
Integrated competence and the maturing doctor

Rosemary MacDonald

Competence should be “at the heart” of medical practice to ensure patient confidence in health care (Calman, 1996), but what is competence in relation to medical practice?

Competence was ranked first of nine core values needed to guide the medical profession into the 21st century (British Medical Association Health Policy and Economic Research Unit, 1995). The term is used by the General Medical Council (GMC) (1993) in *Tomorrow's Doctors*, the implementation of which heralds radical changes in undergraduate medical education. The Chief Medical Officer (Calman, 1996) wrote: “the exact definition of competence requires further work, but it is at the heart of ensuring that practising doctors in all specialties have the appropriate skills and attributes”.

The “attributes of the independent practitioner” and good medical practice (GMC, 1995) have been formally identified, but the definition of competence remains elusive.

The nub of the implementation of the Chief Medical Officer's report on specialist medical training (Department of Health, 1996) is the assessment of competence, both during and at the end of training. This is the prerequisite for progression, and ultimately recommendation, to the Specialist Training Authority for the award of the Certificate of Completion of Specialist Training (CCST). No doctor may now be appointed to a consultant post without the CCST.

A project, jointly funded by the Department of Further Education and the National Health Service (NHS) Executive is currently endeavouring to identify and gain consensus about “core clinical competencies” of medical graduates (Le Beau, 1998). Once these competencies are identified and agreed, then the question of assessment will need to be addressed. Gaining consensus about methods of

assessment and by whom the assessment is made, will not be easy. A policy for the management of medical students who are assessed as being clinically incompetent will be required.

Specifying competence is the cornerstone of valid assessment along the whole continuum of undergraduate, postgraduate and continuing medical education. A working definition of competence which is explicitly clear is therefore necessary for the medical profession.

Definition of competence

Competence, in medicine, is usually perceived in one of two ways. First, the ability to perform discreet tasks, for example, clinical skills. Second, the ability to utilise knowledge to assist transference of cognitive abilities such as decision-making and problem-solving to new situations, for example, a senior house officer (SHO) in cardiology is taught and then learns to manage cardiac arrhythmias (of cardiac origin); SHOs rotate to nephrology where they transfer their skills to the management of arrhythmias, but these may be of metabolic origin. Thus, they transfer their decision-making and problem-solving abilities to a new situation, informed by their basic knowledge.

This transfer of competence requires integration of knowledge, skills and attitudes necessary for safe effective medical practice, and is underpinned by the development of relevant clinical cognitive processes.

It is this transfer of competence from one clinical situation to another which is indicative of professional performance. Adequate performance

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implies the competence required for the totality of patient care. Continuing with the above clinical example, this would imply development of the capability to treat cardiac arrhythmias of every aetiology in all patients.

Any discussion of performance cannot take place without consideration of the role being performed. The profession has never explicitly defined the differing roles of the various training grades (and within the specialist registrar (SpR) grade, year by year) or of consultants as they progress through the consultant grade to retirement.

Integrated competence

Integrated competence draws together all these constituents and encapsulates the whole of a doctor's performance within the context of provision of patient care. Integrated competence supplements the knowledge and clinical skill requirements with non-clinical skills and attitudes implicit within the role which a doctor has to perform. Integrated competence captures the profession's concepts of being a good doctor (Hager & Gonczi, 1996).

Medical education should, in its broadest sense, ensure that a young graduate glides along a continuum of integrated competence, enhancing the constituents until he or she becomes a mature consultant.

Constituents of integrated competence

A project (Illott & Allen, 1996) to identify the generic or core competencies of SHOs in five specialities (accident and emergency medicine, paediatrics, obstetrics and gynaecology, general surgery and general medicine) produced a remarkable consensus about the role of the SHO as well as a classification of the skills required to perform that role. This can be transferred to any training or career grade doctor within the NHS and shows the proposed constituents of integrated competence (see Box 1).

Knowledge

All doctors require adequate knowledge to enable performance of their role. Basic knowledge must be continually updated as new developments occur. Speciality journals tend to publish annual updates or recent advances. It is often developments in the basic sciences which clinicians find most difficult, for example, molecular biology or clinical genetics.

Each speciality should have insight into the areas which Fellows and Members may find difficult.

