you were going to do. Try explaining the procedure now and then go back and tell her in simpler terms.'

Agree the next steps.

Feedback should be regular but can be brief and still very effective.

Feedback should be given as close to the event as possible.

Skills required of a good supervisor

Supervision for junior staff must be offered in a supportive environment whilst ensuring patient safety. The skills required to deliver this supervision are many and varied (Box 5).

All training placements should start with a detailed 'educational needs assessment' and identification of clear learning objectives for the placement. This requires *appraisal skills* and the ability to establish the level of competence of trainees through observation of performance. Of particular importance is the ability to recognize unsatisfactory performance and progress and the willingness to act appropriately in the interests of the trainee and the patient. Supervisors need the ability to *observe and reflect* on practice and to provide trainees with clear and constructive *feedback* on their performance (see Box 4).

Effective supervisors need *formal skills in teaching* and facilitating learning. They need to be able to plan and organize teaching sessions, formulate relevant and achievable learning objectives, and facilitate trainee involvement in the learning process. In supervision sessions, helping the trainee to develop his/her own solutions requires the supervisor to have skills in *identifying alternatives* and *problem-solving*. Supervisors will also, at times, need the ability to *motivate* trainees.

Managing the tension between facilitating self-directed learning and directing the learning of the trainee is not easy. It may feel safest to monitor the trainee closely and this may be very appropriate in the early stages of training but supervisors need to be able to progressively advance the ability of the trainee to work independently without compromising patient safety and thus need skills in *fostering autonomy*.

The supervisor must be a skilled *information provider* able to understand and transmit the training and legal requirements of relevant statutory bodies (for example, medical Royal Colleges and the General Medical Council). The supervisor must also communicate the policy and procedures of the local department/unit and Trust and in turn ensure that other team members are aware of the training requirements and responsibilities of the trainee.

Supervision takes place in a context and the supervisor usually has a key part to play in creating the best possible environment for training. This requires good *service management skills* to ensure that department/unit affairs are well organized and run smoothly and that all staff are clear about their roles and responsibilities. Role modelling good clinical practice, leadership, teamwork and open communication, and critical self-evaluation of performance within the clinical service are essential components of good supervision.

Creating a context for delivering effective clinical services includes ensuring an appropriate balance between service and educational activities, constructing timetables and rotas that are coherent with training requirements, and seeking funds to provide the necessary physical facilities and materials for training. It also requires the *ability to foster a supportive culture* that promotes the personal and professional development of staff.

The supervisor may have to be an *advocate* for the trainee, to ensure he/she has adequate resources for training and that his/her training needs are being met. This will on occasion require *negotiation* skills. Ensuring that there is time for supervision whilst meeting clinical service needs requires *time management and organizational skills*.

Finally, the supervisor needs *self-appraisal skills* and the willingness to reflect on his or her own personal supervisory style and initiate change if it is not shown to be supportive and enabling.

Box 5: Effective supervisors are able to

- Observe and reflect on practice
- Give constructive feedback (see Box 4)
- Teach
- Identify alternatives
- Problem-solve
- Motivate
- Foster autonomy
- Provide information
- Appraise self and others
- Manage a service
- Create a supportive climate
- Advocate
- Negotiate
- Manage time
- Organize

Dealing with problems in supervision

There are many reasons why supervision may not be effective; these include:

- poorly organized training programmes;
- trainers who have poor supervisory skills;
- tension between service delivery and supervision/training needs;
- whether the trainee is able to learn from experience and to manage errors;
- whether trainees feel confident enough to acknowledge/address difficulties.

Many problems can be resolved through effective organization of training and appropriate mechanisms for appraisal and feedback. However, at the heart of supervision is the relationship between trainer and trainee and considerable difficulties can ensue if there are problems in this relationship.

Hierarchy and power

The innate hierarchy and power in a supervisor trainee relationship may be used as a positive or destructive force on either side, although the potential for abuse is probably greater on the supervisor's side.

Working closely together over a period of time can produce a feeling of mutual trust between the supervisor and trainee and a much greater understanding of the problems encountered by both parties. Obstacles to training that are identified can form the basis of supervisory sessions where the supervisor can help the trainee to arrive at his/her own solutions. However, if it is not possible the supervisor can step in when required. This might happen if problems of service work override educational needs—a trainee may be able to address this by making minor adjustments in timetabling but, for example, a consultant intervention may be required to prevent trainees being asked to do extra clinics for other consultants. The trainee's difficulties with other health professionals can be highlighted and might be dealt with by consultant intervention.

However, the relationship is open to abuse, particularly as the trainee may feel in a subservient position, often dependent on the supervisor to progress to the next level of training and for job references. In primary care, the trainee is an employee of the practice and of the trainer. The supervisor also has the power to manipulate the trainee's timetable to ensure that service—not training—needs are met. Consequently the trainee may not feel able to reveal clinical weakness or emotional/psychological problems. If these problems are revealed, the supervisor may constantly focus on these problems and not the solutions, gradually undermining the trainee's confidence.

Dealing with personality issues in supervision

Personality issues may arise in supervision in a number of ways. A 'personality clash' between trainer and trainee may impede effective supervision; some personality issues are almost inevitable within supervision at some stage, even in the best run training schemes. More seriously, supervisors may become concerned about trainee attitudes to patients and to the other staff in the healthcare team. In such cases there may not necessarily be any particular problems in the trainer/trainee relationship, highlighting the importance of canvassing the opinions of other members of the team.

Possible solutions

The process of supervision is a finely balanced one and abuse of the system on either side may well tip the relationship into a potentially destructive one. All training programmes should have clear guidance regarding the conduct of supervision and well-publicized systems in place to address difficulties. Guidance on appropriate conduct should exclude teaching by 'humiliation', bullying, sexual harassment, and relationships between trainers and trainees. Trainees should know whom to contact if problems arise that cannot be resolved within the placement. Trainees should be discouraged from receiving medical treatment from trainers, for example GP trainees registering with their training practice.

Ideally problems should be discussed with the supervisor, as part of the regular process of reflecting on supervision within supervision sessions. Trainees need clear feedback and constructive suggestions on action. These can be related to the speciality learning objectives and also to other relevant publications such as the GMC's *Good medical practice* (1998). If problems cannot be resolved within supervision, there should be clear mechanisms for trainer and trainee to involve a third party as a mediator to help resolve issues. Programme Directors, Postgraduate Tutors or Postgraduate Deans and their nominees are most likely to be involved in this in the UK. A well-defined process of appeal should be identified if all else fails.

When there is concern about 'personality issues' it is important to ensure that trainers and/or trainees are not suffering from treatable physical or psychiatric disorders, or experiencing adverse life events. Careful assessment of

the situation and information regarding past progress and problems will be helpful here.

Many trainers are reluctant to raise concerns about attitudinal problems with trainees, as they can be difficult to resolve. However, the advent of clinical governance and recent advice from the GMC place an obligation on trainers to report such issues if they cannot resolve them. If problems cannot be reconciled, then clearly defined sanctions need to be in place to either prevent the progress of the trainee to the next level or allow for the removal of the trainee from a particular supervisor or trainer. As a last resort, local 'three wise people' procedures can be involved or the national professional regulatory body may need to be contacted if there are serious, unresolved concerns about a trainee's attitude to patients.

Supervision at different levels and in different specialities

Supervision at different levels

It is clear from our definition that all clinical staff should receive supervision, irrespective of grade. This should apply to consultants, principals in general practice and non-training grade doctors as much as to doctors in training. It is illogical that the process of reflection on and coordination of learning, which now takes place for all junior staff, should cease on leaving the training grades. All staff should participate in a programme of continuing professional development and ensure that they are up to date with new procedures, practices and knowledge.

Staff at all levels are likely to be receiving supervision and at the same time supervising others. Even foundation trainees will be 'supervising' medical students.

Trainees need to acquire responsibility in a graded fashion as they achieve competences, with the aim of becoming independent practitioners. The amount of direct clinical supervision required will be maximal at the foundation trainee level and at the beginning of each grade as new and unfamiliar problems are encountered and will decrease with time and experience. Paradoxically, much of the 'supervised' work of more senior trainees such as SpRs will take place without direct supervision. The process of development into an independent specialist requires that as experience is gained so the trainees are able to take more and more responsibility themselves. Clinical decisions are therefore reported to supervisors after the event or may not be reported at all if they form part of the daily currency of the work of a senior trainee. Middle- and senior-grade trainees will also be supervising others as well as receiving supervision themselves although, ultimately, responsibility will lie with consultant supervisors. Thus the capacity to supervise is also an essential part of the training process.

The content of what needs to be supervised at different levels will change but the 'closeness' of supervision will vary according to the grade and amount of progress within the grade. Trainers need to make judgements regarding levels of supervision (See section on 'Ensuring trainee

competence and levels of supervision') as to whether they should:

- be present in same room as the person being supervised;
- be nearby and immediately available to come to the aid of the person being supervised;
- be in the hospital or primary care premises and available at short notice, able to offer immediate help by telephone and able to come to the aid of the person within a short time;
- on call and available for advice, able to come to the trainee's assistance in an appropriate length of time.

Setting out the supervision needs of trainees at each of the different training grades is counterproductive as so much varies according to speciality. Although the content of supervision will vary according to grade, the basic structure of supervision needs is broadly similar at each level. Similarly, the generic skills required of the supervisor remain the same at each level (see section on 'Skills required of a good supervisor'). The personal contribution of the consultant will vary with the amount of supervision also available from intermediate grades; for example, the consultant will be the only person supervising an SpR, whereas a foundation trainee will receive supervision from SHOs and SpRs and other members of the healthcare team as well as the consultant. Where supervision is less direct, as in the situation where a SpR may be providing direct supervision of a SHO or foundation trainee, consultants must set up systems requiring the SpR to report to the consultant on trainee progress of an SHO, staff grade or foundation trainee. This in turn provides valuable supervision opportunities for discussion of and reflection on the SpR's role as a trainer and supervisor.

The supervision of trainees in general practice needs to acknowledge the change from hospital to primary care. The transfer from the confines of hospital work to the open-ended environment of primary care is a culture shock not to be underestimated. The new trainee will need time and space to adjust to the new environment. The registrar must be able to work within his/her competence. After the initial orientation, she/he will be learning new skills, not least in the realm of clinical assessment, consultation skills and living with uncertainty. It is the trainer's job to monitor closely and teach the new skills and attitudes required slowly over the first weeks and months as there will be a gradual increase in responsibility and clinical load. The 'sink or swim' approach is to be strongly deprecated. The paramount aim of supervision is patient safety, now and in the future. Formative assessment, regular tutorials and an educational culture that allows sharing of both knowledge and ignorance is essential.

'Supervision' for consultants, principals and staff grades

The principle of 'partnership' is of paramount importance for consultants and principals in general practice where

individuals may enter into arrangements for peer consultation/supervision of work with colleagues as part of a programme of continuing professional development.

It is important that staff grades should not be exploited in the name of supporting the training grades. The needs of these staff with regard to supervision are similar if not identical to the needs of those in the training grades, albeit that consultants and principals are likely to be receiving 'supervision' from peers. However, the lack of a formal structure to monitor training and supervision has led to many difficulties in ensuring that consultants, principals and staff grades continue to benefit from education and supervision. In the future, the advent of appraisal, revalidation, personal learning portfolios and clinical governance should ensure that this state of affairs does not continue.

Supervision across the specialities

Although the mechanics of supervision vary across the specialities there is a generic structure and skills in all supervision. Here we give examples of supervisory practice from disparate specialities and it will be evident that they have general applicability to supervision issues in other specialities. The examples are taken from case studies, written by experienced supervisors, regarding their personal experiences of supervision. The speciality from which the vignette is taken is indicated in each box (Boxes 6–13).

Box 6: Assessing trainee competence

Although surgical experience is carefully documented in log books, trainers are *not* at present required to sign off the competence of individuals in particular procedures. This gives rise to several problems:

- There is a delay when changing training paths while competence and training requirements are assessed by the new trainer.
- It makes it difficult for the new trainer to formulate and agree a training plan with the trainee.
- It makes it difficult for other supervisors such as the programme director at appraisal (RITA) to monitor progress of the trainee through the training scheme and remedy any deficits.
- It makes it difficult to defend assessment decisions, particularly if the trainee is deemed to be not competent.

Consequently the Vascular Surgical Society of Great Britain and Ireland instituted a simple chart that itemizes the key or index vascular procedures essential for subspecialty training. Included in this chart is open space to record the training received in these specialist procedures and *the level of competence* acquired. This latter is ‘signed off’ by the trainers and so creates a permanent progressive record of achievement. We adapted this form for the year 1–3 trainees on a local higher surgical training scheme. It now forms part of the RITA for these trainees and is used as part of the training agreement between SpRs and their individual trainers. The information is also gathered and analysed at regional level, forming a valuable source of data on the efficiency of operative training.

Surgery

Box 7: Supervision practices

I have managed to divide my outpatient work into new and review clinics. This means those review clinics can be run in a more meaningful way. As far as possible, doctors follow up their own patients. This gives continuity for patient and doctor.

In the afternoon after the morning clinic, all the doctors meet and each presents (consultant included) the patients they have seen and discusses the difficulties and their management plan. This is the time for any doctor to ask for advice about a particular patient. It works extremely well, junior doctors feel supported, patients can be confident that the consultant is still overseeing their case and patients are not subjected to endless, non-productive follow up. Areas of lack of knowledge can be highlighted and addressed. At the end of the post, both SpRs and SHOs have spontaneously expressed enthusiasm for this—regardless of their seniority.

Medicine

Box 8: Continuity of supervision

There is a five-year training programme for the subspecialty of geriatric medicine involving a series of clinical placements and experience. In one local area supervisors decided that trainees should spend at least two years in one hospital site. We think that the advantage is that trainees have increased experience in one unit and a greater chance of longitudinal follow up of patients thereby enhancing their experience of disease progression. In addition, the trainees are more secure in their geographical placement with less disruption to their personal life. The advantage to the hospital is fewer changes of personnel. The trainee is associated with one supervisor for a longer period of time and thereby they get to know each other better and develop a deeper professional association.

Geriatric Medicine

Box 9: Useful supervision techniques

Although various relatively objective and recordable systems of supervision for procedures (e.g. observe, assist at etc.) have been developed, it is more difficult to make an objective assessment of the development of trainee doctors’ diagnostic, consulting and medical management skills. A number of techniques are used in general practice to identify whether the trainee’s work is developing satisfactorily and that the trainee’s management of patients is of an appropriately high standard:

- random case note analysis;
- analysis of consultation on video;
- critical event analysis (events such as deaths or perceived clinical errors are analysed to see if anything might have been done better);
- analysis of prescription rates;
- analysis of investigation rates;
- analysis of hospital referral patterns, referral letters and replies;
- analysis of complaints.

General practice

Box 10: Levels of supervision

The consequences of poor supervision in anaesthesia can be very serious indeed and there is a stringent requirement for all trainees to receive appropriate clinical supervision at all stages in their training in anaesthesia. It is recommended that full-time, direct supervision should be provided at all times during the first 12 weeks of training. If the trainee does take part in the on-call rota then the supervision will probably be provided by other trainees who are further advanced in their training.

The level of clinical supervision is determined by the previous experience/training of the anaesthetist being supervised and the specific clinical situation.

Anaesthetists also have major involvement in intensive care units and pain management clinics. Clinical supervision for anaesthetists in intensive care should follow a similar pattern to that described for anaesthesia. There is normally much less urgency about clinical situations in a chronic pain clinic but high levels of supervision are usually warranted during both consultations and treatment sessions.

At varying times during their training anaesthetists require enhanced supervision. This may be whilst a single procedure is being performed or during introduction to a new sub-speciality.

Anaesthetics

Box 11: Continuity in supervision

Although each trainee had a supervisor there were some problems with continuity as well as personality clashes between trainee and supervisor so a mentor system was instituted in one region. The mentor is a consultant in A&E in another department in the region. She/he meets regularly with the trainee and reviews their progress in the light of their own assessment and feedback from the operational level. Any problems identified are then addressed appropriately. Participants have found that the process enables the strategic education plan to develop appropriately over time, even when the trainee moves hospital. In addition a more balanced assessment can be made during the bi-annual strategic meeting with the trainee.

Accident and Emergency

Box 12: Complexities of supervision in practice

The operating theatre can be a hostile environment for trainees. The trainee has to contend not only with the supervisor/teacher and the process of learning but also with the stresses of administering anaesthesia, the demands of the surgeon, time pressures, cost pressures, the presence of other staff such as nurses and, last but not least, patient expectations. Supervision of a trainee during an operating list may be subject to many interruptions and frequent inability to complete episodes of teaching.

Anaesthetics

Box 13: Problems in supervision

A trainee was enthusiastic about a career in front-line acute paediatrics. Early reports from both nurses and junior members of the department caused concern about the trainee's competence because of panic decision-making, indecisive leadership, failure in delegation of tasks and signs of stress. This led the educational supervisor to sit down with the trainee to list the skills necessary for acute intensive clinical work. But there was no evidence that these skills were improving at repeated reviews. The supervisor helped identify the trainee's areas of strength and identified a career pathway in which the trainee was more likely to succeed. This approach, emphasizing strengths not weaknesses, was successful. The trainee took the career advice enthusiastically, and with relief as she/he did have insight into his/her problems.

A second trainee lacked insight into his/her own difficulties with interpersonal relationships. She/he was brilliant in some areas of basic science and clinical medicine but was not a 'team player'. The educational supervisor arranged regular meetings and offered opportunities for skills development. However, these opportunities were poorly attended and relevant questioning at the trainee's appraisal meeting indicated that she/he had a lack of awareness and understanding of the difficulties. Progress to the next part of the training programme was deferred and the trainee protested. This situation was very difficult to manage and was referred to the Postgraduate Dean who supported the decision of the appraisal panel—that it was very unlikely the trainee would achieve a successful appraisal in the future. The trainee left the training programme to work in research.

Paediatrics

These examples have been chosen to reflect some of the issues that cause difficulties in supervision and to show how they have been addressed in different specialities. They illustrate the importance of structure, continuity, supervision techniques, direct supervision, complexities of supervision in practice and dealing with problems in supervision.

Conclusion

The content of this guide is informed by both empirical work and practitioners' experiences. We have identified the need for a definition of and for explicit guidelines on supervision. There is strong evidence that, whilst supervision is considered to be both important and effective, practice is highly variable. In some cases, there is inadequate coverage and frequency of supervision activities. There is particular concern about lack of supervision for emergency and 'out of hours work', failure to formally address under-performance, lack of commitment to supervision and finding sufficient time for supervision. There is a need for an effective system to address both poor performance and inadequate supervision. We have offered both a definition and a framework for effective supervision that is intended to be of practical use to practitioners.

Acknowledgements

The authors wish to thank the following people who contributed to this guide through their participation in a two-day development workshop and/or by writing about their experiences of supervision: Sushma Acquilla; Janet Anderson; Dee Dawkins; Peter Driscoll; Vin Diwaker; Gordon Jackson; Doug Justins; Richard Morgan; David Newble; Geoff Norris; Trudie Roberts; Denis Wilkins; Simon Bennett; Robin Cairncross; Claire Waring; John Wilkinson.

Notes on contributors

SUE KILMINSTER is Senior Research Officer in the Medical Education Unit, University of Leeds, UK.

DAVID COTTRELL is Professor of Child & Adolescent Psychiatry at the University of Leeds, UK. He remains an active clinician and is Associate Medical Director in his local NHS Trust.

JANET GRANT is Professor of Education in Medicine at the Open University Institute of Educational Technology and Director of the Centre for Education in Medicine.

BRIAN JOLLY is Professor of Medical Education and Director, Centre for Medical and Health Sciences Research, University of Monash, Australia.

References

- Arluke A. 1980. Roundsmanship: inherent control on a medical teaching ward. *Soc Sci Med* 14A:297–302.
- Boud D, Cohen R, Walker D. 1993. *Using Experience for Learning* (Buckingham, SRHE & Open University Press).
- Bools C, Cottrell D. 1994. Future child and adolescent psychiatrists: a further survey of senior registrar training. *Psychiatr Bull* 14:611–615.
- Cottrell D, Kilminster SM, Jolly B, Grant J. 2002. What is effective supervision and how does it happen? *Med Educ* 36:1042–1049.
- Davies BW, Campbell WB. 1995. Inguinal hernia repair: see one, do one, teach one? *Ann Roy Coll Surg Engl* 77:299–301.
- Davies JH, Tan K, Jenkins HR. 2000. The current status of senior house officer postgraduate education in a single region. *Med Educ* 34:367–370.
- Department of Health. 1996. *A Guide to Specialist Registrar Training* (London, Department of Health).
- Ende J, Pomerantz A, Erickson F. 1995. Preceptors' strategies for correcting residents in an ambulatory care medicine setting: a qualitative analysis. *Acad Med* 70:224–229.
- Eraut M. 1994. *Developing Professional Knowledge and Competence* (London, Falmer Press).
- Fallon Jr WF, Wears RL, Tepas III JJ. 1993. Resident supervision in the operating room: does this impact on outcome? *J Trauma* 35:556060 (discussion 560–561).
- General Medical Council. 1997. *The New Doctor* (London, GMC).
- General Medical Council. 1998. *Good Medical Practice* (London, GMC).
- General Medical Council. 1999. *The Early Years* (London, GMC).
- Genniss VM, Genniss MA. 1993. Supervision in the outpatient clinic: effects on teaching and patient care. *J Gen Intern Med* 8:378–380.
- Grant J, Kilminster SM, Jolly B, Cottrell D. 2003. Clinical supervision of SpRs. Where does it happen, when does it happen and is it effective? *Med Educ* 37:140–149.
- Griffiths CH, Desai NS, Wilson EA, Powell KJ, Rich EC. 1996. Housestaff experience, workload and test ordering in a neonatal intensive care unit. *Acad Med* 71:106–1108.
- Harden RM, Crosby JR. 2000. AMEE Education Guide no 20: the good teacher is more than a lecturer—the twelve roles of the teacher. *Med Teach* 22:334–347.
- Hesketh EA, Bagnall G, Buckley EG, Friedman M, Goodall E, Harden RM, Laidlaw JM, Leighton-Beck L, McKinlay P, Newton R, Oughton R. 2001. A framework for developing excellence as a clinical educator. *Med Educ* 35:555–564.
- Jolly BC, Macdonald MM. 1986. Practical experience in the pre-registration year in relation to undergraduate preparation. *Proc Annu Conf Res Med Educ* 25:171–176.
- Kilminster SM, Jolly BC. 2000. Effective supervision in clinical practice settings: a literature review. *Med Educ* 34:827–840.
- Kilminster SM, Jolly B, Grant J, Cottrell D. 2000. *Good Supervision: Guiding the Clinical Educator of the 21st Century* (Sheffield, University of Sheffield).
- Kilminster SM, Jolly B, van der Vleuten C. 2002. A framework for training effective supervisors. *Med Teach* 24:385–389.
- Kolb DA. 1984. *Experiential Learning Experience as the Source of Learning and Development* (Englewood Cliffs, NJ, Prentice Hall).
- Lave J, Wenger E. 1991. *Situated Learning: Legitimate Peripheral Participation* (Cambridge, Cambridge University Press).
- McKee M, Black N. 1992. Does the current use of junior doctors in the United Kingdom affect the quality of medical care. *Soc Sci Med* 34:549–558.
- Panayiatou BN, Fotherby MD. 1996. Junior hospital doctors' views on their training in the UK. *Postgrad Med J* 72:547–550.
- Patel V, Groen P. 1990. The general and specific nature of medical expertise: a critical look, in: KA. Ericsson & J. Smith (Eds), *Towards a General Theory of Expertise: Prospects and Limits* (Cambridge, Cambridge University Press).
- Schon DA. 1995. *The Reflective Practitioner: How Professionals Think in Action* (Aldershot, Arena).
- Somers PS, Muller JH, Saba GW, Draisin JA, Shore WA. 1994. Reflections-on-action: medical students' accounts of their implicit beliefs and strategies in the context of one-to-one clinical teaching. *Acad Med* 69:584–587.
- Sox CM, Burstin HR, Orav EJ, Conn A, Setnick G, Rucker DW, Dasse P, Brennan TA. 1998. The effect of supervision of residents on quality of care in five university-affiliated emergency departments. *Acad Med* 73:776–782.
- Tenant M. 1999. Is learning transferable?, in: D. Boud & J. Garrick (Eds), *Understanding Learning at Work* (London, Routledge).
- Williams S, Dale J, Glucksman E, Wellesley A. 1997. Senior house officers' work related stressors, psychological distress and confidence in performing clinical tasks in accident and emergency: a questionnaire study. *BMJ* 314:713–718.

Appendix: the UK regulatory framework

Supervision and clinical governance

Clinical governance is defined in the 1998 White Paper, *A First Class Service*, as:

... a framework through which NHS organisations are accountable for continuously improving the quality of their services and safe guarding high standards of care by creating an environment in which excellence in clinical care will flourish.

The object of training is to provide the patients of the future with high-quality specialists who have had a wide range of useful and informative experience during their training years. Both the interests of the patients of today

and the quality of the training experience depend on good clinical and educational supervision of trainees during their training years.

The quality of clinical supervision of trainees is therefore a central problem for the clinical governance organizations within Trusts, and these organizations will need to assure themselves that appropriate supervision is being undertaken. Although the arrangements for the management of educational supervision have improved out of recognition throughout the UK over the last decade, it is still relatively unusual for Trusts to have identifiable management systems which are capable of assuring the clinical governance organization within the Trust that the level of clinical supervision of trainees is adequate to ensure the delivery of services of appropriate quality. However, appropriate supervision is central to the process of clinical governance and such management systems will need to be developed.

Paper two

How to be an educational supervisor.