Updating knowledge becomes easier with rapid advances in information technology (IT). Literature searches and printouts of relevant original articles and abstracts are easily accomplished – but how many established consultants have the necessary IT expertise? Has time been made available for those who do not have IT as a hobby, to acquire the necessary skills? Who has elucidated the 'pay off' for time invested in acquisition of these skills? Universities have appropriate courses but not all trusts have organised in-house training. Also, senior consultants may feel shy about revealing inadequate IT skills and are not accustomed to multi-professional learning or being taught by a non-medically qualified person. The profession requires a cultural revolution in learning skills. It is sad that so many consultants only become IT literate after

Box 1. Generic (non-speciality specific) constituents of integrated competence

Knowledge (basic sciences)

Epidemiology, prevention, treatment of relevant disease processes (in some specialities this would include detailed knowledge of equipment, investigative processes and their interpretation)

Skills (clinical and non-clinical)

Clinical defined by medical schools, Royal Colleges and faculties

Non-clinical further divided into: personal and professional development, supervisory, managerial

Attitudes (ways of behaving)

Generic: *Duties of a Doctor* (GMC, 1995)

Speciality-specific, e.g. the paediatrician behaves quite differently from the geriatrician towards his or her patients. A surgeon or physician has patients of all age groups and should modify his or her behaviour accordingly

Each speciality should endeavour to gain consensus about all these constituents. Consideration of relevant attitudes and gaining consensus can only be obtained following much debate. Continual revision is necessary as organisations, populations, doctors and patients change

retirement. If only their employing organisations had made time available and been able to motivate them to acquire these skills during employment.

Adults enjoy learning in groups. Therefore, case conferences, morbidity and mortality meetings all help enhance knowledge. Trainees preparing for examinations are a great source of information.

Skills

These can be divided into clinical and non-clinical skills – the latter embraces attitudes.

Clinical skills Identification of relevant clinical skills for graduates and pre-registration house officers (PRHOs) is the responsibility of medical schools – hence the importance of gaining consensus about core clinical competencies expected of our new graduates (Le Beau, 1998).

Medical graduates are required to undertake a PRHO year prior to gaining full registration. Although their salaries are funded by postgraduate deans, PRHOs are employed by trusts. Part of their general clinical training (GMC, 1997a) involves clinical responsibilities for patients. Trusts need to be reassured that these 'new doctors' have attained appropriate clinical competence on graduation.

At the end of the pre-registration year, the new doctors are 'signed up' for full registration by their educational supervisors. This is no longer a mere formality. *The New Doctor* published by the GMC in 1997, which will be implemented by August 2000, demands training for educational supervisors, continuous appraisal and exit assessment of each PRHO. National standards for these processes will be set.

The New Doctor also defines duties no longer appropriate for PRHOs, for example, routine phlebotomy, transport of blood samples and specimens and filing results.

Thus, continuing educational approval of PRHO posts, which is vested in postgraduate deans on behalf of medical schools, makes demands on the trusts in which PRHOs are placed.

Postgraduate deans work very closely with regional task forces who are charged with continuing implementation of *The New Deal* (Department of Health, 1991). This, unfortunately, has become associated merely with hours worked, rather than the appropriateness of tasks performed by postgraduate trainees and their living and working conditions. It is a sad commentary if a speciality sincerely believes that young doctors should be required to work and be on-call for up to 100 hours a week in order to gain adequate experience and training.

Identification of clinical skills for SHOs and SpRs is the responsibility of Royal Colleges and Faculties,

all of whom have now published curricula. All these curricula also detail the non-clinical skill requirements of trainees.

While trusts can be assured of the clinical skills of trainees acquiring the CCST, what happens to consultants as the years progress? What provision is there for them?

Non-clinical skills Non-clinical skills can be further sub-divided into personal and professional development, supervisory and managerial.

All publications relating to medical education attempt to define the knowledge, skills and attitudes appropriate for trainees. Attitudes, that is, ways of behaving, can be encompassed by consideration of these non-clinical skills as follows.

Personal and professional development implies optimisation of formal and informal learning opportunities, at all stages of a doctor's career, and embraces the process of maturing as a professional, as well as a person. Implicit within personal and professional development are attitudes towards patients, relatives and other staff involved in patient care. Generic professional attitudes are described in *Duties of a Doctor* (GMC, 1995). Speciality-specific attitudes are gradually being identified and defined by relevant Royal Colleges and faculties. Trusts are required to produce 'mission statements' in which the attitudes and behaviour of their staff towards patients are defined. The profession has tended to eschew this. However, each department might benefit from spending a department meeting or similar occasion defining attitudes and the professional and developmental skills expected of its members, for example, enthusiasm, initiative and respect for colleagues. This would then be useful in appraisal and assessment processes. There may be very good reasons why a maturing consultant loses initiative or enthusiasm. When this occurs, investigation is necessary – is it caused by personal anxieties, health problems or is a holiday necessary? We all can become jaded by the daily routine.

Supervision is a basic foundation of medical education and is part of the hereditary nature of education in our profession. We 'inherit' clinical and non-clinical skills. How often do we remember watching a more senior person handle a difficult situation? We look, listen and learn. Positive and negative role modelling play a part in medical education.

Supervisory skills are essential if continuing medical education is really going to be effective, because consultants may be required to supervise other consultants, whether more junior or senior.

Continuing medical education is available in our own departments. Why is it so difficult for us to accept a culture of learning from one another?

Why cannot consultants spend time with other consultants in a mutually supportive manner? For instance, a colleague in one branch of psychiatry recently undertook a sabbatical in another branch of psychiatry, working with a more junior consultant. Both benefited from the experience.

Pride, prejudice and professional jealousy have no place in continuing medical education. Implementation of the GMC's *Performance Procedures* (GMC, 1997b) means that more consultants will be required to undertake more training – supervised either by other consultants or by non-medical staff, if it is their non-clinical skills which have been found to be lacking. Supervisory skills will become more important in this situation.

Managerial skills imply management of the individual workload while being an equal member and leader in different teams at different times, for example, clinical teams and managerial teams.

Each speciality should identify 'speciality-specific' managerial skills. Basic examples are: an ability to manage equipment in anaesthesia; organisational skills in community-based specialities; prioritisation skills in accident and emergency medicine. Again, departments might find it worthwhile to address the issue of essential and desirable managerial skills for all members of staff.

Assessment of competence or integrated competence

Each speciality should identify a minimal standard for each constituent of integrated competence. A doctor falling below that minimal standard should not progress to the next stage in training, even if he or she excels in other areas. For example, a lack of operative ability and inadequate spatial orientation in a surgical trainee, may deny progression even if the individual's knowledge is great. The anaesthetist who cannot tolerate the foibles of surgeons or the obstetrician who overtly dislikes women may have to reconsider his or her choice of speciality.

Speciality-specific portfolios of integrated competence need be devised – not only for trainees but for consultants and other career grade doctors.

Continuing education and development

Continuing medical education and continuing professional development are similar, but not identical. Education implies a 'broadening', a

'flourishing' of the personality. For the maturing consultant, this is as important as professional development. The latter more accurately reflects the changing or maturing role of the consultant within the organisation in which he or she provides a service for patients, and education and training for other members of staff. A young consultant may be able to teach others much about molecular biology or neuropharmacology. The mature consultant can draw upon his or her experience, that is, professional development, to mould the attitudes of those more junior. Continuing medical education and continuing professional development are complementary.

Robert Louis Stevenson wrote in *El Dorado*: "to travel hopefully is a better thing than to arrive, and the true success is to labour". Consultants must continue to travel hopefully. Success will be assured as a result of labouring at enjoyment as well as labouring medically. Stevenson again: "there is no duty we so much underrate as the duty of being happy". Unfortunately this quotation is from *An Apology for Idlers*. Again, the culture of the profession needs to acknowledge that a 24-hour-a-day commitment is not necessarily best for patients. Anhedonia is not essential to be a good doctor.

The main challenge for continuing medical education and professional development is constantly to enhance the knowledge, skills and attitudes of a doctor to enable performance, both as a doctor and as a person.

Unfortunately, the words attitudes and attributes are frequently used synonymously, thus masking subtle differences. In general, the word attitude implies 'a way of behaving' and attributes describe 'individual qualities or characteristics'. Insight into an individual's natural attributes may help his or her career choice, the Meyers/Briggs Type Indicator (Meyers & Briggs, 1998) may be helpful. Attitude can be refined and honed with care, but inevitably will be affected by an individual's attributes – all of which in turn relate to maturity and life experiences. Insight is necessary.

Continuing medical education implies continuous change, developing maturity both as an individual and as a professional; intellect, personality and interests are not disparate domains but overlapping traits. Ackerman & Heggstad (1997) wrote: "abilities, interests and personality develop in tandem such that ability level and personality dispositions determine the probability of success in a particular task domain and interests determine the motivation to attempt the task". The construct 'intellectence' is of great relevance to continuing medical education and is not dissimilar to integrated competence, the constituents of integrated competence are threefold – knowledge, skills (clinical

and non-clinical) and attitudes. Intellectence is intellect, personality and interests. All are necessary for continuing medical education and continuing professional development. The shrewd appraiser will capitalise on his or her knowledge of the personality and interests of the appraisee and should provide the motivation for success.