By Carolyn S. Evans

Reprinted from

Chapter 1 in *Essential guide to educational supervision* edited by Nicola Cooper and Kirsty Forrest (2009)

CHAPTER 1

How to be an educational supervisor

Carolyn S. Evans

Bradford Teaching Hospitals NHS Foundation Trust; Yorkshire and the Humber
Postgraduate Deanery, UK

The educational supervisor is not a new concept – it was established in 1987 – but the role has become far more prominent following the implementation of Modernising Medical Careers (MMC), which introduced shorter, more focussed, competency-based postgraduate training programmes. The importance of the role of educational supervisor is emphasised in the General Medical Council (GMC) publication 'The New Doctor' [1], produced in conjunction with the Postgraduate Medical Education and Training Board (PMETB). This focuses on the generic standards for training within the foundation years, a period of critical transition from medical student to doctor in which the educational supervisor can be pivotal in ensuring trainee survival and enjoyment as well as advising on career pathways. Equally difficult demands are made of educational supervisors responsible for trainees appointed to core training (CT) and specialty training (ST) posts in run-through training programmes, as well as those advising trainees in fixed-term specialty training appointments (FTSTA) after August 2007. The importance and relevance of educational supervision is enshrined in all specialty-specific competency-based curricula; for example, the Royal College of Anaesthetists states that every trainee must have an educational supervisor.

Educational supervision is not just about the educational aspects of postgraduate medical education; and if you are thinking this is not relevant, just ask yourself the following questions:

- Who took an interest in my welfare?
- Who helped uncover my hidden talent?
- Who has been a useful role model for me?
- Who helped me face and resolve a difficult situation in my personal or professional life?
- Who helped me acquire new vision or direction?

Essential Guide to Educational Supervision in Postgraduate Medical Education.
Edited by Nicola Cooper and Kirsty Forrest. © 2009 Blackwell Publishing,
ISBN: 978-1-4051-7071-0.

Supervision

Supervision is a term that can lead to different interpretations. It does not mean someone looking over your shoulder all the time! Educational supervision incorporates both hierarchical and evaluative concepts and can be seen as having supportive, educational and administrative functions.

Under the umbrella of educational supervision, *clinical* supervision has been defined as 'an exchange between practicing professionals to enable the development of professional skills' [2]. The individuals involved are usually in different stages of training and these exchanges form an essential part of the journey from novice to expert.

Supervision in the clinical environment includes a clear demarcation of who is reporting to whom. This may involve a formal process or consist of an informal discussion over coffee. We all undertake clinical supervision to a greater or lesser extent during our normal working day in any situation where we come into contact with someone less experienced than ourselves. This provides part of the information gathered by the educational supervisor for discussion with the trainee. The educational supervisor takes the views of clinical supervisors and uses these to inform the support, development and assessment of the trainee's performance.

Educational supervision may at times expand to take on a mentoring role in which a guidance and developmental conversation leads to a more wide-ranging discussion. In this context, the topics discussed should remain confidential unless permission to disclose them is given by the trainee.

The purpose of educational supervision

Educational supervisors are gatekeepers whose role is to maintain standards of training to all levels of trainees in all specialities. To achieve this, the educational supervisors must understand the educational objectives of each period of training for which they have responsibility. They should ensure priority is given to the educational component of the post and that the trainee is not overloaded with inappropriate responsibilities or excessive clinical commitments. An effective educational supervisor should contribute to the development of professionalism and self-confidence in the trainee and to the reduction of work-related stress, especially for those in their initial years of training.

Becoming an educational supervisor

There is no formal job description for an educational supervisor although the Faculty of Occupational Medicine does specify that educational supervisors must be on the GMC's specialist register and be approved by their local specialist training committee [3]. The essential requirements are an interest in trainee education and development, an understanding of the appropriate

programmes, and readiness to commit time beyond that formally allocated as supporting professional activity (SPA) within the consultant job plan.

An individual does not need to have responsibility for training within a department in order to take on the role of educational supervisor. In small departments with less than 10 trainees it may be possible for the college tutor to act as educational supervisor for all the trainees but normal practice is for the educational supervisor to be an additional rung on the educational ladder, accountable to the college tutor. The Royal College of Anaesthetists' view is that educational supervisors should be career grade doctors, for example consultants, staff grades or associate specialists. Senior trainees, as part of their professional development, may be offered the opportunity to take on a supervisory role for a junior trainee but will require appropriate support and regular review by the college tutor [4].

In some specialties, educational supervisors are allocated to trainees by the training programme director or college tutor, which ensures that all trainees have an identified educational supervisor at the start of their post. However, the opportunity to change educational supervisor must be available should the partnership not prove constructive. Although practice varies between trusts, the trainee usually keeps the same educational supervisor for the duration of their attachment in that hospital.

Some deaneries offer generic training programmes for educational supervisors, which cover assessments in competency-based training programmes, appraisal skills, career guidance, teaching skills and mentoring, all facets of effective educational supervision. There is concern that there is no standard education or supervisory skills course available and that the majority of educational supervisors have had no formal educational training. The Mersey Deanery, reviewing the contribution of educational supervisors in the foundation years, found that 51% had not received any formal training [5].

It is essential for the educational supervisor to understand the educational objectives of the specific period of training for which he or she has responsibility. Trainees interviewed in their second-year foundation programme felt the recent changes in postgraduate medical training had left their educational supervisors unclear of what was required of an F2 trainee [6]. Neither trainee nor supervisor will benefit if both are working in the dark with no clear idea of where they are going.

Key skills of an educational supervisor include the ability to:

- Teach;
- Facilitate rather than direct;
- Challenge without being threatening;
- Provide career guidance and
- Mentor.

Educational supervisors fail in their role for a variety of reasons. This may be because they are rigid in their approach, they always offer minimal support or empathy, they are not interested in teaching or they are unable to encourage or praise and always highlight the trainee's deficiencies. One or

more of these may apply when a person does not enjoy the responsibility and challenges of being an educational supervisor but it is not necessary to exhibit all of these to get excused.

If the educational supervisor cannot engage with the trainee in a constructive manner, the training programme director or college tutor should be contacted as soon as possible to resolve the issue. It may be necessary to allocate an alternative supervisor. Educational supervisors should be allocated without any bias in ethnicity, sexual orientation or gender of the individuals concerned, but occasionally serious differences of opinion or personality clashes will occur. An open admission of a failing supervisory relationship is more constructive than leaving the trainee to flounder and get nowhere.

Educational supervisor responsibilities

Meeting and appraisals

The first meeting is very important and time should be set aside for this in a private office. The objectives of the meeting are to agree on the purpose and role of the relationship, to establish an understanding with the trainee and to agree future means of communication. The trainee should leave the meeting feeling supported and clear about expectations. The most sensible and well-established structure is to agree on a personal development plan (PDP) with some short- and long-term educational goals. The educational supervisor should establish a timetable for future meetings to review progress and respond to any underperformance.

The trainee's PDP should be amended and updated at each meeting. Effective feedback is an important component of these discussions and is aimed at raising confidence and motivating the trainee. The educational supervisor should confirm areas of strength and areas for development. These may relate to lack of clinical exposure, specific clinical skills or broader issues such as communication. Targets must be set and agreed, and both parties should sign a record of the meeting. If the trainee is keeping a log book of cases or procedures undertaken as part of a training portfolio, a regular review by the educational supervisor can be a positive start to a meeting. The data reviewed can also direct the trainee's PDP targets for the next few months.

Guidance on postgraduate examinations

Examinations are an inevitable part of the educational supervisory discussion because in many specialties progress depends on passing royal college examinations by a certain point within the programme. The educational supervisor should know about local examination courses and the study leave budget, and be able to offer advice on appropriate regional and national revision courses for the failing trainee. If educational supervisors know their trainees well, they can direct them to the relevant support (Box 1.1).

Box 1.1

A trainee with appropriate knowledge but who continued to fail despite attending examination preparation courses was offered the opportunity of being video-assessed in order to analyse her presentation skills. This brought about a dramatic change in her body language and delivery in the oral examination and she passed the next sitting of the examination effortlessly. Her educational supervisor organised this session at the deanery with input from an educationalist and was able to maximise the use of this resource by knowing the trainee and her weaknesses.

Educational supervisors should also get involved in the local institution's examination preparation programme, for example teaching sessions, local courses and mock examinations.

There are huge personal and professional implications when a trainee keeps failing postgraduate examinations. It is a very public display of failure to progress. Educational supervisors will be aware of the pressure that working for examinations produces in such individuals. Putting time limits on essential educational targets increases the pressure on the trainee.

Educational supervisors need to know how many attempts trainees can have and what happens if they persistently fail an examination. Some colleges offer guidance interviews for failing trainees; the educational supervisor is the ideal person to accompany the trainee to these meetings, both for support and to ensure that suggestions from the panel are implemented. The Royal College of Anaesthetists report that if trainees attend a guidance interview alone they may feel unable to ask questions of the panel and may later have very limited recollection of the advice offered.

When a trainee is persistently failing postgraduate examinations it may fall to the educational supervisor to start the process of exploring other career options. This can be difficult, especially if the trainee has no insight into the reasons for his or her failure to progress; taking another colleague along to reinforce the message can be helpful.

Career advice

Predictions of staffing requirements in all specialties continue to be difficult, but an educational supervisor should have a feel for employment prospects now and in the future, especially in order to advise foundation programme trainees about CT posts versus run-through training programmes. Those in CT posts will need guidance when applying for entry to an ST programme, including reviewing their application form, giving realistic advice on the likelihood of success, advising them where to apply and ensuring they are considering other employment options if the ST programmes are extremely competitive.

Interview practice is valued and appreciated by all trainees regardless of the level of post being sought.

Although educational supervisors are unlikely to be experts on the constantly changing guidance on 'less than full-time training' (flexible training), they should know where to direct trainees for advice. Each deanery will have an identified person with responsibility for flexible training. The trainee will also need to meet with a specialty-specific advisor to explore details of how flexible training can be incorporated into a training programme. Although the majority of requests for flexible training are related to domestic commitments, it may be appropriate for an educational supervisor to suggest becoming a flexible trainee for a period of time if an individual's health precludes working full-time, such as a trainee with poorly controlled diabetes, an acute depressive illness or a recurrence of a chronic problem such as Crohn's disease or multiple sclerosis.

Arranging access to flexible training can enable a trainee to return to work much sooner than would otherwise be possible, although trainees must be working at least 50% of full-time hours, including on-call work, for their time to be counted towards a Certificate of Completion of Training (CCT). Educational supervisors play an essential role in enabling this type of flexible work and then monitoring and supporting the trainee once it has been established.

Locum doctors could benefit enormously from the advice, input and support of an educational supervisor. Every department should have a named and motivated person whose responsibility is managing the educational and developmental needs of any locum junior doctors based in their department.

The recent changes affecting International Medical Graduates' (IMG) access to training programmes in the UK have produced an isolated and worried cohort of trainees. Many have opted to take non-career grade posts from August 2007 when faced with uncertainty about the number of training posts, permit-free training and the changing status of the highly skilled migrant programme visa.

Educational supervisors cannot anticipate government policy on IMGs but the trust's human resources department or the deanery can help with employment queries. It is likely that large numbers of recently appointed and relatively junior non-career grade doctors will seek out educational supervisors for their personal development and support in the coming years.

Assessments

Educational supervisors should be able to explain the ongoing assessment process for their specialty and the format the annual review takes. The educational supervisors must ensure that their trainees can produce the evidence for learning outcomes and competencies for that year of training. The trainees should make sure that all their paperwork is correct, and they should check in advance with their supervisor that there are no outstanding problems to be addressed and documented. The formal annual review

(Record of In-Training Assessment/RITA or Annual Review of Competence Progression/ARCP) is about reviewing a trainee's progress and ensuring that he or she has achieved that year's training goals. It is *not* about presenting the trainee with new concerns or evidence of failure that have not been explored with the trainee beforehand.

Dealing with the challenging trainee

If the educational supervisor is made aware of an area of concern by a colleague then a meeting with the trainee should be arranged as soon as is possible. This may lead to a resolution of any potential conflict before events escalate. The same rule of an early meeting applies when the trainee's performance has been outstanding in a particular situation. Feedback should be given as soon as possible after the event in order to be effective (Box 1.2).

Box 1.2

A trainee felt that his concerns about his salary were not being dealt with quickly enough by the deanery. He took to phoning the personnel officer concerned on a regular basis and then started sending daily e-mails. Despite being asked to stop, he continued this behaviour, which was on the point of being logged as harassment by the deanery when the trainee's educational supervisor became involved. A discussion and explanation between the trainee and his educational supervisor on ways to resolve the conflict followed and became a useful management learning exercise for the trainee. The threat of a complaint about the trainee was diffused by a more constructive and conciliatory approach and a more realistic time frame agreed for reviewing his salary.

The challenging trainee is the trainee who takes up a disproportionate amount of the educational supervisor's time. This includes trainees with attitude problems, communication difficulties, unrealistic expectations or bullying tendencies, and extends to trainees with serious psychiatric disorders.

An extremely important role for the educational supervisor is to be part of the mechanism for identifying problems early and being able to put in place the support mechanisms to prevent any further deterioration. Challenging trainees frequently lack insight into their own problems in terms of professional behaviour and performance and are unlikely to spontaneously seek help. If the educational supervisor is made aware of any performance outside the acceptable limits of practice, they must arrange a prompt meeting with the trainee.

Challenging trainees can be identified in many ways, often obvious in retrospect. Some of the most common signs are a change in attitude at work,

deteriorating clinical performance, isolation from his or her peer group, increasing time off sick or turning up late for work. In the first instance the educational supervisor should set about information gathering, looking for signs and symptoms, along with any possible causes.

It is vital to remember – ‘if it’s not written down, it did not happen’. Serious concerns about a trainee from any quarter must be in writing and an ongoing log of accurate documentation when addressing the problem is essential. Any written statements should be shown to the trainee. The trainee’s recollection of what was proposed or agreed at the conclusion of a meeting may be completely different from that of the educational supervisor. Ensure that the trainee reads through the contemporaneous notes and signs them to show agreement on any action plan. If the trainee disagrees with any of the aspects of your synopsis, he or she should be allowed to add comments, again signed and dated.

If a conflict is expected then a colleague should be asked to join the meeting during which feedback is given. A second colleague can also be extremely useful if reservations about a trainee relate to only to one area of practice. For example, if the area of concern relates to work on the intensive care unit (ICU) then having a consultant colleague from that area to explain the feedback and put it into context can assist in resolving these issues (Box 1.3).

Box 1.3

Nurses on the intensive care unit (ICU) voiced their concerns about a junior doctor taking decisions without seeking senior advice. An initial meeting with the educational supervisor failed to resolve the matter as the trainee refused to acknowledge that there was a problem. A second meeting with an ICU consultant present produced a more focussed discussion around documented incidents. It became apparent that the trainee did not understand the importance of involving the whole team in patient care decisions and that this included the nursing staff as well as senior colleagues.

A useful starting point, which indicates whether a problem is going to be easily addressed or not, is to ask the trainee to reflect on what he or she thinks is going well and whether he or she is aware of any issues or areas where improvement is needed. Lack of insight is not a simple problem to resolve. However, if not tackled early it can cause isolation from the peer group, fragment the function of the team and ultimately limit the individual’s career progression.

Managing the challenging trainee requires time and commitment from both parties. The supervisor should endeavour to:

- Be supportive and non-judgmental;
- Try and maintain a positive outlook;
- Encourage a commitment to change;
- Try and identify common themes, for example communication skills and time management;
- Listen to the trainee;
- Consider 360° feedback if the trainee is not convinced that there is a problem;
- Direct the trainee towards suitable learning resources;
- Encourage reflection and
- Act as a role model by discussing his or her approach to a tricky situation.

After the discussion, there needs to be a specific agreed plan, with a target for assessment of progress. The trainee should be assured of confidentiality. *The educational supervisor must remember at all times that any breach of information gathered under the auspices of a confidential meeting is catastrophic for both parties.* Information should not be disclosed without prior permission of the trainee.

Personal experience suggests that at any time 1% of trainees may be in a disturbed state of mind, which may affect their ability to work, and another 5% will need additional support to prevent minor problems from escalating. This may be a recurrence of a previous problem, for example an acute exacerbation of a chronic depressive disorder, or a new, sudden loss of confidence in the workplace precipitated by an apparently minor event. A good prognostic sign is the trainee who seeks support early and is honest about his or her mental health.

The educational supervisor must be aware that any serious matter such as working under the influence of alcohol or drugs or undertaking work outside the trainee's sphere of competence, or any issue of patient safety, needs to be referred to higher authorities, for example the trust's human resources department and the deanery. This should be clearly explained to trainees so that they become part of any referral process. If trainees demonstrate their involvement in seeking assistance, those investigating an incident will view this as a positive response. The whole referral process can be a very difficult and emotionally draining experience for all involved.

A trainee who refuses to comply with recommended local resolution procedures following a serious incident or problem or after committing a criminal offence must be referred directly to the GMC [7].

Educational supervisors should not try to manage challenging trainees on their own. It is important that educational supervisors know where to seek advice and to whom a trainee should be referred. *Educational supervisors must be careful with trainees who have a psychiatric component to their problems.* The role of the educational supervisor is to facilitate the trainee in accessing appropriate support services, not to be the support service. It is very easy for an inexperienced and well-meaning educational supervisor to be completely overwhelmed and manipulated by a trainee.

Do educational supervisors make a difference?

The importance of supervision in its broadest sense is referred to in successive reports of the Confidential Enquiry into Peri-Operative Death, which indicate that clinical supervision is associated with a positive effect on patient outcome whereas lack of supervision is harmful to patients [8]. The purpose of supervision is to improve patient care. In their review of supervision in clinical practice, Kilminster and Jolly conclude that the quality of the supervisory relationship is probably the single most important factor for effective supervision rather than the method of supervision used [9]. There is published work from the United States looking at the benefits of direct supervision of residents in terms of quality of care in five Harvard teaching hospitals [10], but there remains very little theoretical basis for current supervisory practice and hardly any research into the quality of medical educational supervision.

A postal questionnaire of 129 paediatric specialty registrars in the North Thames Deanery in 2005 found the most useful aspects of the educational supervisory role to be:

- Feedback on performance;
- Career advice and
- Objective setting.

However, aspects universally commented upon as poor included:

- Commitment;
- Lack of protected time to meet;
- The need to listen rather than talk and
- The need to encourage.

In this survey a number of consultants remained unaware of what was required from them as an educational supervisor and the trainees' conclusions were that only committed consultants should become educational supervisors, otherwise it becomes a process which is not valued by the trainees [11]. Some of these concerns are mirrored by the findings of a review from five postgraduate centres in the UK pertaining to preregistration house officers at the beginning and end of their preregistration year where lack of protected time and perceived inconsistent support from educational supervisors was highlighted [12]. In contrast, trainees from across the Mersey Deanery in their second-year foundation programme reported positively on their interactions with educational supervisors, the benefits of which included career advice, setting objectives and assessing educational needs [6].

Why become an educational supervisor?

Every doctor in training should have an educational supervisor but not everyone is suitable to become one. Educational supervisors have to be interested in and want to be involved with supporting trainees. This can be a demanding, time-consuming and occasionally stressful responsibility.

The rewards are not immediate. However, watching a trainee succeed can be a positive experience for both the trainee and the supervisor and, in the longer term, a successful educational supervisor network raises the profile of a department and assists recruitment at all levels.

The postgraduate deans suggest that the role of educational supervisor should take the equivalent of 1 hour per trainee per week, this time being included within the existing consultant job plan under the umbrella of SPA. This may be insufficient in the face of more detailed trainee assessments being required of educational supervisors as part of competency-based training. There is no direct financial remuneration although the role of educational supervisor should be highlighted on a clinical excellence award form.

If being an educational supervisor inspires you, there are other educational roles to explore including college tutor, foundation or specialty programme director, regional adviser and other positions within your trust, college or specialist society (see further resources).

References

1. General Medical Council. *The New Doctor 2007: standards for training which Foundation Programme course providers need to meet*. GMC, London, 2007.
2. Butterworth T, Faugier J. *Clinical supervision and mentorship in nursing*. Chapman and Hall, London, 1992.
3. Owen JP. A survey of the provision of educational supervision in occupational medicine in the Armed Forces. *Occup Med* 2005; **55**: 227–233.
4. Royal College of Anaesthetists. *CCT in anaesthesia I: general principles. A manual for trainees and trainers*. RCA, London, 2007.
5. Brown J, Chapman T, Graham D. Becoming a new doctor: a learning or survival exercise? *Med Educ* 2007; **41 (July)**: 653–660.
6. O'Brien M, Brown J, Ryland I, Shaw N, Chapman T, Gillies R, Graham D. Exploring the views of second year Foundation Programme doctors and their educational supervisors during a deanery-wide pilot Foundation Programme. *Postgrad Med J* 2006; **82**: 813–816.
7. General Medical Council. *Referring a doctor to the GMC: a guide for health professionals*. GMC, London, 2006.
8. Caalum KG, Gray AJG, Hoile RW, Ingram GS, Martin IC, Sherry KM, Whimster F. Then and now – the 2000 Report of the National Confidential Enquiry into Perioperative Deaths. NCEPOD, London, 2000.
9. Kilminster SM, Jolly BC. Effective supervision in clinical practice settings. *Med Educ* 2000; **34**: 827–840.
10. Sox CM, Burstin HR, Orav EJ, Conn A, Setnik G, Rucker DW, Dasse P, Brennan TA. The effect of supervision of residents on quality of care in five university – affiliated emergency departments. *Acad Med* 1998; **73 (7)**: 776–782.
11. Lloyd B, Becker D. Paediatric specialist registrars' views on educational supervision and how it can be improved. *Arch Child Disord* 2005; **G217**: A77.
12. Doran T, Maudsley G, Zakhour H. Time to think? Questionnaire survey of pre-registration house officers' experience of critical appraisal in the Mersey Deanery. *Med Educ* 2007; **41 (5)**: 487–494.

Paper three

Appraisal.

By Doug Parkin and Judy McKimm

Reprinted from

Chapter 16 in *Clinical teaching made easy: a practical guide to teaching and learning in clinical settings* edited by J. McKimm and T. Swanwick (2010)

Appraisal

Doug Parkin and Judy McKimm

Appraisal is a formal process for health professionals at all levels, including those in training, which supports professional development and stimulates improvements in clinical practice. Appraisal skills are fundamental to the process of educational supervision.

This chapter focuses on the general principles of appraisal, highlighting how effective appraisal can help improve patient care and support continuing professional development as well as noting some of the specific tasks and activities relating to the appraisal of health professionals working in the NHS. It discusses appraisal skills: the importance of preparation, how to structure and manage the appraisal meeting and the key role of self-assessment as well as the outcomes of appraisal, looking at work and personal development objectives and development planning.

What is appraisal?

Appraisal is a structured process for improving future clinical, managerial and educational performance while reviewing past performance. The main beneficiary is the person being appraised. The 'job-holder' receives constructive feedback on his/her job performance in a motivational process that results in an action plan for future performance and development also known as a personal development plan. Ineffective or poor appraisals usually stem from a lack of understanding of what they are for, what they should achieve, and who should benefit and how.

As understanding of the manager's role has changed, moving away from 'command and control' and towards 'lead and coach', so the appraisal has evolved into:

- Two-way rather than one-way communication
- A process rather than an event
- A developmental process, although rating performance is still an important element of NHS appraisal.

The formal appraisal provides an opportunity to draw together the threads of a work-based dialogue that should have been ongoing throughout the period under review. Appraisal is not a disciplinary process, nor is it a disciplinary discussion. Existing processes for addressing serious issues about conduct or capability should be used appropriately. Neither is appraisal a discussion you ‘save things up for’: there should be no surprises in the appraisal discussion.

Benefits of appraisal

Appraisal should bring benefits for the appraisee, the organization and the line manager (*Table 16.1*).

| | |
|------------------------------|---|
| Benefits to the organization | A consistent process for recognizing and managing staff performance |
| | A source of information for planning and decision making |
| | A way of analysing and responding to development needs |
| | Improved communication and staff motivation |
| Benefits to the line manager | A framework for sharing feedback, discussing performance and fixing problems |
| | A structure for reviewing and aligning the contributions of team members |
| | Planning future performance through the use of work-based or learning objectives |
| | Feedback on own management style and approach |
| Benefits to the appraisee | Constructive feedback including praise and ‘improvement focussed’ criticism |
| | A chance to focus on developing his/her individual performance |
| | Having a voice in the team’s planning |
| | Having an opportunity to raise problems, barriers and obstacles |
| | Coming away with a clear set of work and personal development objectives, a better understanding of standards and requirements, and an action plan for future development |

The NHS appraisal scheme for doctors

Appraisal aims to ‘give doctors feedback on their past performance, to chart their continuing progress and to identify development needs’ (Department of Health, 2007a). The standard NHS appraisal scheme (introduced in 2002) aims to address inconsistencies in earlier local, specialty and organizational schemes. It also embeds performance review into managerial processes following the Bristol and Shipman inquiries and accommodates the increasing complexity of doctors’ working practices (Department for Education and Skills, 2001).

While supporting continuing professional development, the NHS system also aims to identify and support poorly or under-performing doctors, although appraisal should not be the main way in which poor performance is identified or addressed. Appraisal should provide early identification of individual performance issues or aspects for development, albeit with the ultimate aim of improving clinical performance and patient care.

Doctors’ appraisal is closely linked to revalidation, with both frameworks based around the headings in *Good Medical Practice* (General Medical Council, 2006, 2008). The main elements of appraisal are similar for all doctors, although details differ between trainees, consultants, academic clinicians, non-consultant career grade doctors and GPs. The schemes are continuously being revised with a view to streamlining activities.

The links between NHS appraisal, performance review and revalidation have led to concerns that, despite the Department of Health’s emphasis on appraisal being on the appraisee’s developmental needs, somehow ‘appraisal will root out poorly performing doctors’ (Department of Health, 2007a). The NHS scheme’s inherent tensions and contradictions relate to unrealistically trying to serve three ends through one process: performance management, an educational emphasis on development, and improvement of quality (Taylor et al, 2002). Performance review, clinical governance and audit should run parallel to the appraisal process, so that issues are identified early and remedies and support set in place. This counteracts the potential for ‘dumping’ issues relating to poor performance into the appraisal scheme when they should be dealt with by local procedures for under-performance or low competence (Department of Health, 2007b).

Other practical issues include:

- Providing training for appraisers
- Providing time (and funding) for preparation
- Possible overlap and conflicts between trainees’ annual workplace appraisals, regular training reviews, panels and workplace-based assessments.

The importance of preparation

Successful appraisal depends on careful preparation, including selecting evidence and completing reflective tasks.

The NHS appraisal scheme requires doctors to complete standard forms and collect information from various sources (patients, colleagues and their own reflections) which provide the basis of the appraisal discussion and the personal development plan. These (and a range of guidance documents) can be found on the Department of Health appraisal site (Department of Health, 2009). The Appraisal Toolkit (Department of Health, 2005) is the official site for completing appraisal paperwork, enabling online sharing of information between appraisee and appraiser and the production of the personal development plan.

Appraisal is a two-way process, and preparation should therefore involve the appraisee as well as the appraiser. Both parties should identify specific examples of good performance and difficulties encountered, review 'on-the-job' feedback received, make time for personal reflection and consider the generic requirements within their current post. The organizational context in which the doctor works may lead to additional preparation, e.g. clinical academics are required to undertake joint academic and clinical appraisal and performance reviews often take place at the same time as appraisal, using the same evidence and process to achieve multiple goals (see Chapter 3). The job description, departmental plans and competency profiles might all provide useful evidence. Appraisees might start to identify topics for the appraisal discussion by listing what they are proud of, major achievements, what (or who) has helped or hindered, and any major difficulties encountered.

The physical and interpersonal environment

An effective appraisal discussion needs to consider both the physical and the interpersonal environment. The physical environment should be:

- Private – being seen threatens privacy as much as being heard
- Quiet – background noise inhibits free-flowing discussion
- Relaxed – but not too relaxed ...
- On neutral territory – being in 'your office' may reinforce status issues and make people less likely to feel at ease
- Free from distractions – divert your calls and stop interruptions. Taking, or worse still making, telephone calls during an appraisal is not acceptable. This is valuable time devoted specifically to the appraisee
- Professional but comfortable – sitting either side of a desk can psychologically suggest opposition.

The interpersonal environment has huge influence on the degree to which the job-holder feels free to contribute to discussion. You should be aiming for a 70:30 (appraisee:appraiser) ratio in terms of the conversation. Achieving this requires empathy and rapport. Rapport promotes cooperation, openness and trust and enhances communication. Empathy (being able to see a situation through the other person's eyes) helps establish rapport.

Begin the discussion with a friendly, non-threatening question that shows interest – this helps shake off early nerves and show concern for comfort by considering the layout of the room, having water available and taking a break if the discussion becomes lengthy or 'difficult'.

Structuring and managing the appraisal interview

Exploring past performance is essential, but too long spent discussing past performance may mean there is insufficient time for quality planning. This defeats the purpose of appraisal. As part of the interview preparation, an agenda of the main areas to cover should be agreed. This should allow time for aspects of strong performance to be highlighted, praised and encouraged, and areas needing improvement to be explored neutrally and productively.

The skills of effective feedback include productive praise and constructive criticism (see Chapter 5). Productive praise is intended to support the appraisee, highlighting skills and behaviours for development. It is not simply routine encouragement or to compensate for negative comments. Constructive criticism is given to enable the appraisee to consider improvements to future performance, not to apportion blame.

Feedback needs to be related to specific examples and should be descriptive and illustrative, not judgmental, for example:

'You really need to get yourself organized, it's causing enormous problems for everyone in the team and impacting on patients...'

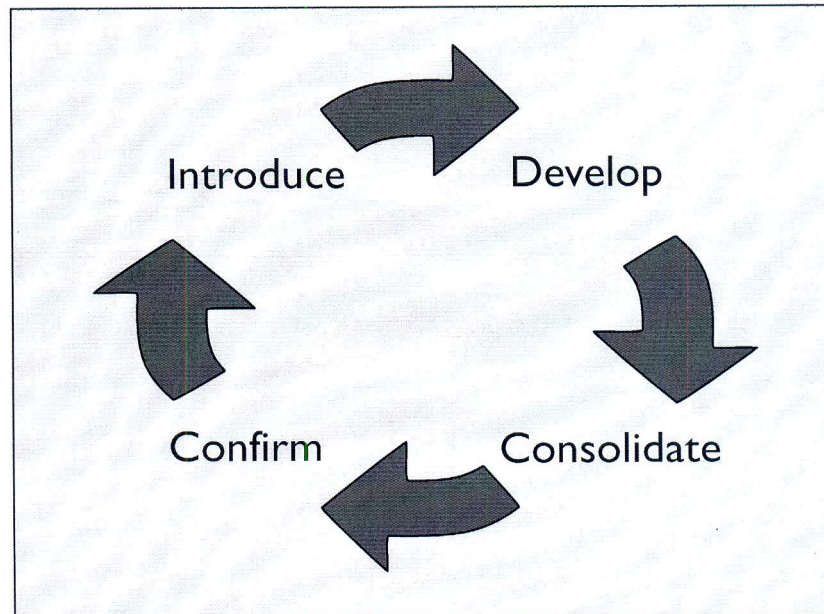
Such judgmental feedback invites a defensive response which can block consideration of the improvements you would like to see the appraisee achieve.

'Keeping patient records up-to-date is crucial. We recently discussed Dr Andrews' difficulties with a paediatric consultation because you had mislaid two of the test results. How have you been able to improve on this?'

The descriptive approach creates a more objective and productive basis for constructive discussion and planning.

The appraisal discussion needs to be managed, taking each agenda item through to completion in a separate communication cycle (*Figure 16.1*).

Figure 16.1. Communication cycle.



For each item, you might proceed as follows:

- Introduce – with a good open question
- Develop – by listening and asking appropriate probing questions
- Consolidate – by adding observations and feedback, agreeing objectives for future performance or activities for their personal development plan
- Conclude – by briefly summarizing what has been covered and agreed.

Then move on to the next agenda item.

If the appraisee wanders off topic, you can bring the discussion back on track through the ‘parking’ technique: acknowledging the point, while saying something like ‘let’s come back to that when we look at teamwork later’. Some flexibility should be retained so that important points additional to the agreed agenda can be addressed.

The key role of self-assessment

Things the appraisee observes, says or decides for him/herself may well have a stronger impact on positive change than your observations. Developing the ‘ask-don’t-tell habit’ Downey (1999) uses open questions to encourage self-appraisal. Compare the following:

Evaluative statement:

‘You’ve got to be sharper and take a lot more care when taking patient histories. Mistakes or areas missed can really jeopardize the chances of an accurate diagnosis.’

Open question:

'Tell me about your use of patient histories as part of diagnosis?'

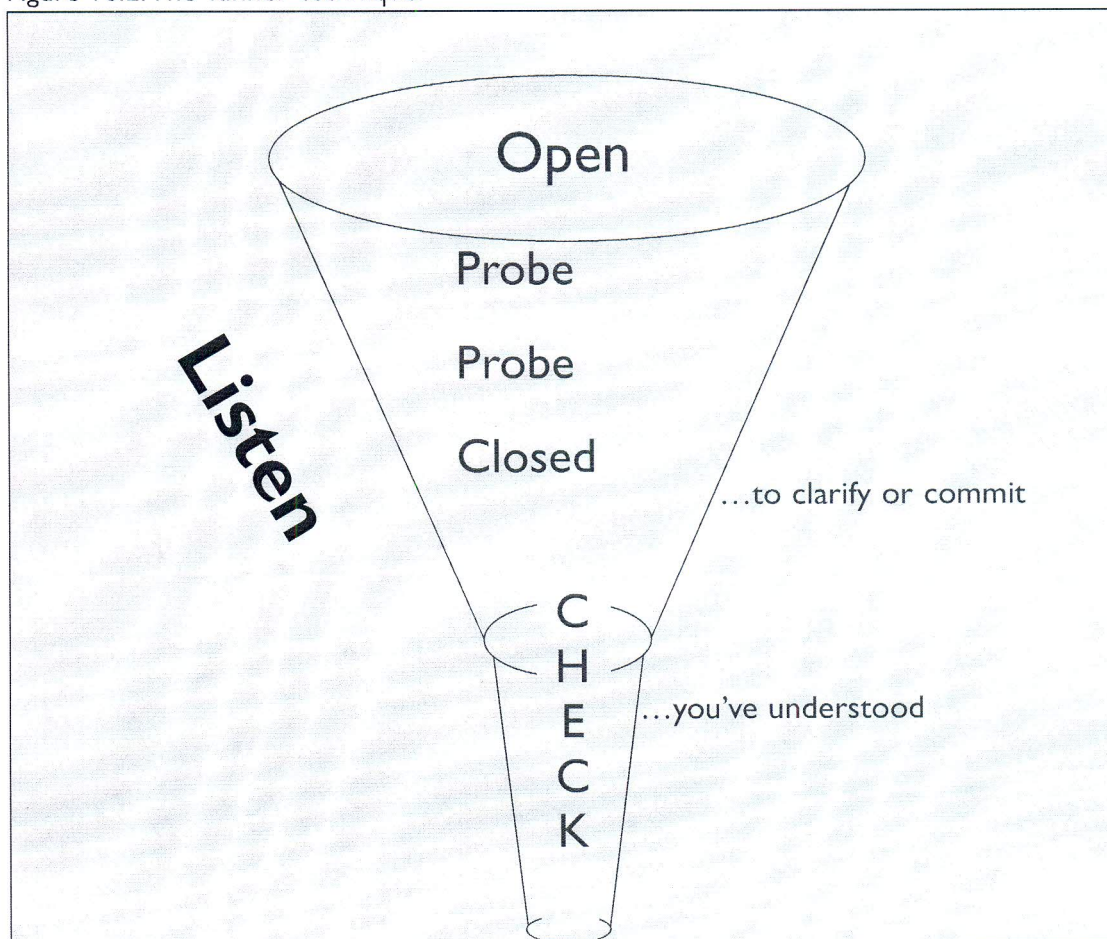
The latter requires the appraisee to respond with specific examples, e.g. 'well, that's an area where I've run into a few difficulties', you can then ask 'what sort of difficulties?' followed by 'talk me through an example?' This helps the appraisee identify solutions and improvements for him/herself. Your role is to add appropriate observations and help the appraisee refine his/her suggestions.

Skilful questioning

Skilful questioning is the key to successful appraisals. The funnel technique (Figure 16.2) is a useful visual reference for questioning skills.

At the mouth of the funnel, begin with an 'open' question which gives the appraisee wide scope in which to respond. You may need to repeat or rephrase this question to allow more thinking time. As the funnel narrows,

Figure 16.2. The 'funnel' technique.



probing questions draw out further specific information to complete the picture. Closed questions are used to check or confirm specific pieces of information, or to get the appraisee to commit to a point more precisely. At the bottom of the funnel, a short paraphrased summary clarifies and checks understanding of the main points.

A question sequence might be:

- ‘Tell me how you went about...?’ open
- ‘How did you prepare?’ open (secondary)
- ‘What was your starting point?’ probe
- ‘So, what happened next?’ probe
- ‘Who else was involved?’ probe
- ‘And how did they respond?’ probe
- ‘What were your thoughts at that stage?’ probe
- ‘What were the main outcomes?’ probe
- ‘So, that took a total of 6 weeks?’ closed – clarifying
- ‘Was it your idea or someone else’s?’ closed – clarifying
- ‘And the patient made a full recovery?’ closed – clarifying
- ‘So, let me see if I’ve followed you...’ checking – summary.

Active listening

Running along the side of the funnel is the word ‘listen’. It can be challenging to stay focused and really listen, particularly in a formal discussion such as appraisal. You may be thinking ahead to what your next question is going to be, waiting to speak instead of listening. ‘Active listening’ helps here, responding through eye contact, nodding, small facial expressions and the occasional echoing of words.

The acronym LISTEN summarizes the features of active listening:

- L = Look interested – get interested
- I = Involve yourself by responding
- S = Stay on target
- T = Test your understanding
- E = Evaluate the message
- N = Neutralize your feelings.

Work and personal development objectives

One output from appraisal is the personal development plan, comprising carefully tailored clinical, educational and personal development objectives

which include 'work objectives' focusing on the appraisee's agreed and expected 'contribution' to the team goals and 'personal development objectives' based on areas of agreed 'improvement' in job performance. Objectives should incorporate three development areas:

1. Remedy – to address poor performance
2. Consolidation – to maintain and push forward an 'acceptable' level of performance
3. Growth and diversification – to encourage and 'stretch' individuals who exceed normal performance standards.

The SMART (specific, measurable, agreed/achievable, realistic and timebound) acronym provides a valuable aide-memoire for writing good, effective objectives. In appraisal, three areas are particularly important:

1. Be specific – be clear about the improvement area the objective is focused upon – ambiguity makes an objective very difficult to review at a later stage
2. Make it measurable – be clear about how the improvement will be evaluated at some future point – how will we know it has been achieved?
3. Ensure it is agreed (or at least accepted) – working from agreement that the improvement is desirable is the best way of approaching writing objectives.

The appraisal needs to include regular review of objectives in response to events and changing circumstances.

Conclusions

Done well, appraisal can be very valuable; done badly it can be superficial, discouraging and demotivating. Being clear about what appraisals are for, preparing carefully, and using a good 'coaching' style with an emphasis on self-assessment are keys to successful appraisal. The outcomes of an effective appraisal discussion are praise for work well done, with clear examples that enable the appraisee to go on doing them well or better, constructive criticism of areas requiring improvement with an agreed plan of objectives, goals and support that will provide a firm basis for development and a well-motivated, involved and committed team member who has a clear sense of support and direction.

KEY POINTS

- The aim of appraisal is to improve future clinical, managerial and educational performance while reviewing past performance.
- Appraisal is a positive, developmental, structured process not a one-off event, disciplinary process or disciplinary discussion.
- Appraisal is a two-way process and good, early preparation by both parties is essential.
- Many of the skills underlying effective feedback and supervision are useful for the appraisal interview.
- A poor appraisal can be discouraging and demotivating.
- A wealth of information is available to support appraisees and appraisers engaging in the NHS appraisal scheme.

References

- Department for Education and Skills (2001) *A review of appraisal, disciplinary and reporting arrangements for senior NHS and university staff with academic and clinical duties*. DfES, London
- Department of Health (2005) The Appraisal Toolkit. www.dh.gov.uk/en/Managingyourorganisation/Humanresourcesandtraining/EducationTrainingandDevelopment/Appraisals/DH_4080426 (accessed 24 April 2009)
- Department of Health (2007a) Appraisal questions and answers. www.dh.gov.uk/en/Managingyourorganisation/Humanresourcesandtraining/EducationTrainingandDevelopment/Appraisals/index.htm (accessed 24 April 2009)
- Department of Health (2007b) Appraisals: sharing best practice. www.dh.gov.uk/en/Managingyourorganisation/Humanresourcesandtraining/EducationTrainingandDevelopment/Appraisals/index.htm (accessed 24 April 2009)
- Department of Health (2009) Appraisals. www.dh.gov.uk/en/Managingyourorganisation/Humanresourcesandtraining/EducationTrainingandDevelopment/Appraisals/index.htm (accessed 24 April 2009)
- Downey M (1999) *Effective Coaching*. Orion Business Books, London
- General Medical Council (2006) *Good Medical Practice*. www.gmc-uk.org/guidance/good_medical_practice/index.asp (accessed 24 April 2009)
- General Medical Council (2008) *Draft Framework for Appraisal and Assessment derived from Good Medical Practice*. www.gmc-uk.org/doctors/licensing/docs/Framework_4_3.pdf (accessed 4 May 2009)
- Taylor CM, Wall DW, Taylor CL (2002) Appraisal of doctors: problems with terminology and a philosophical tension. *Med Educ* 36(7): 667–71

Paper four

The use of reflection in medical education: AMEE Guide No. 44.

By John Sandars

Reprinted from

Medical Teacher August 2009; 31(8):685-695

AMEE GUIDE

The use of reflection in medical education: AMEE Guide No. 44

JOHN SANDARS

The University of Leeds, UK

Abstract

Reflection is a metacognitive process that creates a greater understanding of both the self and the situation so that future actions can be informed by this understanding. Self-regulated and lifelong learning have reflection as an essential aspect, and it is also required to develop both a therapeutic relationship and professional expertise. There are a variety of educational approaches in undergraduate, postgraduate and continuing medical education that can be used to facilitate reflection, from text based reflective journals and critical incident reports to the creative use of digital media and storytelling. The choice of approach varies with the intended outcomes, but it should also be determined by the user since everyone has a preferred style. Guided reflection, with supportive challenge from a mentor or facilitator, is important so that underlying assumptions can be challenged and new perspectives considered. Feedback also has an important role to enhance reflection. There is little research evidence to suggest that reflection improves quality of care but the process of care can be enhanced.

Introduction

There is increasing emphasis on the use of reflection in both undergraduate, postgraduate and continuing medical education, but often the nature and intentions of reflection are nebulous. An understanding of the educational benefits of reflection requires an appreciation of both its theoretical and practical aspects.

The word 'reflection' is widely used in a variety of different contexts, from physics to education, but all remain true to its Latin origins: 'to bend' or 'to turn back'. Reflection in the education context can be considered as a process in which thoughts are 'turned back' so that they can be interpreted or analysed. The trigger to this sense-making process is usually an event or situation and the outcome of the process is increased understanding or awareness. These insights can then be used in the future when faced with a similar event or situation. There are several definitions of 'reflection' that include these essential dimensions (Box 1).

Without reflection, it would be unlikely that the human race would have survived. A simple example is our caveman ancestors who quickly became aware that sabre-tooth tigers can bite and must be avoided in the future! The process of reflection can be summarised as a simple three-stage model that involves three components: planning, doing and review (Figure 1).

The concept of 'reflection' is widely mentioned in medical education literature but often different terms are used to describe similar processes. Reflection is an essential component of reflective learning and reflective practice. Reflective learning has the intention of improving learning and when this happens in the context of working with the ill-defined problems of professional practice it is often called reflective practice. The intended 'learning' is also often not clearly defined.

Practice points

- Reflection is a metacognitive process that creates greater understanding of self and situations to inform future action.
- Reflection has a variety of intended outcomes. Self-regulated and lifelong learning have reflection as an essential aspect, and it is also required to develop both a therapeutic relationship and professional expertise.
- There are a variety of educational approaches in undergraduate, postgraduate and continuing medical education that can be used to facilitate reflection but these should be determined by the user.
- Guided reflection and feedback are important for effective reflection.
- Although there is no evidence to suggest that reflection actually does improve patient care it seems logical and likely since the process of care can be influenced.

A wider definition of reflection is proposed for use in this Guide so that it includes a spectrum of possible uses, approaches and intended outcomes:

Reflection is a metacognitive process that occurs before, during and after situations with the purpose of developing greater understanding of both the self and the situation so that future encounters with the situation are informed from previous encounters.

This definition has several important aspects:

- A metacognitive process suggests that metacognition, or 'thinking about thinking', is essential for effective

Correspondence: John Sandars, Medical Education Unit, Leeds Institute of Medical Education, Worsley Building, The University of Leeds, Leeds, LS2 9JT, UK. Tel: 0113 343 4193; fax: 0113 343 4181; email: j.e.sandars@leeds.ac.uk

Box 1. Some definitions of reflection.

Reflection (Dewey 1938):

'an active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends'.

Reflection (Boud et al. 1985):

'a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to a new understanding and appreciation'.

Reflection (Moon 2004):

'a form of mental processing with a purpose and/or anticipated outcome that is applied to relatively complex or unstructured ideas for which there is no obvious solution'.



Figure 1. The basic three stage model of reflection.

reflection. Metacognition is a self-regulatory process that selects, monitors and evaluates a cognitive process (Flavell 1979). In this case, the cognitive process is the approach to reflection. This concept is important since it highlights that reflection is a process that can be controlled and it also allows various training strategies to be developed so that reflection can be enhanced.

- Reflection can occur at all stages of an encounter: before, during and after. Often reflection is only performed after an event or situation but reflection before an action has the advantage of approaching situations with a particular learning goal or perception that can be challenged. This has the potential for greater personal growth and learning.
- Understanding of both the self and the situation has a wider impact on lifelong learning than simply identifying the acquisition of new knowledge and skills, such as how to perform a particular clinical procedure. An essential component of medical professional practice is the 'therapeutic self', that recognises the underlying personal values and beliefs that are represented as professional attitudes, such as empathy and caring. Understanding the 'self' is also required to develop the important self-efficacy component that is required to become a self-regulated lifelong learner.
- Informing future action suggests that reflection is a process with a definite purpose. Making sense of a situation will not improve practice unless these insights can change future responses to situations.

Importance of the topic in international medical education

The concept of reflection has become enshrined within the plethora of various national and international statements of the desired outcomes for medical undergraduate, postgraduate

and continuing medical education. Most definitions of what it means to be a professional also include statements about reflection or lifelong learning. However, these statements usually provide little discussion of the approaches to be used and the intended outcomes.

Aim/objectives of the guide

The aim of this Guide on 'Reflection', in medical education is to provide an overview of the concept and also to provide practical advice for the effective implementation and assessment of reflection in undergraduate, postgraduate and continuing medical education.

The main approaches to reflection in medical education

The use of reflection in medical education has developed through several paths that have been informed by different educational intentions and expected outcomes. There is a large overlap but three main approaches can be considered:

Reflection for learning

Experiential learning is a process by which learning occurs by having an experience. However, experience alone is not sufficient for learning to occur. The experience must be interpreted and integrated into existing knowledge structures to become new or expanded knowledge. Reflection is crucial for this active process of learning. The concept of experiential can be easily understood by considering how we all learn from the vast range of different events and situations that we all experience in our daily personal and professional lives. For example, we can learn about the side-effects of a drug by observing the reactions of a patient who is prescribed a drug or we can develop a clinical skill by ineffectively using this skill.

The widely quoted 'experiential learning cycle' approach has four main phases (Figure 2) (Kolb 1984). In the first phase, the learner has an experience. A second phase of reflection follows and this leads to a third phase of 'abstract conceptualisation'. This is a time when the learner makes attempts to understand their actions or reactions to the experience. There is often an emphasis on the identification of any learning needs, such as new information that has to be obtained or new skills that need to be acquired before facing a similar situation in the future. Application of the new knowledge and skills occurs in the fourth phase. This can be a cyclical process and be repeated several times, with increased learning obtained through each cycle.

The Kolb experiential learning cycle can be applied to a wide range of learning situations in undergraduate, postgraduate and continuing medical education.

Reflection to develop a therapeutic relationship

Being a 'good' clinician requires having appropriate knowledge and skills but there is also a need to establish and maintain a therapeutic relationship with patients and their carers (Freshwater 2002). This concept implies that a

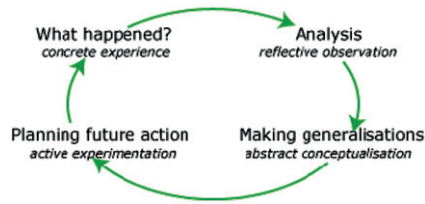


Figure 2. The experiential learning cycle (after Kolb).

relationship has a beneficial effect on patient wellbeing. The importance of a therapeutic relationship has long been recognised in psychotherapy but recent interest in patient-centred care has highlighted that there are improved outcomes, including patient satisfaction, improved chronic disease care and concordance (Stewart et al. 2000).

An essential aspect of the therapeutic relationship is the recognition and understanding of the personal belief and value systems of the involved individuals, whether clinician or patient. There may be differences between these systems and this can produce a strong emotional reaction in the clinician, which in turn can influence their decision making and subsequent actions. Recent neurocognitive research suggests effective reasoning is a mainly subconscious process in which there is modulation of logical information processing by emotions. For example, anger towards the patient may result in a response that would be different if the individual was empathic.

Building a therapeutic relationship is an essential component of professional practice and is a key attribute of being a professional. Guided reflection with a supervisor or mentor is particularly useful for this approach to reflection since underlying beliefs and assumptions can be identified and challenged.

Reflection to develop a therapeutic relationship is particularly important for postgraduate and continuing medical education but is also applicable to undergraduate education, especially in the clinical years.

Reflection to develop professional practice

Clinicians often have to respond to a wide variety of situations that are complex and poorly defined. This 'messiness' of professional practice is at the heart of professional expertise (Schon 1983). Expert professionals appear to quickly make decisions that are appropriate to these complex circumstances and an explanation is that through a process of reflection-on-action, they are able to build up a collection of mental models that can be quickly mobilised to effectively address the situation through reflection-in-action.

The development of professional expertise requires more than a collection of knowledge and skills (Eraut 1994). Expert performance is a complex integration of knowledge and skills that are appropriate to the unique situation that they face. Repeated exposure to the complexities of professional life is essential and guided reflection can maximise the learning opportunity for this approach to reflection.

Reflection to develop professional practice is essential for postgraduate and continuing medical education.

Although the three approaches have different intended outcome, they all share an essential aspect. A deliberate process used to develop an understanding, or making sense, of a situation so that future actions can be informed. This is the essence of reflection.