Promotion of development of integrated competence

All constituent organisations of the NHS should endeavour to develop an ambience in which all members of staff are valued. Deanery visits to assess PRHO posts for educational approval continually reveal that some PRHOs feel grossly undervalued, causing low morale and self-esteem. The attitudes of organisations frequently extinguish the enthusiasm of new doctors, for example, poor accommodation or poor provision of food and refreshments out of hours. Sadly, my visits have also revealed low morale among consultants. This is possibly linked to the fact that consultants are being expected to perform many more roles, managerial as well as educational. Continual change does not afford a stable platform from which to learn to rehearse and perform these additional roles, but perhaps we have to accept that the only constancy is continuous change. This is difficult to maintain, everyone needs time to accept change.

Non-clinical competencies should increase with maturity – enhanced by both life and professional experience. Even disastrous life experiences, if properly managed, can be used to care for others in similar circumstances, but doctors must have the support of colleagues during difficult personal events.

Continuing professional development implies a continually changing role – the maturing consultant metamorphoses from a ‘doer’ to a doer, leader, organiser, counsellor and opinion leader. There is a multitude of opportunities as the consultant matures clinically and non-clinically, the two in synchrony. What if asynchronisation occurs? If the practice of non-clinical skills adversely affects the practice of clinical skills, rationalisation of commitments may be necessary, either clinical or non-clinical. It is essential that each speciality addresses the role of the maturing consultant. We do not all grow old gracefully!

Staff appraisal and development schemes should be for consultants, not just nursing and managerial staff. The new educational processes being put in place for PRHOs, SHOs and SpRs affords much support. Little is available for consultants. The medical profession needs to address mechanisms

for support of consultants throughout their career. Consequently, in each department there may be more than one appraiser. A young consultant requires an appraiser to share problems and clinical anxieties: he or she may also need much advice on ‘how to get the system to work for the patients’. At times a manager may be required to be the appraiser. The maturing consultant will require someone senior in the organisation – sometimes a member of the medical profession, sometimes a senior manager. This is a challenging area for the medical profession – we are just dipping our toes into the world of appraisal and assessment.

The medical profession is very suspicious of non-medically qualified appraisers – thoughts of performance-related pay are dominant. Many senior staff in the NHS have acquired the necessary skills by virtue of their career path. Professional barriers must be broken down.

Those appraising staff grade doctors and associate specialists should have knowledge of the clinical service, the organisation, and must be able to effect the necessary changes for these people who give such a valuable service. Continuing medical education with credits and points will not suffice. This does not embrace the development of integrated competence and intellectence.

Integrated competence and continuing medical education

All medical students should graduate with core clinical competencies which will metamorphose into speciality-specific clinical competencies. Core competencies may diminish as a consultant matures and competencies which are not regularly practised will wane.

Specific competencies should blossom with experience, although increased competence in specialisation may narrow these too. Competencies in ‘high-tech’ specialities necessitating great hand to eye coordination and spatial orientation may diminish, but other competencies will develop with experience. Reviews of ‘job plans’ should take account of this.

Proposed framework for appraisal

Figure 1 illustrates a proposed skeleton framework for appraisal and assessment. Each speciality will

add to this skeleton. Informal sessions with some speciality groupings have proved productive. The framework can be used for trainees and doctors, both consultant and non-consultant career grades. The latter group, staff grade doctors and associate specialists, deserve the same continuing professional development processes.

One advantage of this framework is that it can also be used by the doctor being appraised or assessed, to give feedback to the appraiser or assessor. The framework is also suitable as a basis for feedback to organisations, for example, within the trust is there the knowledge, skills (clinical and non-clinical) and attitudes to enable the doctors adequately to perform their roles in relation to patient care throughout their careers? None of us works in isolation – is there adequate clinical support? What about non-clinical support? Car-parking facilities and secretarial help could be incorporated into the framework!

This framework has been used successfully within the deanery and three examples are described.