Self-regulated learning and reflection

There has been increasing interest in the concept of self-regulated learning. An essential attribute of every healthcare professional is that they will become masters of their own lifelong learning. Self-regulated learners use metacognitive processes to select, monitor and evaluate their approach to a task (Zimmerman & Schunk 2001). Research into self-regulated learners in academic contexts highlights that a deeper approach to learning occurs and this is associated with improved academic performance. The same self-regulated approach has also been noted across a wider range of contexts with improved psychological well being and personal effectiveness (Baumeister & Vohs 2004).

Reflection can be considered as a self-regulated learning activity. An appreciation of this relationship offers useful insights into how reflection can be developed and made widely applicable to the variety of experiences that make up everyone's daily personal and professional lives.

The process of developing an understanding

Everyone tries to make sense and understand their experiences. This is achieved through the creation of a mental model or personal theory. These models or theories are actively created and are informed by previous encounters with similar situations. For example, an individual will have certain beliefs that a particular skill or piece of information will be helpful to them in dealing with a problem. There may also be certain beliefs that these individuals have about themselves or about others. These beliefs and assumptions are challenged whenever a situation is subsequently encountered. The outcome of this process is that the beliefs and assumptions may need to be revised as a result of the experience. Sometimes this process can be quite dramatic and this results in a major shift in perspective. In such circumstances, 'transformative learning' is said to have occurred (Mezirow 1981). The most powerful learning, or shift in perspective, occurs when fundamental beliefs are challenged, such as those related to a view of the self or the world. This shift is usually accompanied by strong feelings and an emotional reaction, such as sadness, shame or anger.

An essential step before the process of developing understanding is 'noticing'. Mezirow (1981) describes the 'disorientating dilemma' when the individual begins to realise that there is a discrepancy between their current actions (based on existing mental models or personal theories) and the actions required for effective resolution of the situation that they face. This may be immediately obvious to the individual but may require the use of prompts, such as feedback from others or

a critical incident review. Noticing can occur at any stage of reflection, that is, before, during or after a situation. The importance of an appreciation that reflection is a metacognitive process is that an individual has to be aware of the need to reflect and this requires the ability to notice the 'disorientating dilemma' or prompt to reflect. Often this will be emotional, with a feeling of discomfort or apprehension associated with a situation. This awareness can be developed through 'mindful practice' in which there is heightened moment-to-moment awareness during situations (Epstein 1999).

Another essential step is the application of the new understanding to further situations (Johns & Freshwater 1998). Reflection is an ongoing process and its value depends on repeated cycles of action, reflection and action. During each action, especially if they are similar, there are opportunities to increase the depth of understanding. This approach is similar to action research and practitioner research which has been extensively used for teacher continuing professional development, but rarely used in the continuing medical education context.

The depth of understanding can also be increased by adopting a critical reflective stance and the application of double loop and triple loop learning. Argyris and Schön (1994) first introduced the concept of single loop and double loop learning. The first loop of learning occurs when an outcome unexpectedly occurs and the individual looks for another strategy to deal with it. Double loop learning occurs when there is a more questioning approach that seeks to identify the reasons behind why the outcome unexpectedly happened in the first place. For example, a clinician may be uncertain about the most effective treatment for a common condition. Single loop learning would identify a learning need and the obvious response would be to seek information about effective treatment, such as looking it up in a textbook or asking a colleague. The specific learning need has been met but consideration of double loop learning would reveal the underlying reason for the clinician being uncertain about the treatment. This may be because there is an over dependence on opportunistic learning rather than systematically identifying their learning needs. The consequences of the clinician's approach to learning are far beyond the initial superficial learning need. Consideration of further triple loop learning is related to the critical aspects of the situation (Carr & Kemmis 1986). This concerns the underlying system of power and control that influences all actions. The specific question to be asked is 'Why should we do it that way?' There is the possibility of conflict over what is considered to be 'the right' way of doing things but it is only by discussing the underlying purposes and intentions of actions that the present approaches can be challenged and the possibility of new approaches considered. This type of learning can be highly transformative and has the potential to change both individuals and the wider society.

Guided reflection

The potential of reflection for individuals may not be fully realised without the help and support of another person. This 'other' person may be a peer group member or someone with

a specific role, such as a supervisor or mentor (Hawkins & Shohet 1989). The role of this person is to facilitate reflection and for this to be effective it requires a skilful mix of support and challenge.

At the heart of reflection is the challenge, and subsequent change, in perspective that can inform future action. The most significant experiences that result in the greatest challenge and change are usually those that are associated with the presence of strong emotions. There are several consequences of these types of experiences. First, an individual may consciously, or more likely unconsciously, block the noticing of this important experience. Second, there is often a reluctance to discuss the experience and to consider change. A facilitator can provide the necessary supportive environment to enable the individual to notice and make sense of their experience. The facilitator can provide this support through key counselling and mentoring skills, such as non-judgmental questioning and acceptance of differences. Attention to the physical environment is also important, ensuring that the discussion can occur in privacy and is free from interruption. More detailed description and discussion of facilitation is provided in Further Reading.

Guided reflection is particularly useful for reflection that has the intention of improving the therapeutic relationship and professional practice. Supervision has long been recognised as essential for psychotherapy and counselling. The descriptions of reflective learning by Schön (1987) also highlight the role of a mentor.

Students appear to appreciate the help of a supervisor or mentor to facilitate their reflection. This was a consistent theme throughout all of the studies identified in a limited literature review for this Guide. There are significant workload implications for the introduction of guided reflection in any curriculum but effective alternatives include group supervision (with one supervisor and a group of learners) or peer co-supervision (with students mutually facilitating one another in a reciprocal manner so that each takes a turn as a presenter and a facilitator). Peer supervision also has the advantage of individual development of skills that can be more widely used, such as in clinical encounters.

Ethical aspects of reflection

Making sense of an experience can be associated with strong emotions (Boud et al. 1985). This may be obvious when an individual reflects on their contribution to an adverse event, such as the death of a patient, but there can also be profound emotions associated when considering a simple information need, such as when a particular fact cannot be recalled. Previous experiences, and the associated feelings, may be vividly remembered, such as when previously ridiculed as a student for not remembering a fact. It is essential to create a safe overall environment within which personal reflection can take place. This is particularly important if reflection is to be in a group setting or with a facilitator but is also important for all reflection, including written reflective journals (Henderson et al. 2003).

It is often assumed that increased self-awareness through reflection will be useful to individuals but there is the

possibility that some individuals can increase their self-rationation behaviour where they are not able to shut off thoughts about themselves. This is an anxious attention to self and they may constantly question their motives and become unsure about their actions.

Important ethical considerations about confidentiality include who has access to the reflection and for what purpose. Many educational programmes and professional revalidation schemes insist on individuals keeping a reflective diary and often the entries are used for assessment. There is a tension in these circumstances since assessment usually requires evidence of 'deep' reflection but it is this type of significant experience that exposes the vulnerability of the individual. This is particularly important when the assessor is also the facilitator or mentor.

There are no easy answers to these problems but the issues require careful consideration. It has to be expected that some individuals may require emotional and psychological support beyond the initial reaction. It is good practice to provide support service contact numbers to individuals and for facilitators to be aware of the available support services.

The educational impact of reflection in medical education

A recent systematic review of reflection and reflective practice in health care professional education and practice highlighted that, to date, there was no convincing evidence that reflection enhanced competence through a change in clinical practice or improved patient care (Mann et al. 2007). However, the authors noted that there was a plausible potential benefit. There was evidence that reflection was associated with a deeper approach to learning that allowed new learning to be integrated with existing knowledge and skills. An important outcome that they identified was that diagnostic reasoning of complex and unusual cases could be improved by reflection.

A limited literature review of reflection in undergraduate medical education was performed for this Guide and 21 articles were identified that were relevant to the purpose of the review. A variety of methods to foster reflection were identified but only one study compared different approaches (Baernstein & Fryer-Edwards 2003). This study had the aim of identifying whether writing a critical incident report, a one-to-one interview, or a combination, was more effective in eliciting reflection. The conclusion was that an interview with a tutor was the most effective for reflection on professionalism. There have been no longitudinal studies during the medical school experience and there is no evidence of the benefits of reflection on their long-term development, especially in their subsequent clinical care. Reflection by undergraduate medical students increased self-reported measures of self-awareness, professional thinking skills and the skills required for intimate examinations. Four studies described positive objective outcomes, with increased skills in reflection and diagnostic thinking (Sobral 2000), professional identity (Niemi 1997), scores in medical-humanism aptitude (Wiecha et al. 2002) and final examination results for obstetrics and gynaecology (Lonka et al. 2001). In conclusion, students found reflection was useful and the implementation of reflection increased

both self-reported and objective outcomes on learning and professional development.

How to implement reflection in medical education

There are a wide variety of different approaches to implement reflection in medical education and these will depend on the intended outcome but also on the constraints of the environment within which reflection takes place, such as the requirements of an academic course.

Educational strategies to develop reflection

The self-regulated learning model (Zimmerman & Schunk 2001) provides a useful framework to guide educational strategies that can be used to develop reflection. This model also helps educators to understand the potential barriers and how they can be overcome.

a) Motivation for reflection

Successful reflection requires the individual to recognise the importance of reflection for both personal growth and professional development. Motivation is dependent on setting clear goals, internal factors and external factors. Goal setting may be difficult if the intended outcome of reflection is not explicit. Often the learner is instructed 'to reflect' but with little or no explanation of the purpose. It is helpful to initially provide information about the nature and outcomes of reflection, including its importance for professional practice and lifelong learning.

The main internal motivation factors are self-efficacy and the perceived ease of the task. These factors are essential to consider, especially when reflection is initially introduced to learners. Motivation can be increased by encouragement and by gradually increasing the reflective tasks, such as beginning with only noticing and then introducing the complete reflective process.

The overall external educational environment within which reflection is expected to occur is an important motivation factor. Assessment appears to drive learning, from examinations in undergraduate students to certification and revalidation in postgraduates and continuing medical education. The use of an assessed portfolio for personal and professional reflective learning will be different to an informal journal or diary.

b) Metacognitive skills for reflection

It is essential that an individual can develop their metacognitive skills to monitor and evaluate the key aspects of reflection: noticing, processing and altered action.

Noticing

An essential first step for an individual is the recognition of when their existing mental models and personal theories are

being challenged by the experience of a particular event or situation. This can occur at any time related to an event or situation: before, during or after. Without an initial awareness no reflection can occur. Noticing can be developed by using several techniques.

(i) Self monitoring. Increased awareness can be developed by constant self-monitoring of thoughts and emotions. Most individuals do not find this easy to achieve but it can be developed by participating in mindful practice (Epstein 1999). Mindfulness has its roots in Eastern philosophical-religious traditions in which emotion, memory and action are inter-dependent. In mindful practice, the individual is not only aware of the moment to moment changes in thoughts and emotions that they experience but also they are able to make sense of these components and to make use of these insights to inform their actions.

Becoming mindful requires deliberate and non-judgemental attention to the immediate thoughts and emotions that an individual experiences. This can be developed by regular self-recording, such as by the use of written or audio diaries and logs. Small paper notepads are useful but with the advent of mobile devices it is possible to easily record verbal comments by using digital dictaphones or the voice recording function that is present on many mobile phones or iPods. It is particularly helpful to make a record at the time of the event happening, a so called 'thought catching' approach, but often this may not be possible. In these circumstances, the record should be made as soon as possible after the event. Immediate recording of thoughts is likely to be a closer reflection of underlying beliefs since later mental organisation for recording is likely to include attributions that may, or not, be an accurate reflection. The consequence is hindsight bias and often this will reveal a more positive view of the self. Increased awareness can be triggered by a wide variety of events, from direct contact with patients and colleagues to watching films or reading literature (Hampshire & Avery 2001). This is the important role of humanities in medical education and exposure to a wide variety of experiences through the eyes of others is to be encouraged.

The self-monitoring techniques may feel artificial and contrived at the beginning but most individuals rapidly adapt so that it becomes a routine and subconscious process. This is typical of most cognitive instruction strategies.

(ii) Feedback from others. An individual's reaction to events may not be readily apparent to them but it can often be more apparent to others. Behaviour can be readily observed that represents underlying beliefs, such as a sarcastic comment, but non-verbal behaviour, such as the tone of voice or facial expression, is often a more powerful indicator of these beliefs and this can be readily observed by others. Feedback can be obtained from a variety of sources, including colleagues and patients. Feedback is usually provided anonymously but a disadvantage is that clarification of comments is not possible. A supervisor or mentor can also provide useful feedback.

Research has consistently shown that individuals self-rate themselves higher and in a more positive light than when rated

by others (Gordon 1994). An effective, reflective learner or practitioner will actively seek out sources of feedback.

(iii) Critical incidents and significant event analysis. Most individuals have 'moments of surprise' when an action unexpectedly goes to plan or not. These moments provide a valuable opportunity for reflection, especially in postgraduate and continuing medical education. These can be personally noted, such as in a reflective diary or log, or as part of an organisational tool, such as significant or sentinel event audit. The approach has also been used in undergraduate medical education (Henderson et al. 2002).

Processing

The main value of reflection is to develop an understanding of both the self and the situation. It is only through this sense making process that future actions can be altered. There are several techniques and these depend on the intention of reflection.

(i) Reflection for learning. The main process with this intention is to identify learning needs, especially about information to be obtained or new skills that need to be developed. The learner can ask themselves a variety of simple questions, such as

- *Does anything surprise me about the situation?*
- *Do I have the information or skills to deal with this situation?*
- *Do I need to have further information or skills to deal with this situation, either now or in the future?*

This approach is typical of most personal and professional development plans. There is the possibility that the approach can become superficial and not address major underlying problems, such as why the doctor did not keep up to date about the latest antibiotics. Addressing this type of issue, which is often related to underlying beliefs, requires double loop learning in which further questioning is required. Typical further questions include

- *Is the lack of information or skill due to having insufficient information or skill on how to address this lack?*
This question seeks to identify the learner's information seeking and personal development skills.
- *What is the underlying reason why the identified issue was not resolved?*
This question seeks to identify beliefs about self, such as self-efficacy, and moves reflection to a deeper level.

(ii) Reflection to develop a therapeutic relationship. A therapeutic relationship is fundamental to medical professionalism and combines the communicative doctor-patient relationship with an active giving of self that is expressed through compassion and care. This aspect is at the heart of medical practice and is determined by the beliefs and values of the individual. It is also dependent on a deep appreciation of how the other person is thinking and feeling. The topic is closely aligned to emotional intelligence which has been associated with individual well being and satisfaction.

Reflection with this intention seeks to identify and challenge current belief systems and assumptions. Often there is an awareness of strong feelings associated with a particular experience and this can lead to deeper questioning. These questions include

- *What am I feeling and what are my emotions?*
- *Why do I feel like this?*
- *Are there other situations in my life or my encounters with others when I feel the same?*
- *Can I explain why I feel this way?*
- *What are the consequences of these emotions for me and for others?*

(iii) *Reflection to develop professional practice.* The intention of this approach to reflection is to develop professional expertise. Research into the nature of expertise identifies that experts have more elaborate mental models than novices. This allows experts to quickly mobilise these models when they encounter a situation. The elaborate models are created by repeated exposure to a wide variety of experiences and they are also closely interconnected. Development of these models has not occurred by a random phenomenon but through repeated exposure to situations. This is the key to professional expertise.

Professional expertise can be developed by encouraging repeated exposure to the field of practice and by widening this field with further experiences from related films and literature. A process of constant reflection-on-action is an essential requirement for professional expertise and is typical of the 'enquiring mind' that explores and tries to obtain multiple perspectives to enrich their view of the world. Often there is little in the way of written reflection but there may be wide ranging discussions with colleagues, such as journal clubs and at conference. Some doctors try and make sense by the use of written reflection, either as reflective diaries, reflective storytelling or poems.

Future action

It can be easy to assume that reflection is only introspection with little outside application. However, the aim of reflection is to inform future actions so that they can be more purposive and deliberate. An important aspect is to ensure that actions respect the context to which they are being applied, such as when evidence based clinical guidelines are not followed because the patient is different to the population in which the original research was conducted. This often results in further cycles of reflection and action when the consequences of this decision making are considered.

c) Reflective storytelling and writing

There is a long and ancient history of storytelling in most civilisations. Individuals tell stories to convey their experiences to others and these stories include information, opinions and emotions. It is a natural step for storytelling to be used for reflective learning since an integral aspect of many stories is reflection on an experience with the development of new insights. The process of telling a story, whether written or oral,

requires the teller to notice and make sense of an experience. The presentation of the story, either private or within a group appears to have an important therapeutic aspect which allows the learner to release emotion, an essential part of the reflective process (Gersie 1997).

Storytelling has been used to effectively engage students and healthcare professionals in reflection and reflective practice (McDrury & Alterio 2003). Individuals often require initial training to develop their storytelling skills and a structured approach is useful. A typical sequence for a story is a beginning, middle and an end. Usually the beginning sets the scene and this is followed by a middle component in which the 'drama unfolds' and the main aspects of the story are presented and discussed. The end of the story usually contains an important message that the storyteller wishes to convey to the audience. There are close parallels of these stages with the phases required for effective reflection.

The use of reflective writing for reflection in undergraduate medical students has been described (DasGupta & Charon 2004) and also in continuing medical education (Bolton 1999).

For an example of instructions to use digital storytelling for reflective learning, please see Appendix 2, available at www.medicalteacher.org.

Personal development plans and portfolios

There has been increasing use of structured approaches to both encourage and assess reflective learning in postgraduate and continuing medical education (Rughani 2001). Often these approaches are essential components of training, certification or revalidation. The approach requires that learning needs are initially identified and then decisions are made as to how these needs can be met. Reflection is an essential aspect of the process and this can be included in the structured approach. For example, there can be several questions that can prompt reflection on current knowledge or skills.

(i) *Identification of learning needs.* Most professionals will have a wide range of experiences that will enable them to identify their learning needs. These include self-awareness of how they respond to situations, such as thoughts about what situations they find challenging, significant events, feedback from colleagues and patients, prescribing and referral audits, and quizzes.

(ii) *Developing a plan to meet the identified learning needs.* Several educational interventions are chosen and these are usually prioritised. For example, an identified learning need of not having knowledge about the latest treatment for diabetes would prompt the learner to seek further information, such as by attending a training course or reading an article.

A portfolio provides a collection of the various pieces of evidence to prove to an assessor that learning needs have been identified but, more importantly, have been met by appropriate educational approaches (Moon 1999). It is useful to have all of this information in one place but it is also easy to regard a portfolio as not helping the learner. The advent of e-portfolios has enabled a more flexible and user-friendly approach to collection of evidence. It is now easier to upload a

wide range of materials to stimulate reflection, such as photographs or audit reports, to record the reflections and to keep a dynamic record of how these reflections have influenced professional practice.

For examples of templates to structure reflection and questions to develop deeper reflection please see Appendix 1, available at www.medicalteacher.org.

Assessment of reflection

Assessment is a process that requires a judgment to be made about the standard of an outcome and has relevance for reflection in medical education. Formative assessment is an integral aspect of giving feedback and it also offers the identification of further learning needs. Summative assessment occurs after a period of study and this may be required for reflection, such as in undergraduate course curricula. Students dislike the notion of assessment of their reflective activities, regarding their entries as private but also they are sceptical about whether the assessment approach can be valid and reliable. Validity considers whether the assessment is measuring what it is intended to measure and reliability that the result of the assessment is consistent between markers and time. Students readily recognise that written reflection, such as in reflective diaries, may not be an accurate account of the thoughts and emotions of the writer.

Despite the concerns of students, assessment of reflection may be required for a variety of purposes and an overall framework can be useful. Most assessments will incorporate 'levels of reflection' and this hierarchical model is based on the concept of depth of reflection. Superficial reflection is considered to occur when there is only description of events but deeper reflection includes a 'stepping back' from events and actions with evidence of challenge, and possibly change, to existing beliefs and perspectives. This deeper level is equivalent to when 'transformative learning' takes place.

Two approaches to categorising reflective material are provided as illustrative examples. The first approach is based on the observed stages in professional development (Box 2) and the second a more pragmatic approach (Box 3).

Common problems encountered with reflection in medical education

The use of reflection in medical education is associated with several problems and these will be discussed with an emphasis on practical solutions.

Low engagement in reflection

How to engage individuals in reflection appears to be a persistent challenge to all educators. The model of self-regulated learning provides a useful overall framework to understand low engagement. Effective reflection will only occur when there is alignment between the various components. The main components of the self-regulated learning model are the goal, the 'will' (the motivation) and the 'skill' (the monitoring of strategies).

Box 2. Categorising reflective material based on stages in professional development (after Niemi 1997).

Committed reflection. There is a discussion of what has been learned, how it has affected the individual and how they feel that they have changed. Some presentation of evidence to back this up should be provided.

Emotional exploration. There is evidence of the emotional impact of an experience and this includes insights and discussion about their own beliefs and values, including how these have been challenged.

Objective reporting. There is only a descriptive account of what happened during the experience with no evidence of reflection, or how the experience has affected them.

Diffuse reporting. The description is unfocused or disorganised and contains only a description of the experience.

Box 3. A pragmatic approach to categorising reflective material (after Moon 2004).

Grade A: Experiencing an event(s) has changed, or confirmed, how you experience an event(s). You may wish to change how you respond to similar event(s) in the future. You provide an explanation, including references to other literature, eg articles or books.

Grade B: Involves judgement – what went well, or less well and why.

Grade C: Describing an event – recognising how it affects your feelings, attitudes and beliefs and/or questioning what has been learnt and comparing it to previous experience.

Grade D: Describing an event – recognising that something is important but not explaining why.

Grade E: Describing an event – repeating the details of an event without offering any interpretation.

Grade F: Describing an event – poor description of an event.

Individuals may not be clear of the overall goal of their reflection and this is made worse if their supervisors are also uncertain. Unfortunately, reflection is often seen as a 'bolt on' extra and something that has 'to be done', especially for the purpose of assessment. The process and outcomes of reflection that has the goal of identifying knowledge learning needs will be different to that required to develop a therapeutic relationship.

Motivation is complex and includes both internal and external factors. Internal motivation includes intrinsic interest in the activity, self-efficacy (a self-belief in being able to achieve the task) and the perceived difficulty of the task. The ability to reflect appears to be developmental and usually most individuals find it difficult without regular practice. There is also a maturational effect in which there is a tendency for younger learners to reflect on events in more absolute terms rather than consider the wider context and the possible implications. External factors include the support and encouragement by the organisation within which the individual is learning and working. This aspect also includes the role of facilitators and confidentiality.

Strategies for self-monitoring require individuals to take an 'executive function' that ensures that the key aspects of noticing, processing and future action are considered. Research into the conscious use of metacognition by students has identified similar difficulties when they try to increase awareness of the process. This has been addressed by specific training that progressively introduces learners to the use of metacognitive monitoring. These strategies have the aim of

making the metacognitive process explicit and include encouraging learners to talk aloud about the phases of reflection whilst reflecting and keeping a 'thinking' journal so that the various phases can be identified and discussed. An initial briefing of the metacognitive process of reflection may provide a useful template and prompt. A facilitator or mentor is also invaluable if they are able to encourage the learner to model their own metacognitive processing approach.

Although several authors have noted low engagement in reflection, students state that they perceive that they are already doing it and that the written process does not align to their learning preferences (Grant et al. 2006). A recent study of first year medical students has highlighted that 'Net Generation' learners have a preference for group based and creative activities rather than using written text based approaches (Sandars & Homer 2008). Experience with the use of multimedia (audio, photographs and video) and its creative use for reflection, such as in digital storytelling, appears to not only increase student engagement but also increases the depth of reflection (Sandars et al. 2008).

Individuals have a variety of preferred ways to present thoughts and emotions. These include drawing, painting, photographs and sculpture (Gauntlett 2007). Being creative can liberate many learners and it transcends barriers due to language, such as cultural meanings and difficulty in putting thoughts into words. This is particularly important when the topic is associated with strong emotions.

Difficulties with the phases of reflection

There may be difficulties in the various phases of the reflection process. Difficulties in the noticing phase can often be related to the lack of adequate feedback. Although students state that they wish to receive feedback from others there is a reluctance to give feedback. This may result in students either not receiving feedback, or receiving it in a form that does not help the learner to reflect. Effective techniques in providing feedback include providing specific examples using a non-judgmental way (Westberg & Jason 2001). Failure to do this may result in the creation of strong emotions that may block the rest of the reflection process.

There may be difficulties with the processing phase of reflection. A common difficulty is the presence of strong emotions that the event has produced in the learner. Often the most important events, such as a missed diagnosis, that can stimulate reflection are also those that are associated with the most powerful emotions, such as anger or sadness. An essential step is to recognise and release these emotions since they can block further reflection (Boud et al. 1985). This process can lead to defensiveness in the learner and important underlying issues may not be addressed, such as fear of saying 'no' to patients. A trained supervisor or mentor can be invaluable. Hindsight bias has been noted to be a possible difficulty but this is related to the wider issue of retrospectively trying to make sense of previous situations and events (Jones 1995). Experimental evidence highlights that often there is poor memory recall of past events and this may be further altered by the presence of powerful emotions. In addition, attribution of events is constantly mentally processed after an

event. There is no simple answer to this dilemma since all reflection is based on a constructed view of the world.

A structured process to reflection can be very useful and there are several frameworks. These frameworks allow a progressive deepening of reflection by the use of prompts.

Although reflection may lead to increased understanding of a situation, it is essential that these insights can inform future encounters with similar situations. A particularly powerful part of the reflection process is when the insights inform a future action and there is reflection of the consequences of this action. This is the beginning of a cyclical process and deeper reflection can occur. Action or practitioner research involves a cyclical process in which greater understanding (and the development of personal theory) can be iteratively developed through action. The ultimate aim of this process is to improve professional practice but other intentions can also be met, such as when learning needs have been identified, new information or skills have been acquired and then applied to the real life situation. There is often a difference between what is taught in a classroom situation and then applied to another context.

Lack of integration of reflection in overall teaching and learning approach

Reflection is often a 'bolt on' extra to a teaching session or a curriculum. The effect is that both tutors and learners begin to regard reflection as a process that is disconnected from the educational process. There is not only poor engagement but a culture, often called a hidden curriculum, can quickly develop that devalues reflection. It is important that reflection becomes an integral part of each session and the overall curriculum. The curriculum includes the underlying philosophy about what type of learner it intends to develop, the various approaches to delivery and the assessment strategy. This has implications for tutor development and course developers. In healthcare education, reflection is also often regarded as only related to certain aspects of the curriculum, such as communication skills or clinical attachments, but there are opportunities for integration into preclinical teaching.

Further development of reflection in medical education

Further research is recommended to compare different approaches for reflection, including facilitator supported and the use of new technologies. It is also important to evaluate the impact, both subjective and objective, on attitudes and behaviour, but first it will be essential for educators to clarify the intended purpose of reflection to enable appropriate outcome measures to be used or developed.

The impact of healthcare educational interventions on clinical care is of increasing interest both to educators and funding agencies. There appears to be little evidence generated that has attempted to answer this important question. Further research is recommended since failure to address this issue will result in an increase in the scepticism of clinicians and this, in turn, can produce a culture where the role of reflection in medical education is not valued.

Engaging undergraduate students in reflection is a major challenge and the use of digital multimedia (audio, photographs and video) combined with new technologies, such as blogs, social networking sites and podcasts, has the potential to not only increase motivation by this group of learners but to facilitate deeper reflection. Further research is recommended. There are also challenges into how multimedia artefacts can be assessed compared with written reflective assignments.

Understanding reflection as a metacognitive process allows a wider appreciation of how reflection can be developed and researched. An essential aspect of reflection is noticing and research on impulsivity in other educational contexts highlights that increased impulsivity leads to reduced learning outcomes. However, this can be reversed when learners are made aware of the tendency and receive training in cognitive strategies to consciously slow down their learning. Closely linked to this concept is situational awareness in which individuals become aware of various cues in the environment but an initial, and essential step, is noticing. Situational awareness has been extensively studied in aviation and increasingly its importance has been recognised in patient safety work. Further research is recommended to identify whether there is an association with metacognitive processes across educational and practice domains.

Conclusions

Reflection is an essential component of medical education and it has a variety of intended outcomes and approaches. Important aspects of reflection include its use before, during and after experiences. Reflection can be developed by individuals but guided reflection with a supervisor or mentor is important so that underlying beliefs and assumptions can be challenged within a supportive relationship. The approach to reflection should be determined by the individual since there are different preferred approaches, especially in medical students. Although there is no evidence to suggest that reflection actually does improve patient care it seems logical and likely since the process of care can be influenced.

Notes on contributor

JOHN SANDARS, MB ChB (Hons), MD, MSc, FRCGP, MRCP, Diploma in Palliative Medicine, Diploma in Counselling, Certificate in Education, is a Senior Lecturer in Community Based Education in the School of Medicine at the University of Leeds. He is manager of the Personal and Professional Development strand in the undergraduate course and he is also academic lead for e-learning. This has led to his interest in the use of digital storytelling to engage Net Generation learners in reflection. John was a general practice trainer for many years and he has wide experience in personal and group mentoring for personal and professional development.

References

Argyris M, Schön D. 1974. *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey-Bass.

Baernstein A, Fryer-Edwards K. 2003. Promoting reflection on professionalism: A comparison trial of educational interventions for medical students. *Acad Med* 78:742–747.

Baumeister RR, Vohs KD. (ed) 2004. *Handbook of self-regulation: Research, theory, and applications*. New York: Guilford Press.

Bolton G. 1999. Reflections through the looking-glass: The story of a course of writing as a reflexive practitioner. *Teach High Educ* 4(2):193–212.

Boud D, Keogh R, Walker D. 1985. *Reflection: Turning experience into learning*. London: Kogan Page.

Carr W, Kemmis S. 1986. *Becoming critical. Education, knowledge and action research*. Lewes: Falmer.

DasGupta S, Charon R. 2004. Personal illness narratives: Using reflective writing to teach empathy. *Acad Med* 79:351–356.

Dewey J. 1938. *Experience and education*. New York: Collier.

Epstein RM. 1999. Mindful practice. *JAMA* 282:833–839.

Eraut M. 1994. *Developing professional knowledge and competence*. London: Falmer Press.

Eve R. 1994. PUNs and DENs: Discovering learning needs in general practice. Abingdon: Radcliffe Medical Press.

Flavell JH. 1979. Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *Am Psychol* 34(10):906–911.

Freshwater D (ed) (2002) *Therapeutic nursing: Improving patient care through self awareness and reflection*, London: Sage.

Gauntlett D. 2007. *Creative explorations*. Abingdon: Routledge.

Gersie A. 1997. *Reflections on therapeutic storytelling*. London: Jessica Kingsley.

Gordon MJ. 1994. Review of the validity and accuracy of self assessments in health professions training. *Acad Med* 66:762–769.

Grant A, Kinnersley P, Metcalf E, Pill R, Houston H. 2006. Students' views of reflective learning techniques: An efficacy study at a UK medical school. *Med Educ* 40(4):379–388.

Hampshire AJ, Avery AJ. 2001. What can students learn from studying medicine in literature? *Med Educ* 35:687–690.

Hawkins P, Shohet R. 1989. *Supervision in the helping professions. An individual, group and organizational approach*. Milton Keynes: Open University Press.

Henderson E, Berlin A, Freeman G, Fuller J. 2002. Twelve tips for promoting significant event analysis to enhance reflection in undergraduate medical students. *Med Teach* 24(2):121–124.

Henderson E, Hogan H, Grant A, Berlin A. 2003. Conflict and coping strategies: A qualitative study of student attitudes to significant event analysis. *Med Educ* 37:438–446.

Johns C, Freshwater D. 1998. *Transforming nursing through reflective practice*. Oxford: Blackwell Science.

Johns C. 1995. Framing learning through reflection within Carper's 'fundamental ways of knowing in nursing'. *J Adv Nurs* 22(2):226–234.

Jones PR. 1995. Hindsight bias in reflective practice: An empirical investigation. *J Adv Nurs* 21(4):783–788.

Kolb DA. 1984. *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice Hall.

Lonka K, Slotte V, Halttunen M, Kurki T, Tiitinen A, Vaara L, Paaavonen J. 2001. Portfolios as a learning tool in obstetrics and gynaecology undergraduate training. *Med Educ* 35:1125–1130.

Mann K, Gordon J, Macleod A. 2007. Reflection and reflective practice in health professions education: A systematic review. *Adv Health Sci Educ* Nov 23:1573–1677 [Epub ahead of print].

McDrury J, Alterio M. 2003. *Learning through storytelling in higher education: Using reflection and experience to improve learning*. London: Kogan Page.

Mezirow J. 1981. A critical theory of adult learning and education. *Adult Educ* 32(1):3–24.

Moon JA. 1999. *Learning journals: A handbook for academics, students and professional development*. London: Kogan Page.

Moon JA. 2004. *A handbook of reflective and experiential learning: Theory and practice*. Abingdon: Routledge Falmer.

Niemi PM. 1997. Medical students' professional identity: Self-reflection during the pre-clinical years. *Med Educ* 31:408–415.

Rughani A. 2001. *The GP's guide to personal development plans*. 2nd ed. Abingdon: Radcliffe Medical Press.

Sandars J, Homer M. 2008. Reflective learning and the net generation. *Med Teach* 30:877–879.

Sandars J, Murray C, Pellow A. 2008. Twelve tips for using digital storytelling to promote reflective learning. *Med Teach* 30:774–777.

Schon DA. 1983. *The reflective practitioner*. Temple Smith: London.

- Schön D. 1987. *Educating the reflective practitioner*. San Francisco: Jossey-Bass.
- Sobral DT. 2000. An appraisal of medical students' reflection-in-learning. *Med Educ* 34:182–187.
- Stewart M, Brown JB, Donner A, McWhinney IR, Oates J, Weston WW, Jordan J. 2000. The impact of patient-centered care on outcomes. *J Fam Pract* 49(9):805–807.
- Westberg J, Jason H. 2001. *Fostering reflection and providing feedback: Helping others learn from experience*. New York: Springer Publishing Company.
- Wiecha JM, Vanderschmidt H, Schilling K. 2002. HEAL: An instructional design model applied to an online clerkship in family medicine. *Acad Med* 77:925–926.
- Zimmerman BJ, Schunk DH. 2001. *Self-regulated learning and academic achievement: Theoretical perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates.

Further reading

www.infed.org. The Encyclopedia of Informal Education is a non-profit on informal learning theory. There are excellent articles on the key aspects of reflection in education and the major thinkers.

Paper five

Twelve tips for the best use of feedback.

By Renée M. van der Leeuw and Irene A. Slootweg

Reprinted from

Medical Teacher May 2013; 35(5):348-351

TWELVE TIPS

Twelve tips for making the best use of feedback

RENÉE M. VAN DER LEEUW¹ & IRENE A. SLOOTWEG^{1,2}

¹University of Amsterdam, The Netherlands, ²Maastricht University, The Netherlands

Abstract

Background: Feedback is generally regarded as crucial for learning. We focus on feedback provided through instruments developed to inform self-assessment and support learners to improve performance. These instruments are being used commonly in medical education, but they are ineffective if the feedback is not well received and put into practice.

Methods: The authors formulated twelve tips to make the best use of feedback based on widely cited publications on feedback. To include recent developments and hands-on experiences in the field of medical education, the authors discussed the tips with their research team consisting of experts in the field of medical education and professional performance, to reach agreement on the most practical strategies.

Results: When utilizing feedback for performance improvement, medical students, interns, residents, clinical teachers and practicing physicians could make use of the twelve tips to put feedback into practice. The twelve tips provide strategies to reflect, interact and respond to feedback one receives through (validated) feedback instruments.

Conclusions: Since the goal of those involved in medical education and patient care is to perform at the highest possible level, we offer twelve practical tips for making the best use of feedback in order to support learners of all levels.

Introduction

Background

Professionals working in patient care are required to adapt or improve their performance to be able to provide excellent care. It is globally understood that in order to improve, you should know how you are doing and what can be done better (Davis et al. 2006; Colthart et al. 2008; Krackov & Pohl 2011). An international study concluded that learners of all levels (undergraduates, postgraduates and practicing physicians) perceived feedback as essential to knowing how one was doing and how to improve (Mann et al. 2011). The process of interpreting data about one's own performance and comparing it to an explicit or implicit standard was defined as informed self-assessment (Epstein et al. 2008). The power of self-assessment lies in two domains: (1) the integration of data to assess current performance and promote future learning and (2) the capacity for ongoing self-monitoring during practice (Sargeant et al. 2010). People are known to have difficulty to reliably self-assess their performance (Eva & Regehr 2007; Mann et al. 2011; Sargeant et al. 2011a). For example, physicians' self-assessment of their clinical performance differed from the measures of competence observed by others (Davis et al. 2006). Similar results were found for faculty's teaching performance, which faculty themselves frequently underestimated or overestimated

(Lombarts et al. 2009; Boerebach et al. 2012). To generate feedback and inform self-assessment of performance, multiple validated instruments are available (Petrusa et al. 1990; Grand'Maison et al. 1992; Sloan et al. 1995; Beckman et al. 2004; Lombarts et al. 2009, 2010; Arah et al. 2011; van der Leeuw et al. 2011; Boerebach et al. 2012; Durning et al. 2012; Overeem et al. 2012). Even though feedback is widely used, its effect on performance was found to vary (Kluger & DeNisi 1996). In general, there seems to be an emphasis on how to provide effective feedback (Archer 2010; Sargeant et al. 2011b). However, even valid, reliable and effectively given feedback is useless when not well received and put into practice to improve performance. This journal recently published twelve tips to help clinical teachers to give feedback effectively (Ramani & Krackov 2012). What is lacking are twelve tips to make the best use of feedback in order to support performance improvement.

Objectives

We provide twelve tips that will help medical students, interns, residents, clinical teachers and practicing physicians to make the best use of feedback from (validated) feedback instruments to inform self-assessment, to define goals and develop learning plans in order to realize performance at higher levels (Yardley et al. 2012).

Correspondence: R.M. van der Leeuw, Research Group Professional Performance, Centre for Evidence-based Education, Academic Medical Centre, Meibergdreef 9, PO Box 22700, 1100 DE Amsterdam, The Netherlands. Tel: +31 20 566 1274; fax: +31 20 566 4440; email: r.m.vanderleeuw@amc.nl

Twelve tips for making the best use of feedback

Tip 1

Become quiet and take your time

Feedback can promote learning if it is received mindfully (Bangert-Drowns et al. 1991). Time can help to separate emotions from ratio. Plan and take time to let emotions sink, like sand in muddy water needs time to sink to the bottom before you can see through clear water again. Sometimes a couple of minutes can be enough, but it can also take a night's sleep or a few days. After time has passed, you will better be able to see clearly and establish the value of the feedback. This first 'master-tip' can be helpful throughout the whole process of making the best use of feedback.

Tip 2

Read the feedback attentively

Start by choosing a place that suits you best to read the feedback thoroughly, for example a quiet office or favourite work space at home. When you are reading, it is important to regard all feedback as something that matters. Postpone your judgement until you have carefully read all the information. Try to focus on both the numerical feedback and the narrative comments. Narrative comments have proven to be a rich and useful source of feedback (Overeem et al. 2010; van Es et al. 2012). This 'value-free' reading could be helpful to gain an overview and provide insight in the content and relevance of the received feedback.

Tip 3

Place yourself in the position of the one who provided the feedback

Feedback is always given from a particular context. It is important to know and understand the context, because it can influence your perception of the feedback. If you place yourself in the position of the feedback giver(s), it is easier to think about the context information at play. The context information can help you broaden your own views to test the true relevance of the feedback (Sargeant et al. 2008; Archer 2010).

Tip 4

Separate the content from the relationship

The content of the feedback and the relationship you have with the feedback giver(s) are separate things. Keep these two things apart from each other. Use your knowledge and reason to deliberate the aim and the value of the feedback for your practice or performance (Ericsson 2004; Sargeant et al. 2008). Recognize and acknowledge the time and effort the feedback giver(s) have put into providing the feedback. You could view the feedback as an opportunity to learn enabled by your

feedback giver(s). Therefore, it is important to sincerely thank your feedback giver(s) and possibly feed back what it meant to you.

Tip 5

Balance between being self-confident and being humble

A high level of self-confidence facilitates clear analysis of the content. Starting from a self-confident position can be helpful to view the content of the feedback even when it evokes emotional feelings because of negative or unconstructive feedback (Sargeant et al. 2008, 2009). This allows you to accept or reject the content of the feedback based on professional grounds. Hold that confidence to address improvement and develop a personal development plan, as it will increase the chance of being successful in the attempt to become a better doctor or teacher. But keep in mind that confidence can only exist with a humble attitude to yourself and the people in your surroundings.

Tip 6

Love learning

To want to improve your performance is an inherent characteristic of professionals (Medical Professionalism Project 2002). Lifelong learning can run from commencing medical school to working as a physician and educator. The love to learn can facilitate lifelong learning whereas a study on residents reported that those who do not continue to learn become dissatisfied and burn out (Becker et al. 2006). Lifelong learning can be defined as a (1) continuation of medical education with an (2) ongoing process of professional development along with (3) self-assessment that enables physicians to maintain the requisite knowledge, skills and professional standards (Madewell 2004). Even physicians who perform at a high level need feedback to inform their self-assessment and direct learning. Reflection on feedback, defining goals and developing a learning plan can help to put feedback into action (Yardley et al. 2012).

Tip 7

Keep your professional goals in mind

To support professional development, you should keep your professional goals in mind. If you know what you want to develop professionally, you can determine the usefulness of the feedback to get closer to these goals. The process of interpreting feedback about one's own performance and comparing it to an explicit or implicit standard is known as self-assessment (Epstein et al. 2008). Self-assessment is considered to be the key step in the continuing professional development cycle (Eva & Regehr 2008).

Tip 8

Keep the common goal in mind

The feedback giver(s) and you often share a common goal. This could be 'becoming the best possible doctor you can be' (students and their teachers), 'ensure safe and high quality patient care' (residents and clinician teachers) or 'improve teaching' (teachers and their students or residents). With that goal in mind, you may be better able to overcome personal feelings of failure or uncertainty. This is an important step towards making use of the feedback to direct your learning (Sargeant et al. 2011b; Eva et al. 2012).

Tip 9

Take your study, residency training or job seriously

When you are doing something that has value to you, you are more likely to seek feedback and act upon it. For professionals it means that learning is an issue of engaging in and contributing to the practice of their community (Wenger 1998). Equally, for students it means training to become a doctor through their study, for residents growing professionally as doctors and as teachers and for physicians working jobs as doctor *and* teacher. Use your engagement as a starting point to keep a professional attitude towards feedback and the feedback giver(s).

Tip 10

Talk about the feedback with the feedback giver(s)

It is important to talk about feedback to check whether the message that was intended has come across, but it may take courage to discuss the feedback together with the feedback giver(s). If you have the opportunity to talk about the feedback, plan enough time and create the right conditions to exchange thoughts. Ask questions to deepen your understanding of the content and context of the feedback to self-regulate learning (Nicol & Macfarlane-Dick 2006). This requires a non-defensive attitude. Posing questions in an open manner prevents refuting the message the feedback giver(s) might have.

Tip 11

Start a dialogue with peers

Courage is needed to organize peer evaluation of the content of the feedback. Use a method of dialogue and the help of an expert to organize a safe setting to discuss feedback with others. This increases the chances of learning from peers through sharing and testing the content of feedback to professional values and standards with your peer group. It helps to make the implicit standard explicit (Lockyer et al. 2011). Furthermore, it provides the opportunity to confirm feedback and enables you to discover how peers deal with feedback and learn from each other.

Tip 12

Pick out the pearls

Finally, you are the one who decides whether you can and will do something with the feedback. Moving through the above tips presumably will stimulate reflection which leads to a careful analysis of the content of the feedback (Sargeant et al. 2009). Pick out the pearls you want to respond to. If you accept the feedback, do it wholeheartedly and praise yourself for doing so. Reject the feedback that does not apply to you or is not helpful. Communicate about the unhelpful feedback with the feedback giver(s) acknowledging their efforts. If you choose to reject the feedback, keep looking for feedback in order to keep learning.

Conclusion

Everybody could potentially benefit from receiving feedback. However, feedback was not always found to be successful or beneficial to performance. We aimed to provide a practical solution to bridge the gap between receiving feedback and utilizing it the best possible way. We presented twelve tips that enable medical students, interns, residents, clinician teachers and practicing physicians to utilize feedback to their best interest in order to achieve better performance.

Acknowledgements

The authors would like to thank their colleagues for their insightful comments and helpful suggestions for improvement: Prof. Dr Onyebuchi Arah, Benjamin Boerebach, Prof. Dr Maas Jan Heineman, Dr Kiki Lombarts, Renée Scheepers and Prof. Dr Albert Scherpbier. Finally, we thank our colleagues for their valuable and informal tip to pour a glass of wine when discussing feedback.

Declaration of interest: The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

Notes on contributors

RENÉE VAN DER LEEUW, MD, is a PhD student at Academic Medical Centre Amsterdam.

IRENE A. SLOOTWEG is a PhD student at Academic Medical Centre Amsterdam and Maastricht University. She is also employed as a senior teacher in the Teach the Teacher program of the Academic Medical Centre.

Both authors contributed equally to the paper.

References

- Arah OA, Hoekstra JB, Bos AP, Lombarts KM. 2011. New tools for systematic evaluation of teaching qualities of medical faculty: Results of an ongoing multi-center survey. *PLoS One* 6(10):e25983, available from: PM:22022486.
- Archer JC. 2010. State of the science in health professional education: Effective feedback. *Med Educ* 44(1):101–108, available from: PM:20078761.
- Bangert-Drowns RL, Kulik CLC, Kulik JA, Morgan M. 1991. The instructional effect of feedback in test-like events. *Rev Educ Res* 61(2):213–238.

- Becker JL, Milad MP, Klock SC. 2006. Burnout, depression, and career satisfaction: Cross-sectional study of obstetrics and gynecology residents. *Am J Obstet Gynecol* 195(5):1444–1449, available from: PM:17074551.
- Beckman TJ, Ghosh AK, Cook DA, Erwin PJ, Mandrekar JN. 2004. How reliable are assessments of clinical teaching? A review of the published instruments. *J Gen Intern Med* 19(9):971–977, available from: PM:15333063.
- Boerebach BC, Arah OA, Busch OR, Lombarts KM. 2012. Reliable and valid tools for measuring surgeons' teaching performance: Residents' vs. self evaluation. *J Surg Educ* 69(4):511–520, available from: PM:22677591.
- Colthart I, Bagnall G, Evans A, Allbutt H, Haig A, Illing J, McKinstry B. 2008. The effectiveness of self-assessment on the identification of learner needs, learner activity, and impact on clinical practice: BEME Guide no. 10. *Med Teach* 30(2):124–145, available from: PM:18464136.
- Davis DA, Mazmanian PE, Fordis M, Van Harrison R, Thorpe KE, Perrier L. 2006. Accuracy of physician self-assessment compared with observed measures of competence: A systematic review. *JAMA* 296(9):1094–1102, available from: PM:16954489.
- Durning SJ, Artino A, Boulet J, La Rochelle J, van der Vleuten C, Arze B, Schuwirth L. 2012. The feasibility, reliability, and validity of a post-encounter form for evaluating clinical reasoning. *Med Teach* 34(1):30–37, available from: PM:22250673.
- Epstein RM, Siegel DJ, Silberman J. 2008. Self-monitoring in clinical practice: A challenge for medical educators. *J Contin Educ Health Prof* 28(1):5–13, available from: PM:18366128.
- Ericsson KA. 2004. Deliberate practice and the acquisition and maintenance of expert performance in medicine and related domains. *Acad Med* 79(10 Suppl.):S70–S81, available from: PM:15383395.
- Eva KW, Armson H, Holmboe E, Lockyer J, Loney E, Mann K, Sargeant J. 2012. Factors influencing responsiveness to feedback: On the interplay between fear, confidence, and reasoning processes. *Adv Health Sci Educ Theory Pract* 17(1):15–26, available from: PM:21468778.
- Eva KW, Regehr G. 2007. Knowing when to look it up: A new conception of self-assessment ability. *Acad Med* 82(10 Suppl.):S81–S84, available from: PM:17895699.
- Eva KW, Regehr G. 2008. "I'll never play professional football" and other fallacies of self-assessment. *J Contin Educ Health Prof* 28(1):14–19, available from: PM:18366120.
- Grand'Maison P, Lescop J, Rainsberry P, Brailovsky CA. 1992. Large-scale use of an objective, structured clinical examination for licensing family physicians. *CMAJ* 146(10):1735–1740, available from: PM:1596809.
- Kluger AN, DeNisi A. 1996. The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychol Bull* 119(2):254–284.
- Krackov SK, Pohl H. 2011. Building expertise using the deliberate practice curriculum-planning model. *Med Teach* 33(7):570–575, available from: PM:21696284.
- Lockyer J, Armson H, Chesluk B, Dornan T, Holmboe E, Loney E, Mann K, Sargeant J. 2011. Feedback data sources that inform physician self-assessment. *Med Teach* 33(2):e113–e120, available from: PM:21275533.
- Lombarts MJ, Arah OA, Busch OR, Heineman MJ. 2010. Using the SETQ system to evaluate and improve teaching qualities of clinical teachers. *Ned Tijdschr Geneesk* 154:A1222, available from: PM:20170574.
- Lombarts KM, Bucx MJ, Arah OA. 2009. Development of a system for the evaluation of the teaching qualities of anesthesiology faculty. *Anesthesiology* 111(4):709–716, available from: PM:19707115.
- Madewell JE. 2004. Lifelong learning and the maintenance of certification. *J Am Coll Radiol* 1(3):199–203, available from: PM:17411559.
- Mann K, van der Vleuten C, Eva K, Armson H, Chesluk B, Dornan T, Holmboe E, Lockyer J, Loney E, Sargeant J. 2011. Tensions in informed self-assessment: How the desire for feedback and reticence to collect and use it can conflict. *Acad Med* 86(9):1120–1127, available from: PM:21785309.
- Medical Professionalism Project. 2002. Medical professionalism in the new millennium: A physicians' charter. *Lancet* 359(9305):520–522.
- Nicol D, Macfarlane-Dick D. 2006. Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Stud Higher Educ* 31:199–218.
- Overeem K, Lombarts MJ, Arah OA, Klazinga NS, Grol RP, Wollersheim HC. 2010. Three methods of multi-source feedback compared: A plea for narrative comments and coworkers' perspectives. *Med Teach* 32(2):141–147, available from: PM:20163230.
- Overeem K, Wollersheim HC, Arah OA, Cruisjberg JK, Grol RP, Lombarts KM. 2012. Evaluation of physicians' professional performance: An iterative development and validation study of multisource feedback instruments. *BMC Health Serv Res* 12:80, available from: PM:22448816.
- Petrusa ER, Blackwell TA, Ainsworth MA. 1990. Reliability and validity of an objective structured clinical examination for assessing the clinical performance of residents. *Arch Intern Med* 150(3):573–577, available from: PM:2310275.
- Ramani S, Krackov SK. 2012. Twelve tips for giving feedback effectively in the clinical environment. *Med Teach* 34(10):787–91.
- Sargeant J, Armson H, Chesluk B, Dornan T, Eva K, Holmboe E, Lockyer J, Loney E, Mann K, van der Vleuten C. 2010. The processes and dimensions of informed self-assessment: A conceptual model. *Acad Med* 85(7):1212–1220, available from: PM:20375832.
- Sargeant J, Eva KW, Armson H, Chesluk B, Dornan T, Holmboe E, Lockyer JM, Loney E, Mann KV, van der Vleuten CP. 2011a. Features of assessment learners use to make informed self-assessments of clinical performance. *Med Educ* 45(6):636–647, available from: PM:21564201.
- Sargeant J, Mann K, van der Vleuten C, Metsemakers J. 2008. "Directed" self-assessment: Practice and feedback within a social context. *J Contin Educ Health Prof* 28(1):47–54, available from: PM:18366127.
- Sargeant J, McNaughton E, Mercer S, Murphy D, Sullivan P, Bruce DA. 2011b. Providing feedback: Exploring a model (emotion, content, outcomes) for facilitating multisource feedback. *Med Teach* 33(9):744–749, available from: PM:21854151.
- Sargeant JM, Mann KV, van der Vleuten CP, Metsemakers JF. 2009. Reflection: A link between receiving and using assessment feedback. *Adv Health Sci Educ Theory Pract* 14(3):399–410, available from: PM:18528777.
- Sloan DA, Donnelly MB, Schwartz RW, Strodel WE. 1995. The Objective Structured Clinical Examination. The new gold standard for evaluating postgraduate clinical performance. *Ann Surg* 222(6):735–742, available from: PM:8526580.
- van der Leeuw R, Lombarts K, Heineman MJ, Arah O. 2011. Systematic evaluation of the teaching qualities of Obstetrics and Gynecology faculty: Reliability and validity of the SETQ tools. *PLoS One* 6(5):e19142, available from: PM:21559275.
- van Es JM, Visser MR, Wieringa-de Waard M. 2012. Do GP trainers use feedback in drawing up their Personal Development Plans (PDPs)? Results from a quantitative study. *Med Teach* 34(11):e718–24.
- Wenger E. 1998. *Communities of practice – Learning, meaning, and identity*. Cambridge: Cambridge University Press.
- Yardley S, Teunissen PW, Dornan T. 2012. Experiential learning: AMEE Guide No. 63. *Med Teach* 34(2):e102–e115, available from: PM:22289008.