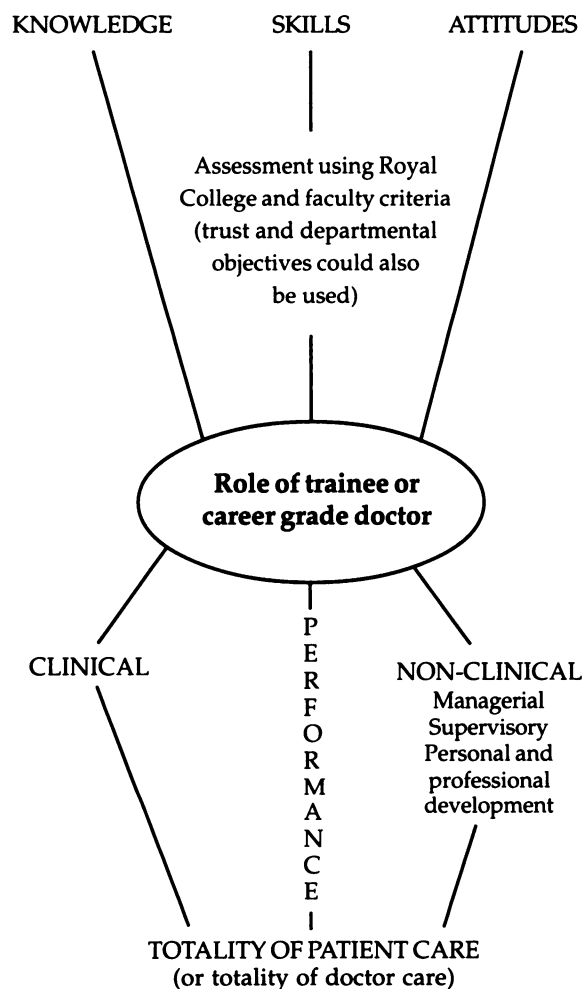


Fig. 1 Integrated competence framework for assessment

These are an amalgam of the many trainees with problems for whom the deanery provides support and in no ordinary way reflects individual trainees.

A male trainee appeared on the wards with a multitude of ear, nose and eyebrow rings: his green hair appeared luminous. The trust served a very conservative population of elderly persons. Complaints ensued. Otherwise, the trainee was satisfactory. His appearance was discussed within the framework – giving positive feedback as appropriate. The trainee did not take offence. His appearance became more acceptable.

A female trainee had just come to terms with her sexual orientation which she pursued enthusiastically. Complaints from the female nursing staff ensued. This was discussed within the framework. Counselling and mentoring was offered and accepted. The trainee is progressing well, professionally and personally.

A very bright trainee with more than adequate knowledge and clinical skills, repeatedly failed a postgraduate exam. He had an impatient attitude towards patients and the nursing staff. The first annual assessment without a framework ended in a robust altercation between the trainee and his assessors. The second assessment was more orderly, especially as a therapeutic plan for management of the trainee had been devised in advance. He accepted this, along with the offer of a mentor, and spent time with an educationalist who advised him about his revision plans. He now accepts that he has difficulty working within organisations and once his exam pass is secure, he may seek an alternative speciality. In the meantime, at least those responsible for his education and training, are having a productive dialogue.

Occasionally, firmness is required and, surprisingly, may be appreciated by the person being advised.

Appraising career grade doctors

The role of appraiser or assessor should not be vested automatically in formal positions such as clinical director or college tutor. Instead the role should be vested in a member of the organisation with the attitudes and attributes necessary to be a good appraiser or assessor. Such a person should have the confidence of his or her colleagues and also have appropriate training.

Time

We cannot develop professionally in isolation. Continuous professional and social interaction with

a wide range of individuals enhances continuing medical education. Exposure to young doctors, albeit at times frustrating as they challenge our knowledge, skills and attitudes (and prejudices) promotes, almost invisibly, our continuing medical and non-medical education.

The main prerequisite for continuing professional development is time: time to stand still clinically and non-clinically; occasionally to be an observer instead of a key player. Participation in non-medical activities – music, literature, the arts and sport all enhance professional development. Interaction with non-medical professionals helps us realise that our problems are not unique.

Finally, the NHS should consider sabbatical leave for all permanent staff. The majority of permanent staff give much to the NHS: time lost in sabbaticals would be regained by the enhanced performance of staff – refreshed, replenished, enthusiastic and brimming with ideas.

My views and ideas have been accrued during many years practising a high-tech specialty and my time as a postgraduate dean. I do not offer a 'quick fix', but I hope to challenge readers to think, debate and formulate plans for development of the integrated competence of consultants, not just in psychiatry but in other specialities. Prevention is better than cure – avoidance of professional consultations from your colleagues will reduce your workload.

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