Paper six

Supervision and the Johari window: a framework for asking questions.

By Helen Halpern

Reprinted from

Education for Primary Care January 2009; 20(1):10-14

Supervision and the Johari window: a framework for asking questions

Helen Halpern MB BS MRCGP MSysPsych
GP Trainer and External Tutor in Supervision Skills for the Tavistock Clinic and London Deanery,
UK

Keywords: clinical supervision, conversations inviting change, educational supervision, medical education

INTRODUCTION

For a long time regular, structured supervision has been the norm within much of the mental health and nursing professions. However, it is still a relatively new concept for some other clinicians, although a requirement for educational and clinical supervision has now been written into doctors' postgraduate training contracts¹ and doctors are expected to incorporate reflection into their lifelong learning.² The concept of supervision carries with it a number of elements aimed at improving the quality of professional practice and patient care. There is an aspect of support in thinking about areas of work which are presenting difficulties or dilemmas for the practitioner. It also implies a chance to think about clinical governance elements of the work.

Over the past few years a method of supervision for healthcare professionals has been developed^{3–5} based mainly on asking questions. Supervision can be offered to peers, colleagues and seniors as well as to juniors and students. Clinicians generally report it to be helpful to have an independent person asking them questions to help them develop new thoughts about a case or workplace issue that has given rise to tension.⁴ The skills involved help to develop reflective practice both for those giving and for those receiving supervision. Training in this method has now been delivered at the Tavistock Clinic, London Deanery and in secondary care trusts across London to several hundred GPs, hospital doctors, dentists and other clinicians.

Some clinicians seem to find it easy to muster their curiosity in order to generate a wide range of questions to use in supervision, while others struggle to maintain a questioning stance and tend to rush in with advice and problem solving. There are pros and cons of these approaches. Obviously in certain clinical situations if, for example, a patient is at immediate risk of harm, it is essential for a supervisor to give instant, direct advice. However, in other circumstances it can be more helpful to ask questions to assist the person seeking supervision to find solutions which fit for their own context or, if advice is given, that this is tailored to the person's situation and particular needs. This means that while supervisors might be relieved of some of the responsibility for problem solving, they need to be skilled in asking questions which can help them to hold a conversation which might bring about change.

In teaching supervision skills we use ideas which can help people to generate different types of questions that can be used to enable colleagues to develop their ideas. The main theoretical ideas which have been drawn on so far come from systemic family therapy approaches.^{5,6} While these concepts seem to fit for some people, it might also be helpful to incorporate other theoretical approaches, particularly those more familiar to doctors and educators.

The Johari window⁷ was originally formulated by Joseph (Jo) Luft and Harrington (Hari) Ingham, developed as a model of interpersonal awareness. However, it has since been applied to a wide variety of learning situations as an educational tool. Clinicians may be familiar with the Johari window in situations where thinking about different arenas can be helpful in deciding how to manage consultations, where either the clinician or the patient is not aware of all the relevant information.⁸ The original Johari window is a grid of four arenas (Figure 1).

Within the context of supervision the Johari window can be helpful in thinking about the different kinds of questions that might be asked at different stages in a conversation and at different stages in the developing relationship between supervisor and supervisee (Figure 2).

| | | |
|-------------------|-------------------------|------------------------|
| | known to self | unknown to self |
| known to others | open arena | blind spot |
| unknown to others | hidden or private arena | undiscovered potential |

Figure 1 Johari window

| | | |
|-----------------------|-------------------------|------------------------|
| | known to supervisee | unknown to supervisee |
| known to supervisor | open arena | blind spot |
| unknown to supervisor | hidden or private arena | undiscovered potential |

Figure 2 Adapted Johari window

As the supervisor asks questions and the supervisee responds to these, different arenas might be opened. In some contexts it could be more appropriate to substitute the words interviewer and interviewee, implying a non-hierarchical approach. The Johari window is a tool for thinking about the different kinds of key questions which might expand different windows.

THE OPEN OR PUBLIC ARENA

It is sometimes suggested that an ideal conversation will enlarge the open arena; however, this is not always necessary when thinking about some desired outcomes from supervision. Early on it can be worth establishing what is in the open arena. This can help both supervisor and supervisee discover common ground and build up a sense of trust. Questions in this arena might also be used to clarify ground rules and set an agenda for supervision. It might generate new information, but little new thinking. When time is short, much of this arena can be understood by reviewing documents. It is, of course, possible that there might be some surprises, when one person believes that information is known to the other when, in fact, it is not.

HIDDEN OR PRIVATE ARENA

Within this arena is information known only to the supervisee. Supervisees will obviously have information and ideas which they will be happy to share with the supervisor. When this is brought into the conversation it enlarges the open arena. In the early stages of the process of supervision, the supervisor might need to ask questions within the hidden arena to gather orientating information in order to help understand the supervisee's context.

Supervisees might also have knowledge which they are reluctant to share with others and the supervisor needs to be sensitive about how much they ask, using verbal and non-verbal feedback from the supervisee to guide them. Work in this arena is more likely to occur if the supervision process is grounded in an attitude from the supervisor which promotes trust and confidence.

However, within the context of supervision a conversation might be helpful for the supervisee even if they keep things within the hidden arena. Feedback from supervisees suggests that while they might not acknowledge something at the time, they often continue to think usefully about some questions beyond the immediate supervision conversation. Supervisees might well wish not to divulge certain things during supervision; supervision is not psychotherapy, although the process might be therapeutic.

BLIND SPOT

How much the blind spot needs to be addressed depends on the context of the piece of supervision and whether any clinical governance issues become apparent. An educational supervisor, in particular, might want to work to reduce the blind spot. Driessen *et al*⁹ have suggested that in helping students to become more reflective, medical teachers should ask them to suggest options for change rather than providing solutions.

In this area the supervisor has to be skilled in balancing the needs and sensitivities of the supervisee with the educational aims and service requirements of the workplace. To work successfully in this area the supervisor will need to be aware of how to give appropriate feedback and how to pace this so that the supervisee is most likely to take on board what is said.¹⁰ Some learners might become paralysed and unable to think if pushed beyond their comfort zone but unless there is a degree of challenge there is also a danger that no new learning or thinking will occur. Supervisees are more likely to be prepared to actively engage in work in this area in an atmosphere of trust and safety where they might be able to take some risks. In almost all supervision situations it is impossible to get away from issues about power and the different ways this might be understood between the supervisor and supervisee even if they are apparently peers or colleagues. Supervisors need to be wary of thinking of their assumptions and interpretations as 'knowledge' which they impose on the supervisee. It might be more useful to think of these just as possible ideas which might or might not be helpful to the supervisee and need to be tested out by asking questions and checking back with the supervisee to find out.

ARENA OF UNKNOWN OR UNDISCOVERED POTENTIAL

Within this arena some of the most exciting and creative work can take place. This is the area where supervisor and supervisee can work with being perplexed about something together. In general it is when the supervisor can ask questions to which neither they nor the supervisee know the answer that new thoughts and ideas might emerge. This can enable both supervisor and supervisee to develop different stories about the situation presented for supervision and about themselves. Used in this arena, questions are used 'to *generate experience* rather than to gather information'.¹¹

The questions which might be helpful are those which Tomm¹² has described as circular questions and reflexive questions.

Circular questions are used to help illustrate patterns and to build up a complex picture of interactions between people and of connections between people and events.

Question of this type could include:

- When you do x what effect does that have on y?
- When y responds what impact does that have on z?

Reflexive questions are those which help the supervisee think about something in a way that they might have never considered before. These questions will often be about different imagined futures. These questions can have the effect of facilitating change by opening up new solutions for old problems.^{13,14}

They can sometimes have the effect of confusing people if they cannot easily find an answer. In this case the supervisor needs to help the supervisee use that confusion as part of the process of learning. Questions of this type could include:

- What might happen if ... nothing changes/this problem goes away/someone from a different background was looking at this dilemma?
- What might your colleague/partner/boss/patient say if they could hear what we are talking about?

CASE EXAMPLE

It is difficult to give specific examples of the kinds of questions which can be asked in the different arenas as they depend to a great extent on the context in which they occur and an experienced supervisor will move seamlessly between the arenas guided by internalised knowledge and intuition. However, a case illustration might demonstrate some of these. The conversation has been abridged and the details altered to preserve anonymity.

A GP registrar asked for supervision from a more experienced colleague about a patient who attended the surgery frequently and with whom she always seemed to have 'the same consultation'.

The supervisor started by asking a question in the 'unknown to supervisor' arena: 'How will you know if

this piece of supervision has been useful to you?'. At the moment of asking the question the supervisor was not sure if the answer was known or not known to the registrar. The question evoked a thoughtful pause which seemed to indicate that the registrar was working to create an idea about something she had not previously thought about. She responded by saying that it would be helpful if she could go away with some new ideas about how to manage the patient, so that she would not dread seeing him next time and so that she would not go round and round in circles in the consultations.

Questions in the hidden arena (known to supervisee, unknown to supervisor) elicited the following information which helped give the supervisor some context to the case.

The patient usually presented as an emergency with a variety of somatic symptoms related to anxiety. He had been extensively investigated on numerous occasions and had no underlying physical illnesses. The GP registrar had discussed the case with her trainer who had made a number of suggestions about managing the patient, including: that the registrar should arrange to see the patient at regular fixed intervals, that she should see the patient together with the trainer, and that she should explain to the patient the physiology and psychology of anxiety so that he might gain some insight into his physical symptoms.

During the conversation the supervisor developed a hypothesis that the registrar knew little about this patient as a person and that because the patient presented as an emergency in a state of high anxiety the consultations focused on symptoms and investigations. In addition, the patient's anxiety seemed to rub off onto the registrar whose heart sank whenever she saw him. Instead of asking questions which might illustrate the registrar's blind spot, the supervisor asked a question within the 'unknown to both' arena: 'If you didn't talk about his anxiety, what other conversations can you imagine having with this patient?'. The registrar reflected for a few moments and then a number of thoughts came tumbling out that seemed to feed into each other and develop as she spoke. She replied that she would like to ask the patient more about his life. She had an idea that he had been in the performing arts but knew little more than that. The registrar said that she felt the patient might find it helpful to talk more about the wider aspects of his life and this might help them both make new links with why he was so anxious. She thought it would give a different focus to the consultations and would help her to find a new curiosity about the patient. The registrar and supervisor agreed to end the supervision at this point.

Although the supervisor was informed by a hypothesis, exactly what might be helpful to the registrar was not known and the supervisor did not seek to impose any particular solution, recognising that the registrar was the expert about this particular situation. It could be said that the question implied a piece of advice, but had the registrar answered that she could not imagine having any different kind of conversation with the patient, the supervisor would have needed to change tack and ask different questions which might fit better for this registrar's dilemma.

We cannot know the outcome, but we can be fairly sure that future consultations will have a different element to them which might make them more useful to both doctor and patient.

DISCUSSION

The Johari window can be thought of as a dynamic relational tool which can help inform both supervisor and supervisee of where they are operating during a supervision conversation. It is dynamic in the sense that different arenas open or change in size as the conversation proceeds. The concept of arenas can also help the supervisor and supervisee understand where they are in relation to the knowledge or ideas shared between them. This can be used as a basis for how to move on in their conversation.

Working effectively in this way depends on a sense of trust and respect between supervisor and supervisee. It requires skill in the supervisor to formulate questions which tap into these different arenas and to time them appropriately during the conversation. This requires maintaining a sense of curiosity about what the supervisee is saying and about the process of the supervision conversation itself. The supervisor needs to be aware of the verbal and non-verbal feedback they are getting from the supervisee to judge whether they are working at a suitable level of challenge. This can be quite complicated because supervisor and supervisee may be thinking and working in different arenas. The supervisor might aim to move to a situation where the unknown arena and blind spot have been reduced and the open arena enlarged. However, there might be situations where questions asked within the unknown arena move one or other into a situation where they acquire insights or ideas which they do not wish to divulge to the other. This needs to be respected and managed sensitively. It is not unusual to find that a supervisor is surprised to hear that the supervisee has found the conversation extremely useful to them even though the supervisor had not felt that they had been helpful.

In certain situations of clinical and educational supervision, where the supervisor might also have to act as an advisor, assessor or performance manager, the work might need to involve demonstrably enlarging the open arena and producing written evidence that this has occurred. In peer supervision, thinking about the different arenas might help the supervisor to widen their repertoire in generating a range of questions and increasing the complexity and creativity of the conversation.

The Johari window has the potential to be helpful in thinking about a wide range of issues for clinicians working in primary and secondary care and for medical educators.

Conflicts of interest

None.

References

- 1 (2008) *A Guide to Postgraduate Speciality Training in the UK, The Gold Guide*. www.mmc.nhs.uk/pdf/Gold%20Guide%202008%20-%20Final.pdf
- 2 GMC (2000) *Revalidating Doctors: ensuring standards, securing the future*. London: General Medical Council.
- 3 Halpern H and McKimm J (2008) www.faculty.londondeanery.ac.uk/e-learning/supervision
- 4 Launer J (2006) *Supervision, Mentoring and Coaching: one-to-one learning encounters in medical education*. Association for the Study of Medical Education.
- 5 Launer J and Halpern H (2006) Reflective practice and clinical supervision: an approach to promoting clinical supervision among general practitioners. *Work Based Learning in Primary Care* **4**: 69–72.
- 6 Launer J (2003) A narrative-based approach to primary care supervision. In: Burton J and Launer J (eds) *Supervision and Support in Primary Care*. Oxford: Radcliffe Publishing.
- 7 Palazzoli Selvini M, Boscolo L, Cecchin G and Prata G (1980) Hypothesizing, circularity, neutrality: three guidelines for the conductor of the session. *Family Process* **19** (1): 3–12.
- 8 Tomm K (1988) Interventive Interviewing: Part III. Intending to ask lineal, circular, strategic, or reflexive questions? *Family Process* **27** (1): 1–15.
- 9 Luft J and Ingham H (1955) The Johari window, a graphic model of interpersonal awareness. *Proceedings of the Western Training Laboratory in Group Development*. Los Angeles: UCLA.
- 10 Sullivan F and Wyatt J (2005) How decision support tools help define clinical problems. *BMJ* **331**: 831–3.
- 11 Driessen E, van Tartwijk J and Dornan T (2008) The self critical doctor: helping students become more reflective. *BMJ* **336**: 827–30.
- 12 McKimm J (2007) www.faculty.londondeanery.ac.uk/e-learning/feedback
- 13 Fredman J and Combs G (1996) *Narrative Therapy: the social construction of preferred realities*. New York: WW.Norton and Co.
- 14 Penn P (1985) Feed-forward: future questions, future maps. *Family Process* **24** (3): 299–310.

Correspondence to: Dr Helen Halpern, Brondesbury Medical Centre, 279 Kilburn High Road, London NW6 7JQ, UK.
Tel: +44 (0)207 624 9853; email: Helen.halpern@btinternet.com

Paper seven

The 'problem' learner: whose problem is it? AMEE Guide No.76

By Yvonne Steinert

Reprinted from

Medical Teacher April 2013; 35(4): e1035-e1045

WEB PAPER
AMEE GUIDE

The “problem” learner: Whose problem is it? AMEE Guide No. 76

YVONNE STEINERT
McGill University, Canada

Abstract

Clinical teachers often work with students or residents whom they perceive as a “problem”. For some, it is a knowledge deficit that first alerts them to a problem; for others it is an attitudinal problem or distressing behaviour. And in some cases, it is difficult to know if the learner is, indeed, presenting with a problem. The goal of this Guide is to outline a framework for working with “problem” learners. This includes strategies for identifying and defining learners’ problems, designing and implementing appropriate interventions, and assuring due process. The potential stress of medical school and residency training will also be addressed, as will a number of prevention strategies. Identifying learners’ problems early – and providing guidance from the outset – can be an important investment in the training and development of future health professionals. It is hoped that this Guide will be of help to clinical teachers, program directors and faculty developers.

Introduction

Clinical teachers often work with students or residents whom they perceive as a “problem”. For some, it is a knowledge deficit that first alerts them to a problem; for others it is an attitudinal problem or distressing behaviour (Steinert & Levitt 1993). And in some cases, it is difficult to know if the learner is, indeed, presenting with a problem. The goal of this Guide is to outline a framework for working with “problem” learners, which includes strategies for identifying and defining learners’ problems, designing and implementing appropriate interventions, and assuring due process. The potential stress of medical school and residency training will also be addressed, as will a number of prevention strategies. Although some of the issues involved in teaching students and residents may differ (e.g. length of exposure to the learner; available methods of assessment), the principles for working with “problem” learners remain the same. Moreover, although many of the examples in the Guide come from working with students and residents in medical specialties, the approaches apply to learners in all of the health professions (e.g. Clark et al. 2008). Identifying learners’ problems early – and providing guidance from the outset – can be an important investment in the training and development of future health professionals. It is hoped that this Guide, based on experiences in working with students and residents (Steinert & Levitt 1993; Steinert 2008) will be of help to clinical teachers, program directors, and faculty developers.

Definitions

A variety of terms have been used to describe the “problem” learner: the “*resident in difficulty*”; the “*troublesome learner*”;

Practice points

- A framework for working with “problem” learners can help both teachers and learners alike.
- The “problem” may reside with the learner, the teacher and/or the system.
- Early identification and problem definition are essential ingredients to success.
- One-on-one discussions and observations of learners are key steps in problem identification.
- All contributing factors, including individual strengths and the stress of training, should be considered in problem definition and the design of the intervention.
- Interventions should be learner-centred and outcomes-based.
- Teachers should be supported by their colleagues and the system in their work with “problem” learners.

the “*disruptive student*”; and the “*impaired physician*” (Shapiro et al. 1987; Grams et al. 1992; Gordon 1993; Steinert et al. 2001; Yao & Wright 2001). The American Board of Internal Medicine (1999) has defined a “problem resident” as a “*trainee who demonstrates a significant enough problem that requires intervention by someone of authority, usually the program director or chief resident*”, whereas Vaughn et al. (1998) have provided the following definition: “*a learner whose academic performance is significantly below performance potential because of a specific affective, cognitive, structural, or interpersonal difficulty*”. The term has also been used to refer to impairment, secondary to emotional stress or substance abuse (Grams et al. 1992). This Guide will define a “problem” learner as a student or resident who

Correspondence: Yvonne Steinert, PhD, Centre for Medical Education, Faculty of Medicine, McGill University, 1110 Pine Avenue West, Montreal, Quebec H3A 1A3, Canada. Tel: 514-398-4988; fax: 514-398-6649; email: yvonne.steinert@mcgill.ca

does not meet the expectations of the training program because of a significant problem with knowledge, attitudes or skills (Steinert 2008).

Prevalence

Studies reporting the prevalence of “problem” learners are limited (Roback & Crowder 1989; Yao & Wright 2000; Reamy & Harman 2006). However, reported rates vary from 5.8% over a four-year period in a Psychiatry program (Yao & Wright 2000) to 9.1% over a 25-year period in a Family Medicine program (Reamy & Harman 2006). In one study (Yao & Wright 2000), the most frequent problems identified by teachers were: insufficient medical knowledge (48%); poor clinical judgment (44%); and inefficient use of time (44%). In another study (Reamy & Harman 2006), insufficient knowledge and attitudinal problems were identified as the most common challenges, followed by interpersonal conflict, psychiatric illness, family stress and substance abuse. Not surprisingly, “problem” residents rarely identify themselves (Yao & Wright 2000).

It is also important to remember that, although working with “problem” students or residents can easily color our perceptions as teachers, the majority of learners demonstrate strong academic performance and high motivations to succeed (Hays et al. 2011). Moreover, as Brenner et al. (2010) have stated, *“most applicants will become successful residents who progress without interruption towards graduation, facing only the usual stumbles of normal professional development along the way”*. However, the presence of a “problem” learner can significantly affect an entire program (Brenner et al. 2010), as increased monitoring, counseling, or remediation may tax the resources of both the program and the faculty. Some educators also fear that the presence of a “problem” learner may damage the integrity of the training program or negatively influence the experience of peers (Yao & Wright 2001).

As teachers, we often wonder if it is possible to predict who will become a “problem” learner, hoping that we can avoid some of the anguish that is related to this educational experience. To date, however, studies have not been able to isolate factors that we can reliably use to either screen applicants to medical school/residency or predict future problems (Dubovsky et al. 2005; Brenner et al. 2010).

“Signs and symptoms”

A range of “signs” may suggest that a learner is in difficulty (Evans & Brown 2010; Evans et al. 2010). These signs include failing a written or practical test; poor (or late) attendance at regularly scheduled events; inadequate knowledge or clinical skills that are inconsistent with stage of training; unprofessional behaviors with patients or peers; poor interpersonal skills; a lack of insight; anxiety; depression or reluctance to become part of the team. A lack of professional behavior is also a common indicator (Bennett et al. 2005; Greenburg et al. 2007). In an exploratory study, Hays et al. (2011) developed a framework of “typical” problems that included poor learning skills, poor organizational skills, poor mental health, immaturity, poor insight and major personal crises. Interestingly, a lack

of insight has been identified as one of the most difficult problems to address.

It is also important to note that learners can encounter difficulty as a result of many factors, including exhaustion and fear of failing, substance abuse, illness, family and personal issues or academic challenges (Bennett & O’Donovan 2001; Tyssen & Vaglum 2002; Evans & Brown 2010). Mental and physical illnesses, as well as learning disabilities, are relatively common in the general population; not surprisingly, they frequently occur among medical students and residents as well (Frank-Josephson & Scott 1997; Faigel 1998; Dyrbye et al. 2005; Midtgaard et al. 2008).

A framework for working with “problem” learners

Although different approaches to working with problem learners exist in the literature (e.g. Shapiro et al. 1987; Gordon 1993; Vaughn et al. 1998; Kahn 2001; Mitchell et al. 2005), the following framework, which has been described previously (e.g. Steinert & Levitt 1993; Steinert 2008) and is outlined in Table 1, has been found to be helpful to clinical teachers and program directors.

From intuition to problem identification

Defining a student’s or resident’s problem usually involves several steps (Steinert & Levitt 1993), beginning with a hunch or intuition that something is amiss. This intuition may come from the direct observation of a learner with a patient or repeated interactions in both formal and informal settings. When teachers (or primary supervisors) first suspect a problem, they should ask themselves three initial questions in order to verify their suspicion: What is the problem? Whose problem is it? Is it a problem that must be changed? Answering these questions will help to determine whether the learner actually has a problem, what it might be, and whether something needs to be done. By going through this process,

Table 1. A framework for working with “problem” learners.

| |
|---|
| <p>From intuition to problem identification</p> <ul style="list-style-type: none"> What is the problem? Whose problem is it? Is it a problem that must be changed? |
| <p>From identification to problem definition</p> <ul style="list-style-type: none"> What is the problem? What is the learner’s perception of the problem? What are the learner’s perceived strengths and weaknesses? What is the learner’s relevant life history? What are the teacher’s – and the system’s – perceived strengths and weaknesses? How do colleagues perceive the learner? |
| <p>From definition to intervention</p> <ul style="list-style-type: none"> What problem are you trying to address? How will you address the identified problem? Who will be involved in the intervention? What is the time frame for the intervention? How will the intervention be evaluated? How will the intervention be documented? How will due process be assured? |

Clinical teachers may wish to use this grid to help identify learners’ “problems” as well as strengths (Steinert, 2008). Examples are included to facilitate reflection of personal challenges.

| KNOWLEDGE | ATTITUDES | SKILLS |
|---|--|--|
| <p>e.g. Gaps in knowledge of basic or clinical sciences</p> <p><i>Be sure to identify both challenges <u>and</u> strengths.</i></p> | <p>e.g. Difficulties with motivation, insight, self-assessment, doctor-patient relations.</p> <p><i>Attitudinal problems, which are usually manifested by behaviours, are often easy to identify but challenging to address.</i></p> | <p>e.g. Difficulties with interpreting information, interpersonal skills, technical skills, clinical judgment, or organization of work.</p> <p><i>Skill deficits often overlap with gaps in knowledge. Strengths must be identified as well.</i></p> |
| TEACHER | LEARNER | SYSTEM |
| <p>e.g. Teachers’ perceptions, expectations or feelings; personal experiences or stresses; colleagues’ perceptions, expectations or stresses.</p> | <p>e.g. Relevant life history or personal problems, including acute life stresses, learning disabilities, psychiatric illness, or substance abuse; learner expectations and assumptions; learner reactions to identified problems.</p> | <p>e.g. Unclear standards or responsibilities; overwhelming workload; inconsistent teaching or supervision; lack of ongoing feedback or performance appraisal</p> |

Figure 1. Working with “problem” learners: a framework for analysis.

teachers will also be able to develop a working hypothesis that they can later confirm with the learner and other colleagues.

What is the problem? In our experience, learners’ problems usually lie in one of three areas: knowledge, attitudes or skills (Steinert 2008). Knowledge problems, sometimes called cognitive difficulties (Hicks et al. 2005), often include deficiencies in basic or clinical sciences. Attitude problems (often manifested as behaviors) usually include difficulties related to motivation, insight, doctor-patient relations or self-assessment. For many, attitude problems are easy to identify but challenging to resolve. Skill deficits can include problems with interpretation of information, interpersonal or technical skills or clinical judgment and organization of work. More importantly, there is often an overlap between skill deficits and attitudinal problems (Steinert & Levitt 1993). For example, if a learner has difficulty establishing rapport with patients or colleagues, we must ask ourselves if this problem is one of attitude, skill or both. Figure 1 provides a framework for analyzing learners’ problems. Teachers in our setting have found this framework to be particularly helpful in teasing apart the learner’s problems and *strengths*, while also identifying whether the problem lies with the teacher, the learner, and/or the system.

Whose problem is it? Determining where the problem lies may be one of the most challenging aspects of problem definition. Based on our experience, it appears that teachers often assume that it is the learner who has the problem. However, difficulties may also lie with the teacher or the system.

Teachers’ issues

Teachers play many roles (Whitman & Schwenk 1997) and may label a student or resident as a “problem” because they cannot fulfill the role they wish to fill (Steinert & Levitt 1993). Teachers also enter educational situations with specific assumptions, expectations and experiences, all of which can lead to problems; so can the teachers’ own stresses or biases. At all times, teachers should try to carefully analyze to what extent they are contributing to the identified problem. For example, they may label a learner a “problem” because they are personally stressed or dissatisfied with their teaching role, not because the learner is “in trouble”.

Working with “problem” learners also engenders a variety of reactions in teachers. Common responses reported by teachers include the following (Steinert 2008):

- Denial (*Maybe he’s just having a bad day...*)
- Avoidance (*I think I’ll schedule another clinic during my teaching session.*)
- Desire to rescue or protect (*If I work hard enough, I will be able to help her...*)
- Anger/frustration (*Oh no! Why do I always get the challenging residents?*)
- Helplessness/impotence (*It’s so hard! We’ll never be able to do it.*)
- Acceptance (*Let’s get on with it and design a good remediation!*)

Not surprisingly, teachers’ sentiments often mirror the learner’s feelings. Identifying personal responses can, therefore, serve as a useful assessment tool.

Learners' issues

In addition to gaps in knowledge, attitudes or skills (as described above), learners' problems can include: stress relating to training or career concerns; life stresses, such as immigration, moving to another location, marriage or divorce; medical or psychiatric illness; substance abuse; learning disabilities or interpersonal conflict. As an example, in one report, 25% of interns were mildly depressed and 12.5% of junior doctors were misusing alcohol (Lake & Ryan 2005). At the same time, learners' expectations, assumptions, and reactions to the perceived problem (e.g. a sense of inadequacy or insecurity; anger or fear of losing control) may also contribute to problem identification. In addition, the process of labeling a student or resident as a "problem" can have a significant impact, and whenever possible, teachers should try to avoid all labels. They may cause more harm than good.

Systems' issues

Systems problems, which are often difficult to identify, can include unclear standards and responsibilities beyond perceived levels of competence, an overwhelming workload, inconsistency in teaching or supervision, or a lack of feedback or assessment (Steinert & Levitt 1993). Learners will often report that they do not receive feedback from their supervisors on a routine basis or that their summative assessment is a "surprise," while teachers will say that they did not have enough time to observe performance. Clearly, this challenge lies with the educational system and not the learner. Other systems' issues include reduced clinical exposure, fragmentation of clinical teams (Evans et al. 2010), conflicting demands or expectations, and difficult patient problems. In multiple ways, identifying systems' constraints is critical in defining the problem and designing an appropriate intervention. At the same time, teachers must feel supported by the system and know that they have access to resources when dealing with challenging situations.

Is it a problem that must be changed? Before talking to the learner and other colleagues, a critical next step, teachers should ask themselves whether a particular problem must be changed, and more importantly, what would happen if it was *not* addressed (Steinert 2008). Although many teachers would like their learners to be happy, pleasant and cooperative (Steinert & Levitt 1993), this expectation is not realistic, and teachers must ask themselves whether they have labeled specific behaviors as problematic because they interfere with their own objectives or assumptions. It is not surprising for a teacher to realize that a suspected problem does not need to be addressed. At the same time, early identification is critical, for as Evans et al. (2010) have stated, "*although learners in difficulty are often recognized, they frequently go unbalanced until a critical event occurs*". To the extent that is possible, we should try to avoid these critical events.

From identification to problem definition

Once teachers have identified the problem(s) and considered their own role in the process, careful data-gathering is needed

to confirm the teachers' working hypothesis. This step includes a detailed description of the problem (e.g. when did it start; what makes it worse), the learner's perception of the problem, the learner's strengths and weaknesses in knowledge base, attitudes and skills (if not already identified), the learner's *relevant* life history (e.g. current life stresses; substance abuse; coping strategies), the teacher's perceived strengths and weaknesses, and colleagues' perceptions, feelings, expectations and assumptions (Steinert 2008).

Importantly, clinical teachers are often reluctant to talk to the learner directly. Some believe that it is not their role to do so; others feel that they lack the skills to do so effectively or worry that they are opening a potential "can of worms" that will make things worse (Evans et al. 2010). Some teachers feel that they are already "overstretched" and cannot take the time to get involved, whereas others fear reprisal through legal action (Lake & Ryan 2005). Irrespective of these sentiments, however, a direct approach is needed as teachers work through the following questions:

1. What is the problem?

Teachers need to ascertain a detailed description of the learner's problem(s) and must decide if it is primarily one of knowledge, attitude, or skill. They must also try to identify observable behaviors and patterns as well as factors that either alleviate – or exacerbate – the problem. In multiple ways, teachers should rely on their clinical skills in order to conduct a "functional inquiry" of the learner's problem(s).

2. What is the learner's perception of the problem?

Talking to the student or resident is the most important step in confirming the teacher's suspicion that there is, indeed, a problem. For some reason, many teachers try to avoid this step, but ascertaining the learner's perception of his/her difficulties and strengths, motivations and assumptions, as well as training and career objectives, are an essential first step. More specifically, a learner-centred interview may uncover the learner's perception of the problem (as well as its causes), the history of the problem and related factors (e.g. academic difficulties) and personal factors (Evans & Brown 2010). It is also important to remember that such an interview can be considered an intervention in itself, as some learners welcome the opportunity to talk about what is troubling them and appreciate the teacher's support and interest in helping them from the outset.

3. What are the learner's perceived strengths and weaknesses?

The discussion with the learner should include a thorough assessment of his or her *strengths* and areas for improvement in knowledge, attitudes and skills. Unfortunately, teachers often rely upon a deficit-based approach to teaching and learning; instead, an appreciation of the learner's strengths and personal qualities is needed. This information may also be gleaned by observing the learner in multiple situations (and different electives or rotations) or talking to colleagues and other members of the health care team. As described above, learners may struggle for a number of reasons. It behooves us to explore these issues together with the student or resident – and to draw upon our clinical skills in the assessment process.

4. What is the learner's relevant life history?

Teachers often ask themselves how much – and what kind of – information they should gather. In fairness to the learner and the teacher's ability to make an accurate diagnosis and treatment plan (Steinert & Levitt 1993), teachers should inquire about current life stresses, recurrent problems and support systems. It is also important to inquire whether the learner has experienced similar problems in the past or whether this is a new challenge for him/her. As an example, a student with a learning disability is often aware of this problem long before the teacher has made the diagnosis. Although teachers are often concerned that they may be crossing a boundary by asking “personal” questions, this information is needed to make a diagnosis and to determine an appropriate intervention plan. Yao and Wright (2001) have suggested that a learner's poor performance may be related to one of the following causes: behavioral issues, such as those related to professionalism; medical conditions, including psychiatric illness; difficulty coping with stress; substance abuse and cognitive issues, including learning disabilities. This classification may be helpful in guiding this line of questioning. As Mitchell et al. (2005) have stated, “*attempting to understand resident performance without understanding factors that influence performance is analogous to examining patient adherence to medication regimens without understanding the individual patient and his or her environment*”.

5. What are the teacher's – and the system's – perceived strengths and weaknesses?

As stated earlier, the problem may lie with the teacher and/or the system. It is therefore important to ascertain the teachers' own strengths (and areas for improvement) in knowledge, attitudes and skills, as well as his/her current life stresses and challenges. In an interesting study, Cleland et al. (2008) explored the reluctance of medical educators to report underperformance in students. In multiple ways, their findings, which included teachers' attitudes towards a specific student (as well as failing students in general), normative beliefs and motivations, skills and knowledge, and environmental constraints, are all relevant in this context. We must also be aware of the potential role that the system can play in contributing to a “problem” situation. As stated earlier, it is worthwhile to identify systems issues so that we can try to minimize their influence as a contributing factor to the learner's problem.

6. How do colleagues perceive the learner?

Despite our best intentions to be objective and committed to teaching students and residents without bias, we do need to check out our perceptions with colleagues and members of the team. Do our colleagues share our perceptions about the learners' challenges or do they see strengths where we do not? What experiences have they had with the learner – and how can our shared perceptions be beneficial? Speaking to colleagues can reveal interesting behaviour patterns or help to decide that it may be best for the student or resident to work with another colleague or team member.

To gather data effectively, clinical teachers need to observe learners in multiple situations, systematically review patients' problems with students and residents, and work to ensure that their assessments are congruent with those of their colleagues

(Steinert & Levitt 1993). Formal test results may also be helpful (Evans et al. 2010), and when appropriate, so is feedback from other rotations. However, the importance of direct observation and talking to the learner cannot be undermined. As noted by Yao and Wright (2001), problems are most often identified through direct observation (82%) and critical incidents (52%).

From definition to intervention

Once a working diagnosis has been established, teachers must design an appropriate intervention. This step includes a consideration of the problem(s) to be addressed, the available intervention options, who should be involved in the intervention, the proposed timeline for both the intervention and the evaluation of outcomes, and the process for documentation. Some problems (e.g. psychiatric illness; substance abuse) will require urgent attention (Steinert 2008); others will require additional time for observation or monitoring. As stated previously, it is essential to involve the learner in every step. In addition, whatever the plan, the intervention should ideally be conducted with genuine concern for the well-being of the learner (Winter & Birnberg 2002) and the safety of patients and their families.

1. What problem are you trying to address?

Most problems are complex in nature and do not occur in isolation. It is therefore important to prioritize the perceived problems and to decide which one will be addressed first. Consensus between teachers, and between the teacher and the learner, is also a critical first step. During this phase, the teacher may need to help the learner recognize and acknowledge the issues affecting performance (Evans et al. 2010) and solicit feedback on possible strategies and solutions. Based on experience, shared decision-making is essential; in fact, the designed intervention will usually fail if the learner does not agree with the intended plan.

2. How will you address the identified problem?

A number of interventions, outlined in Table 2, can be considered when working with “problem” learners. In some instances, the clinical teacher will be involved in all components; at other times, program directors or other senior administrators will be responsible (Steinert 2008). However, in all situations, we must be aware of what options are available to us and one person must be accountable. Frequently, time with monitoring, or further assessment, is

Table 2. Options for intervention.

- Additional time
- Further assessment and monitoring
- One-on-one discussions
- Enhanced teaching and learning opportunities
- A reduced clinical workload
- A change in rotation, venue or supervisor
- Peer or mentor support
- A remedial program, with defined goals, objectives and strategies
- Counseling or therapy
- A leave of absence
- Probation, suspension or dismissal

sufficient. In other cases, we need to enhance teaching and learning opportunities, either by increasing time for observation or feedback, or by arranging one-on-one coaching with staff or peers. In some situations, workloads might need to be reduced to allow for independent study and reading (for knowledge problems) or increased practice and feedback (for skill-related deficits). Alternatively, a formal remedial program may be required, with clearly defined goals and objectives, learning strategies, and evaluation methods (Steinert 2008). Although suspension, probation or dismissal (from the program) are not desirable options, they must, at times, also be considered (Ikkos 2000).

Additional time

As in medicine generally, time can be an effective healer (Steinert & Levitt 1993). Some learners can overcome their difficulties by moving out of a particularly challenging or stressful rotation, or by working with a different clinical teacher. Others gain confidence or skill as time progresses. Whenever possible, additional time should be accompanied by careful monitoring through observation.

Further assessment and monitoring

In other situations, further assessment will be needed. This will include spending more time with the learner and carefully monitoring what they do. It will also involve observing the student or resident in different contexts, with different patients and families. Including colleagues and other members of the team in this assessment phase can be equally beneficial. It is often surprising how invaluable team coordinators' comments can be with regard to a student's or resident's behaviors with patients and other health professionals.

One-on-one discussions

One-on-one discussion with the learner constitutes an important strategy that is often taken for granted. Although frequently not considered part of an intervention, meeting with the learner, to review specific issues or concerns, can be very worthwhile. Such a meeting can also be used to clarify expectations (which learners often feel are not explicit) and discuss pre-assigned readings, clinical problems or identified deficits (e.g. problem-solving).

Enhanced teaching and learning opportunities

At times, increased observation and feedback can help to address identified problems. This is especially true for knowledge-based problems or skill-related deficits. More frequent case discussions and chart reviews can facilitate knowledge acquisition, as can mini-tutorials, review of patient management problems and discussion of pre-assigned readings. Increased opportunities to observe role models in action can encourage the acquisition of interpersonal skills, as can time in a simulation-based environment. The latter can also help to address deficiencies related to technical skills, interviewing

skills and team work. A skill-based training course, tailored to individual needs, might also be recommended.

A reduced clinical workload

A reduced clinical workload, with protected time to focus on knowledge or skill acquisition, may at times be in order. If the learner is feeling overwhelmed by the clinical demands (in relation to their own expertise and competence), a lesser workload may decrease stress so that learning can occur.

A change in rotation, venue or supervisor

Changes at the system level should also be considered. Changing the learner's rotations (e.g. scheduling an easier rotation, working in a different setting or clinical environment) can be another alternative, as can changing the primary supervisor or adding other teachers (with different skill sets) to the roster. Working with "problem" learners is generally quite time-consuming for teachers, and sharing the workload may be beneficial to all concerned.

Peer or mentor support

Medical school and residency training can be a stressful time for students and residents (Dyrbye et al. 2005). At times, a supportive peer or teacher can be very helpful. The role of peers in working with "problem" residents has been debated by clinical teachers and residents alike; however, the value of "near-peer" support cannot be underestimated as long as peers maintain confidentiality and respect.

A remedial program, with defined goals, objectives and strategies

The above components are frequently used in a more formal remedial program, which may include a variety of teaching methods (e.g. videotape reviews of clinical encounters, role plays of difficult doctor-patient interactions) or extra rotations in a specific discipline, with protected time for increased supervision, study and review (Steinert & Levitt 1993). Known to address specific problems with reasonable success, such programs require clearly defined goals and pre-determined outcomes. Moreover, in some settings, they have had considerable success with both students (Schwartz et al. 1998) and residents (Catton et al. 2002).

Counseling or therapy

Although most clinical teachers find this a difficult option to pursue, counseling or therapy may be indicated, especially if the learner is presenting with aggressive or depressive symptoms, substance abuse, or psychiatric problems. Learning disabilities can also not be ignored as an underlying factor for perceived problems and often require intervention (Coles 1990). This is also an area where outside consultants or expertise should be sought.

A leave of absence

A survey of internal medicine programs from 1979 to 1984 found that 1% of the residents required a leave, and 56% of the programs granted leaves of absence because of “emotional impairments” (Smith et al. 2007). Although teachers are often reluctant to consider this option, it should be part of the repertoire of interventions, especially as leaves of absence are one of the suggested options for health-related problems including substance abuse (Long 2009).

Probation, suspension or dismissal

In order for this option to work, clear policies must be in place. It is also true that this intervention is dependent on local norms and values, and as Ikkos (2000) had said, the legal and administrative framework to deal with “problem” learners differs across countries and authorities. In addition, only a few reports describe termination policies in medical training programs (Irby et al. 1981; Tulgan et al. 2001). However, this option must be seriously considered, despite teachers’ reluctance to do so. Irby and Milam (1989) distinguish between academic dismissals, which result from academic or clinical performance issues, and disciplinary dismissals, which follow violations of institutional rules or policies. Irrespective of the nomenclature, however, we might need to dismiss learners from their programs when remediation efforts fail (Catton et al. 2002). As Winter and Birnberg (2002) have stated in the description of their work with impaired residents, we must have a long range view of success and “*recognize that suspension or dismissal may only be a temporary setback... short-term failure, including relapse, may in fact lead to long-term success*”. It is also important to remember that re-directing a student to another specialty – or career – may not be a failure in the long run.

In an interesting study, Dudek et al. (2005) identified four factors to explain teachers’ reluctance to fail students and residents: a lack of documentation; a lack of knowledge about what to document; anticipation of an appeal; and a lack of remediation options. These factors are equally important in this context and must be addressed by program directors, educational leaders and administrators. In fact, we must put systems into place to protect our teachers as well as our learners.

As described previously (Steinert 2008), experience has shown that common interventions include: increased observation and feedback (for gaps in knowledge or skills); increased time with a faculty advisor (for knowledge deficits, attitudinal problems, interpersonal conflict or family stress); weekly study sessions, core content review and videotaping of clinical encounters (for knowledge, attitudinal or skill problems); and psychiatric counseling (for attitudinal problems, interpersonal conflict, family stress or substance abuse). Anticipated outcomes, and consequences of failed interventions, must also be determined early in the process, though it is heartening to note that close to 90% of “problem” learners succeeded after a structured intervention or remediation program (Winter & Birnberg 2002; Reamy & Harman 2006).

3. Who will be involved in the intervention?

At times, the primary supervisor (or clinical teacher) will be responsible for both designing and implementing the intervention. At other times, another member of the team or outside consultant will be involved. Although this decision is often dependent on institutional policy or local norms, whenever possible, the program director or associate dean (or someone in a similar position) should be consulted and involved in the intervention plan. So should the student or resident. Depending on the design and complexity of the intervention, and the specific educational context, it may also be helpful to have more than one person involved in the intervention plan, and ideally, this should be discussed with the learner. In all cases, it is important that the learner is comfortable with the teacher(s) involved in the intervention, all of whom should have the time and expertise to deal with the learner’s difficulties. As highlighted above, peer support can also be invaluable.

4. What is the time frame for the intervention?

Teachers often err by “jumping into” an intervention without clear goals, objectives or time frames. Clearly, both the teacher and the learner would benefit from knowing how long the intervention will last and what the expected outcomes will be. It is also important to recognize that time frames may be context-specific. For example, much of undergraduate training occurs in one-month blocks; postgraduate training often provides more time for intervention and problem resolution. Clearly, the dimension of time must be seriously considered.

5. How will the intervention be evaluated?

Whatever the intervention, learners often lament that they do not know what is expected of them. Accordingly, the criteria for success must be carefully laid out from the outset. For example, if the teacher and learner are working on improving technical skills, the expectations for success should be clearly enunciated at the outset and a system for evaluating progress should be determined. It is equally important to schedule regular, pre-arranged meetings between the learner and the supervisor to monitor ongoing progress, to determine whether the intervention plan has been able to achieve its specified goals (Steinert & Levitt 1993), and to make mid-course corrections. These meetings should also be scheduled before the intervention starts so that they are not viewed as a method of crisis intervention. Finally, it is essential to outline what consequences will be considered if no improvement is noted. At times, the problem may need to be re-defined; at other times, the remediation program will need to be extended or altered. And as stated earlier, probation or dismissal may need to be considered as a viable option. In this era of outcomes-based education, clear outcomes are needed at every step of the way.

6. How will the intervention be documented?

Although thorough documentation is an essential component of all interventions, this step is often omitted or left to happenstance. For example, teachers must document the identified problem (with supporting data), the discussions with the learner and colleagues, the intervention plan, and the observed outcome of designated activities. Some teachers find it helpful to write up the intervention plan as a “learning contract”, outlining how the problem will be dealt with, in a

particular time period; others prefer to keep carefully documented process notes. Though often skeptical at first, learners frequently express appreciation at knowing what is expected of them and what outcomes are desired. Documentation is also essential in ensuring due process.

7. How will due process be assured?

Teachers must work collaboratively to ensure due process (Rankin & Kelly 1986; Rose 1989) and to guarantee fairness, confidentiality, and informed consent. Fairness implies that the learner is aware of the program's educational objectives and rules of promotion. It also implies that feedback is given on a regular basis and that the teachers' evaluations are based on first-hand exposure and objective data. Documentation is critical in assuring natural justice, and teachers must be encouraged to document their assessments, interventions, evaluations and discussions with the learner. At the same time, we must remember that due process is a bilateral process and we must work to ensure natural justice for our colleagues. Many a teacher has commented on the "loneliness" and "vulnerability" that they experience when working with "problem" learners (Steinert 2008).

Developing an institutional policy and protocol for handling learners' problems can also help to assure residents' rights and due process. Although such a policy and protocol will differ for each organization (or institution), it should describe the preferred sequence of events, the "chain of command" and who is responsible for which part of the protocol, the reporting structure, the time frame for assessment and intervention, and the need for clear and careful documentation. For example, some schools have entrusted a Board of Examiners (Catton et al. 2002) to handle residents' problems; others have designated program directors or postgraduate deans to be responsible. Irrespective of the chain of command, it is important that all faculty members are aware of local policies and protocols and that the institution maintain a uniform approach to learners requiring attention. Long (2009) has described a number of reasons why it is important to have robust systems in place to work with "problem" learners. This includes the need for uniformity, the development of expertise, and most importantly, the early identification of learners in difficulty.

Prevention of problems

Medical school and residency training is "a time of stress and turmoil for many learners" (Dabrow et al. 2006). As stated earlier in this Guide, and as described in the literature, these stresses come from a number of sources, including communication problems in the workplace, feelings of not being respected, the constraints of collaborative work, the potential gap between the medical school and clinical care, work overload, responsibility towards patients, worries about career plans and a perceived lack of knowledge (Luthy et al. 2004). Depending on their life experiences and coping strategies, students' responses to stress may – or may not – be adaptive (Dyrbye et al. 2005). Although a full discussion of prevention strategies is beyond the scope of this article, a number of approaches are worth considering. For example, Langlois and Thach (2000) have provided a helpful framework by which to look at the prevention of difficult learning situations, modeled along the lines of primary,

secondary, and tertiary prevention. At the level of primary prevention (i.e. preventing the problem before it occurs), they suggest a well-developed orientation program that includes the sharing of course expectations, a discussion of mutual goals and objectives, and ongoing assessment. With respect to secondary prevention (i.e. early detection), they concur with the suggestions made in this Guide and re-affirm the importance of paying attention to early clues, responding quickly, and providing ongoing feedback and monitoring. Tertiary prevention (i.e. managing a problem to minimize impact) is of course more complex and includes a number of carefully crafted intervention strategies; it is also wise at this stage to not try to "rescue" the learner by ignoring the problem or accepting poor performance. Interestingly, few prevention programs for teachers in distress have been described in the literature. However, each of these suggestions would be equally relevant to the teacher and the system. As Langlois and Thach (2000) have said, "*many potentially difficult situations can be prevented by setting expectations, giving feedback, and providing thoughtful, ongoing evaluation*".

Acknowledge the stress of training. As Hays et al. (2011) have said, "*academically bright and ambitious medical students must cope with a combination of curriculum, assessment, career choice, [and] personal, family and social pressures*". As teachers, we must acknowledge the stress and strain of undergraduate and postgraduate training and offer support to deal with systemic issues (Howell & Schroeder 1984; Peterkin 1991). We must also provide an educational environment that allows for learner differences, timely feedback and ongoing assessment so that problems are identified early and evaluations are not a "surprise". In addition, we should consider the role of faculty advisors or mentors, so that learners can receive support and guidance in an atmosphere of trust and respect. Peer support, which can help to guard against delay in problem identification, can also be a useful intervention (Steinert 2008).

Promote study skills and life-long learning strategies. Although life-long learning is often identified as an important attribute of competent practitioners, the skills inherent to this process are not frequently taught. Perhaps, it is time to re-dress this gap and teach students and residents ways in which to maximize learning in the workplace, direct their own learning, seek input from others, and use evidence at the point of care (Teunissen & Dornan 2008).

Organize relevant educational events. Some programs have held annual retreats to combat stress in residency training (e.g., Klein et al. 2000). Others have developed wellness (or assistance) programs to deal with the stress inherent in medical training (Borenstein 1985; Zoller et al. 1985). Irrespective of the program design, these activities include a discussion of relevant stresses and ways of identifying high stress levels, strategies for coping with stress, and information about available resources. Some programs have also included psychiatric counseling as part of their wellness or assistance program (Dabrow et al. 2006). As an example, the program at the University of South Florida College of Medicine offers

confidential evaluation, brief counseling, and referral services (as appropriate). Importantly, this program is not focused solely around crisis intervention; it also incorporates a number of components of a successful assistance program: total confidentiality; easy access; education regarding availability of services and overall integration with the educational program (Dabrow et al. 2006). Educational courses and seminars on professionalism may also be warranted (Marco 2002). Demonstrating a lack of unprofessional behaviour is often seen among “problem” learners. It is, therefore, important to both teach and assess these behaviors in an explicit manner (Cruess et al. 2009) and make expectations clear.

Develop your faculty. As stated earlier, most teachers do not feel prepared to handle “problem” learners effectively and faculty development has a critical role to play in this context. In our setting, we frequently offer workshops on the “problem” student and resident to our faculty members. The goal of these workshops is to provide a systematic framework for teachers “to help them in their task by emphasizing early identification, accurate diagnosis, and appropriate interventions” (Steinert et al. 2001). Workshop topics include: defining the problem; data gathering: confirming the diagnosis; designing and implementing the intervention; and assuring residents’ rights. Participants work in small groups and are encouraged to focus on their own challenges and lessons pertinent to their own settings. Program evaluations have shown that this workshop can be an effective way to sensitize teachers to the challenges of working with “problem” learners, to increase their knowledge and skill, and to help them become more aware of systems issues that may impact learner progress. Muller et al. (2000) have also highlighted the benefits of a faculty development workshop in helping teachers to apply an “interactional model to working with learners in difficulty”. As they pointed out, such an activity can help faculty to explore critical issues, test out their assumptions, identify new ways of working with learners’ challenges and begin to work collaboratively.

Some general principles

In closing, some general principles will be emphasized. Although “success” is not always possible, most “problem” learners do succeed in finding their way to a fulfilling career.

Early identification is critical. As Evans et al. (2010) have stated, “early identification and early support, before the trainee or student runs into major difficulties, should be regarded as the gold standard for educational supervision.” Most educators have encountered learners with significant gaps in knowledge or professional behaviors that have not been addressed earlier in their training. We fail this group by not failing them, and at a minimum, we must provide them with feedback, remedial guidance, and a plan (LeBlanc & Beatty in press).

It is not easy to be a student or resident. As teachers and program directors, we need to remember that it is not easy to

be a student or resident. It is also true that some learners complete their trajectory without any problems, but the essence of training can be stressful for many. Awareness – and acknowledgement – of this fact can be very helpful for both the learner and the teacher.

An outcomes approach is warranted. Claridge and Lewis (2005) describe two frames for problem solving: a problem frame and an outcome frame. In the former, which focuses on the details of the problem and the deficiencies at hand, the over-riding motivation is to “escape”. The outcome frame, on the other hand, focuses on internal motivation to change, finding solutions and moving towards a positive outcome. Belief in the individual as resourceful and capable underlies this frame, as does the notion of exploration and change. Clearly, all of these factors are important in working with “problem” learners.

Conclusion

Clinical teachers often do not know what to do when confronted with a “problem” learner who requires significant time and effort. The goal of this Guide is to provide a structured approach to problem definition, data-gathering and the design of effective interventions. Although learners’ problems are often seen as residing in the student or resident alone, teacher and system factors must be considered. Winter and Birnberg (2002) have suggested that the “rewards of working with impaired residents outweighs the trials and tribulations”. This philosophy is what motivates us, as teachers, to work with all of our learners in reaching their full potential.

Acknowledgements

I would like to gratefully acknowledge my colleagues in the Department of Family Medicine, the Faculty Development Office and the Centre for Medical Education at McGill University for helping me to develop and refine my thinking about working with “problem” students and residents. I would also like to thank all of the faculty members who have participated in our workshops and have provided invaluable feedback on the concepts described in this Guide, as well as the many students and residents who have shown us that success is achievable.

Declaration of interest: The author reports no conflicts of interest. The author alone is responsible for the content and writing of the article.

Notes on contributors

Dr YVONNE STEINERT, PhD, is a clinical psychologist and Professor of Family Medicine, the Director of the Centre for Medical Education in the Faculty of Medicine and the Richard and Sylvia Cruess Chair in Medical Education at McGill University. She was also the first Associate Dean for Faculty Development at McGill University (1993–2011) and the President of the Canadian Association for Medical Education (2006–2008). She is actively involved in undergraduate and postgraduate medical education, educational research, and the design and delivery of faculty development programs and activities in a variety of settings. Her research interests

focus on teaching and learning in the health professions, the impact of faculty development on the individual and the organization, and the continuing professional development of faculty members. She has written extensively on the topic of faculty development and frequently addresses medical educators at both national and international meetings.

References

- American Board of Internal Medicine. 1999. Association of program directors in internal medicine (APDIM)'s chief residents' workshop on problem residents. New Orleans (LA).
- Bennett J, O'Donovan D. 2001. Substance misuse by doctors, nurses and other healthcare workers. *Curr Opin Psychiatry* 14(3):195–199.
- Bennett AJ, Roman B, Arnold LM, Kay J, Goldenhar LM. 2005. Professionalism deficits among medical students: Models of identification and intervention. *Acad Psychiatry* 29(5):426–432.
- Borenstein DB. 1985. Should physician training centers offer formal psychiatric assistance to house officers? A report on the major findings of a prototype program. *Am J Psychiatry* 142(9):1053–1057.
- Brenner AM, Mathai S, Jain S, Mohl PC. 2010. Can we predict “problem residents”? *Acad Med* 85(7):1147–1151.
- Catton P, Hutcheon M, Rothman A. 2002. Academic difficulty in postgraduate medical education: Results of remedial programs at University of Toronto. *Ann RCPSC* 35(4):232–237.
- Claridge MT, Lewis T. 2005. Coaching for effective learning: A practical guide for teachers in health and social care. Oxon, UK: Radcliffe Publishing.
- Clark CM, Farnsworth J, Springer PJ. 2008. Policy development for disruptive student behaviors. *Nurse Educ* 33(6):259–262.
- Cleland JA, Knight LV, Rees CE, Tracey S, Bond CM. 2008. Is it me or it is them? Factors that influence the passing of underperforming students. *Med Educ* 42(8):800–809.
- Coles CR. 1990. Helping students with learning difficulties in medical and health-care education. *Med Educ* 24(3):300–312.
- Cruess RL, Cruess SR, Steinert Y. 2009. Teaching medical professionalism. New York: Cambridge University Press.
- Dabrow S, Russell S, Ackley K, Anderson E, Fabri PJ. 2006. Combating the stress of residency: One school's approach. *Acad Med* 81(5):436–439.
- Dubovsky SL, Gendel M, Dubovsky AN, Rosse J, Levin R, House R. 2005. Do data obtained from admissions interviews and resident evaluations predict later personal and practice problems? *Acad Psychiatry* 29(5):443–447.
- Dudek NL, Marks MB, Regehr G. 2005. Failure to fail: The perspectives of clinical supervisors. *Acad Med* 80(10):S84–S87.
- Dyrbye LN, Thomas MR, Shanafelt TD. 2005. Medical student distress: Causes, consequences and proposed solutions. *Mayo Clin Proc* 80(12):1613–1622.
- Evans DE, Alstead EM, Brown J. 2010. Applying your clinical skills to students and trainees in academic difficulty. *Clin Teach* 7(4):230–235.
- Evans D, Brown J. 2010. Supporting students in difficulty. In: Cantillon P, Wood D, editors. ABC of learning and teaching in medicine. Oxford, UK: Wiley-Blackwell. pp 78–82.
- Faigel HC. 1998. Changes in services for students with learning disabilities in US and Canadian medical schools, 1991 to 1997. *Acad Med* 73(12):1290–1293.
- Frank-Josephson C, Scott JU. 1997. Commentary: Accommodating medical students with learning disabilities. *Acad Med* 72(12):1032–1033.
- Gordon MJ. 1993. A prerogatives-based model for assessing and managing the resident in difficulty. *Fam Med* 25(10):637–645.
- Grams GD, Longhurst MF, Whiteside CB. 1992. The faculty experience with the “troublesome” family practice resident. *Fam Med* 24(3):197–200.
- Greenburg DL, Durning SJ, Cohen DL, Cruess D, Jackson JL. 2007. Identifying medical students likely to exhibit poor professionalism and knowledge during internship. *J Gen Intern Med* 22(12):1711–1717.
- Hays RB, Lawson M, Gray C. 2011. Problems presented by medical students seeking support: A possible intervention framework. *Med Teach* 33(2):161–164.
- Hicks PJ, Cox SM, Espey EL, Goepfert AR, Bienstock JL, Erickson SS, Hammoud MM, Katz NT, Krueger PM, Neutens JJ, et al. 2005. To the point: Medical education reviews – Dealing with student difficulties in the clinical setting. *Am J Obstet Gynecol* 193(6):1915–1922.
- Howell JB, Schroeder DP. 1984. Physician stress: A handbook for coping. Baltimore: University Park Press.
- Ikkos G. 2000. Responding to trainee doctors in difficulty. *Hosp Med* 61(5):348–351.
- Irby DM, Fantel JI, Milam SD, Schwarz MR. 1981. Legal guidelines for evaluating and dismissing medical students. *N Engl J Med* 304(3):180–184.
- Irby DM, Milam S. 1989. The legal context for evaluating and dismissing medical students and residents. *Acad Med* 64(11):639–643.
- Kahn NB. 2001. Dealing with the problem learner. *Fam Med* 33(9):655–657.
- Klein EJ, Marcuse EK, Jackson JC, Watkins S, Hudgins L. 2000. The pediatric intern retreat: 20-year evolution of a continuing investment. *Acad Med* 75(8):853–857.
- Lake FR, Ryan G. 2005. Teaching on the run tips 11: The junior doctor in difficulty. *Med J Aust* 183(9):475–476.
- Langlois JP, Thach S. 2000. Preventing the difficult learning situation. *Fam Med* 32(4):232–234.
- LeBlanc C, Beatty L. (in press) A resident in difficulty, or a difficult resident? In: Bandiera G, Dath D. editors. Program directors' manual. Ottawa: Royal College of Physicians and Surgeons of Canada.
- Long A. 2009. Trainees in difficulty. *Arch Dis Child* 94(7):492–496.
- Luthy C, Perrier A, Perrin E, Cedraschi C, Allaz AF. 2004. Exploring the major difficulties perceived by residents in training: A pilot study. *Swiss Med Wkly* 134(41–42):612–617.
- Marco CA. 2002. Ethics seminars: Teaching professionalism to “problem” residents. *Acad Emerg Med* 9(10):1001–1006.
- Midtgaard M, Ekeberg O, Vaglum P, Tyssen R. 2008. Mental health treatment needs for medical students: A national longitudinal study. *Eur Psychiatry* 23(7):505–511.
- Mitchell M, Srinivasan M, West DC, Franks P, Keenan C, Henderson M, Wilkes M. 2005. Factors affecting resident performance: Development of a theoretical model and a focused literature review. *Acad Med* 80(4):376–389.
- Muller J, Sommers P. 2000. A workshop for junior faculty on the learner in difficulty. *Acad Med* 75(5):557.
- Peterkin AD. 1991. Staying human during residency training. Ottawa: Canadian Medical Association.
- Rankin JW, Kelly MB. 1986. Evaluating medical residents – “Fairness,” “due process,” and other legalities. In: Lloyd JS, Langsley DG, editors. How to evaluate residents. Chicago: American Board of Medical Specialties.
- Reamy BV, Harman JH. 2006. Residents in trouble: An in-depth assessment of the 25-year experience of a single Family Medicine residency. *Fam Med* 38(4):252–257.
- Roback HB, Crowder MK. 1989. Psychiatric resident dismissal: A national survey of training programs. *Am J Psychiatry* 146(1):96–98.
- Rose TG. 1989. Due process in residency training. In: Little M, Midtling JE, editors. Becoming a family physician. New York: Springer-Verlag.
- Schwartz PL, Loten EG. 1998. Effect of remedial tutorial help on students who fail in-course assessments. *Acad Med* 73(8):913.
- Shapiro J, Prislun MD, Larsen KM, Lenahan PM. 1987. Working with the resident in difficulty. *Fam Med* 19(5):368–375.
- Smith CS, Stevens NG, Servis M. 2007. A general framework for approaching residents in difficulty. *Fam Med* 39(5):331–336.
- Steinert Y. 2008. The ‘problem’ junior: Whose problem is it? *BMJ* 336(7636):150–153.
- Steinert Y, Levitt C. 1993. Working with the “problem” resident: Guidelines for definition and intervention. *Fam Med* 25(10):627–632.
- Steinert Y, Nasmith L, Daigle N, Franco ED. 2001. Improving teachers' skills in working with ‘problem’ residents: A workshop description and evaluation. *Med Teach* 23(3):284–288.
- Teunissen PW, Doman T. 2008. Lifelong learning at work. *BMJ* 336(7645):667–669.

- Tulgan H, Cohen SN, Kinne KM. 2001. How a teaching hospital implemented its termination policies for disruptive residents. *Acad Med* 76(11):1107–1112.
- Tyssen R, Vaglum P. 2002. Mental health problems among young doctors: An updated review of prospective studies. *Harv Rev Psychiatry* 10(3):154–165.
- Vaughn LM, Baker RC, DeWitt TG. 1998. The problem learner. *Teach Learn Med* 10(4):217–222.
- Whitman N, Schwenk TL. 1997. *The physician as teacher*. Salt Lake City, Utah: Whitman Associates.
- Winter RO, Birnberg B. 2002. Working with impaired residents: Trials, tribulations, and successes. *Fam Med* 34(3):190–196.
- Yao DC, Wright SM. 2000. National survey of internal medicine residency program directors regarding problem residents. *JAMA* 284(9):1099–1104.
- Yao DC, Wright SM. 2001. The challenge of problem residents. *J Gen Intern Med* 16(7):486–492.
- Zoller DP, Murphy-Cullen CL, Moore S, Graff A. 1985. A wellness program model for family practice residency programs. *Fam Med* 17(3):93–95.

Paper eight

The GROW model of coaching

By Sir John Whitmore

Reprinted from

Coaching for performance: GROWing human potential and purpose: the principles and practice of coaching and leadership. People skills for professionals (2009)

The GROW Model of Coaching

This model was developed by Sir John Whitmore in the 1980s and provides a framework for structuring feedback.

G = goal setting for the session or for the long term.

R = looking at the reality of the situation and what is currently happening.

O = looking at options and alternative strategies to overcome the situation or improve.

W = what is to be done, when, by whom and does the individual have the will to do it?

1. Goal setting

Remember that it is important that goals are SMART!

- What do you want to achieve by the end of this session?
- What would you like to get out of the next 30 minutes?
- What areas do you want to work on?
- What do you want to achieve as a result of this session?
- What will make this meeting feel valuable to you?
- What will be the most helpful thing for you to take away from this session?
- What is your ideal future?

2. Reality

These questions should allow the individual to develop their own self-awareness of what is happening and the more detail gathered here the more effective the conversation.

- Where are you now in relation to your goal?
- On a scale of 1-10 where are you? Where would you like to be? How will you get there?
- What progress have you made so far?
- What is working well right now?
- What do you need to be able to do?
- What is not working so well right now?
- On a scale of 1-10 what is your confidence level when carrying out? Where would you like it to be by the next time we meet? How will you get there?
- What is the biggest obstacle that you are facing at the moment?
- What is stopping you from achieving your goal?

3. Options

The aim of this part of the conversation is for the individual to create a list of as many alternative courses of action as possible. Remember that the individual needs to feel comfortable expressing themselves and opening up.

- What are your options?
- What could you do differently?
- Give me 5 options? Now give me the best 3. Now give me the best 1.
- If anything was possible what would you do?
- What else?
- What do you think you should do first?
- What would be the smallest and easiest step to take first?
- What is the best use of your time at the moment?
- If you could do one thing this week what would it be? What about today?

- If you saw someone else in this situation, what would you suggest they do?
- If you had 50% more confidence, what would you do?

You may also need to counteract any negative responses with further questions, e.g.

The individual might say . . .

- *'It can't be done'*
- *'It can't be done like that'*
- *'It can't be done in that time frame'*
- *'They would never agree to that'*

To which the coach should respond. . .

- *'What if you had enough time?'*
- *'What if this obstacle didn't exist?'*
- *'If you were an expert what would you say the solution was?'*

4. What will you do?

It is important to convert the discussion into a decision on what to do next. Here you are concerned with what is to be done, by whom, when, what obstacles might the individual face, what support they might need and do they have the will to do it?

- What are you going to do in the next 24 hours?
- Which options work best for you?
- Which options are going to be the most helpful to you?
- What actions are you going to take?
- How will you know when you have been successful?
- Who do you need to inform?
- What support do you need?
- On a scale of 1-10 how committed are you to reaching carrying out this activity?
- What will it take to make this a 10?
- How will you feel when you have achieved this goal?

There is also a range of coaching tools which may be useful and involve moving away from using just coaching questions alone. It may be useful to find out about the following:

- The Career Life Line
- The Futures Wheel
- The Wheel
- using scales (similar to what has been used in the above questions)

Further reading

Coaching For Performance – John Whitmore

Coaching and Mentoring at Work – Mary Connor and Julia Pokora

Effective Coaching in Healthcare – Ruth Hadkin

Paper nine

A guide to the legal framework

The legal framework

Links to AoME framework

- ✓ Encourages participation through provision of equality of opportunity and acknowledgement of diversity (Area 2)
- ✓ Ensures that trainees receive the necessary instruction and protection in situations that might expose them to risk (as part of their induction) (Area 2)

The Legal Framework - 1

- Human Rights Act 1998
- Data Protection Act 1998
- Race Relations (Amendment) Act 2000
- Equality Act 2010
- Employment tribunals
- Insurance and Indemnity
- GMC
- European Working Time Directive

EQUALITY ACT 2010

Standardised protection against:

- Direct discrimination
- Indirect discrimination
- Harassment

IMPORTANT TO BEAR IN MIND WHEN TALKING TO, EMAILING OR DEALING WITH ALL COLLEAGUES AND PATIENTS

3 TYPES OF DISCRIMINATION

DIRECT DISCRIMINATION on grounds of:

1. Race/colour
2. Sex
3. Sexual Orientation
4. Gender Reassignment
5. Disability
6. Religion/belief
7. Pregnancy
8. Being married/in a civil partnership
9. Age (including retirement from October 2011)

3 TYPES OF DISCRIMINATION

INDIRECT DISCRIMINATION

- If working rules or practices indirectly disadvantages one person/group for no good reason

e.g. a single trainee with children is suddenly forced to work shifts from 3-11pm, despite objecting due to family commitments

3 TYPES OF DISCRIMINATION

HARASSMENT

- Unwanted conduct which is
 - Ongoing or repeated and which
 - Creates an uncomfortable environment

(The Law prioritises impact over intent)

The Legal Framework - 2

- Lives vs livelihoods
- Appeals
- Employment tribunals
- Indemnity
- The right tools for the job
- Documentation

Transfer of Information Trust to Trust

- PG Dean is Trainee's Responsible Officer (RO)
- Patient safety takes precedence over employee's right to confidentiality
- Trainee has a right to know what is being transferred
- Written communication of factual information – maybe over and above portfolio record
- Special educational needs organised via TPD/Programme lead/PG Dean

Transferring Factual Outcome of Disciplinary

Verbal warning

The triggering event and fact of the warning may be transferred to next Trust

Written warning
and
Final written warning

As above, plus recommend assessment of performance after three months

The trainee should be shown the information passed on

If Contract Ends before a SUI Inquiry is Complete

- Trainee should be encouraged to continue to co-operate from new post
- Recipient Trust should be informed and asked to allow time for attendance at inquiry
- If there is no new employer, and trainee does not agree to co-operate, Deanery will consider reporting to GMC and generating alert letter for viewing by other potential employer

Doctors in Training and the GMC

- Poorly performing trainees normally managed within educational procedures
- GMC may be appropriate if educational procedures exhausted: 'untrainable'
- Sick doctors referred for appropriate help
- Doctors abusing alcohol, drugs to GMC
- Doctors behaving unprofessionally to GMC

Implications of the EWTD

We need to ensure doctors in training:

- Are supported, informed and understand their position regarding the working time regulations
- Appreciate it is in their interests to check they accurately record the hours they work
- Understand that opting out is an individual right and wholly voluntary
- Understand that any opt-out is an agreement between them and their employer in writing
- Understand there is still a 56 hour per week limit

Implications of the EWTD

- Doctors in training working hours are averaged over six months so the 48-hour limit applies to an average of the hours over this period
- Rest requirements must be met for example, 11 hours rest in every 24-hours under EWTD
- Employers have a legal duty to monitor the hours their doctors in training are working
- Trainee doctors are contractually obliged to record their hours accurately.

Response to the trainee in difficulty - Summary

- Investigate the situation
- Careful documentation
- Offer confidential counselling
- Health, conduct, or performance?
- Consider removing from patient care
- Consider new training environment
- Remedial training

Links to AoME framework

- ✓ Encourages participation through provision of equality of opportunity and acknowledgement of diversity (Area 2)
- ✓ Ensures that trainees receive the necessary instruction and protection in situations that might expose them to risk (as part of their induction) (Area 2)

Paper ten

Pre-ARCP checklist for educational supervisors and trainees

By Joint Royal College of Physicians Training Board

Reprinted from

<https://www.jrcptb.org.uk/documents/pre-arcp-checklist-2014> (2015)

Pre-ARCP Checklist for Educational Supervisors and Trainees

This checklist is designed to help trainees and educational supervisors (ES) to prepare for the Annual Review of Competence Progression (ARCP) by ensuring ePortfolio requirements are met. It should be used in conjunction with the specialty curriculum and ARCP decision aid

Updated April 2015

The ARCP decision aid provides information on the targets to be met for each level of training. It is the trainee's responsibility to know the requirements for a successful ARCP outcome. The number of SLEs/WPBAs required on the decision aid is a **minimum** number; the Training Programme Director may expect more for successful ARCP outcome.

The following guidance is available on the JRCPTB website:

- [ARCP decision aids](#)
- [WPBA guidance](#)
- [ePortfolio user guides](#)

Educational Supervisor's responsibilities (via ES login on ePortfolio)

- The ES should check that appraisal meetings have taken place and discuss with the trainee whether the educational objectives have been achieved. The ePortfolio should be kept up to date and regularly reviewed throughout the year.
- The ES should review the ePortfolio to determine whether the trainee has made satisfactory progress. Evidence will include workplace based assessments (WPBAs) / supervised learning events (SLEs), reflective practice and documents stored in the Personal Library.
- Multiple Consultant Report (MCR) - the ES should review the MCR Year Summary Sheet and ensure the minimum number of consultant responses have been received according to the specialty's requirements. The ES should discuss the feedback received with the trainee and plan any remedial action required. A summary of the MCR should be included in the ES report to the ARCP panel.
- If Multi-Source Feedback (MSF) or patient survey has taken place in the training year, the ES should review and release the anonymised results to the trainee and discuss any arising issues. A summary of the outcomes should be recorded in the ES report. **The MSF summary must be released on the ePortfolio to be visible to the ARCP panel.**
- The ES should review a sample of trainee's self-ratings and the linked evidence and then select a rating (from the drop down list). Ideally, this process should take place several times in a training year and may be devolved to clinical supervisors in core medical training. The result of sampling and progress against the curriculum should be recorded in the ES report.
- For practical procedures, the ES should check DOPS evidence demonstrates appropriate progress for the level of the trainee in line with the ARCP decision aid, including summative sign off where required.
- Complete all sections of the Educational Supervisor's (ES) report and provide explanatory comments referring to evidence reviewed. **The ES report must be signed off to be available for the ARCP panel; it will not be visible if saved in draft.**

Trainee responsibilities

- Ensure you are using the correct curriculum. All trainees are required to move to the current version of the curriculum if their CCT date is after 31/12/2015 (please refer to JRCPTB website for [further information](#)).
- Organise a timely appointment with your ES. It is strongly recommended you meet six to eight weeks prior to ARCP to ensure relevant competencies are signed off and that the ePortfolio contains the necessary information for achieving a successful outcome. **The ES report must be signed off and the MSF summary released to be visible to the ARCP panel.**
- WPBAs/SLEs and reflection should be carried out regularly throughout the year. ARCP panels may pre-review your ePortfolio four weeks in advance, so late inputs will be missed. Please note; failure to spread WPBAs throughout the year may result in an unsatisfactory ARCP outcome.
- Ensure the required number of consultants have completed a Multiple Consultant Report (MCR) as agreed with your ES. Each consultant should complete one MCR. Your ES will review the MCR Year Summary Sheet and feedback the results to you and include any actions resulting in the ES report for the ARCP panel. MCR guidance is available on the JRCPTB website WPBA page.
- Ensure your Multi-Source Feedback (MSF) is complete in advance of your ES meeting so that the feedback can be released and discussed.
- It is recommended that you organise your online Personal Library by year (eg ST3) with clear subdivisions (eg management, audit, education and research) to facilitate navigation by ARCP panel.
- Ensure the following items are uploaded to your Personal Library:
 - Patient Survey summary form (if completed in training year)
 - Certificates of attendance at training days
 - Teaching evaluation forms, showing learner feedback on your teaching
- Upload ALS certificates to the 'Certificates' section of your ePortfolio
- Sign and send hard copy of enhanced Form R (essential for revalidation)

With thanks to N Tugnet & E Ntatsaki, Rheumatology SAC



Royal College
of Physicians

Resource pack

Royal College of Physicians
11 St Andrews Place
Regent's Park
London NW1 4LE

Education Department
020 3075 1563/1353
education.courses@rcplondon.ac.uk
www.rcplondon.ac.uk/events