14 Management: Maintaining performance, learning and teaching

This competency area is about maintaining the performance and effective continuing professional development of oneself and others

This is the longest chapter in the book, which gives you some idea of its importance. Although the profession worries a great deal about performance, it is telling that it is not uppermost in patients' minds. This may be partly because patients don't know quite what to look for, but it is also because they assume that keeping up to date and maintaining our performance will be so important to us that they can take it for granted. Do we as a profession and you as a doctor live up to this assumption?

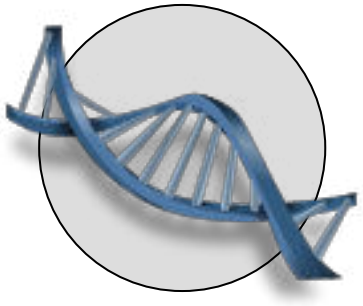
Maintaining our medical performance is no different to maintaining our physical or mental performance. Think of it as 'health promotion' but with the added dimension that we are doing it partly for ourselves but mostly because others may come to harm if we don't.

What does this mean in practice? Performance, like health promotion, is not just about having good intentions; anyone can give up smoking once they've been told they have lung cancer. Maintaining performance is about respecting its importance to those dependent upon us, having the commitment to do something regularly and having a mechanism for doing so.

The *mechanism* is vital, because it underpins performance. This section is part of the 'Management' section of this book because it concerns our ability to *manage ourselves by monitoring* our performance, learning and development in all relevant areas, and therefore maintain the capacity to keep working throughout our careers at a sufficiently effective and safe level.

Why do we need a mechanism? This is because no matter how good our self-awareness might be, we can't rely upon it as the only trigger that prompts us to learn. 'Patient harm' is like an iceberg. By the time we become aware of the tip, most of the harm has been done. By having a mechanism to monitor ourselves and keep up to date even when we are not prompted to do so, we keep the 'Sea of performance' warmer and don't allow so many icebergs to form.

Joined up?
See p14



Which aspects of our DNA, our deeper features, are particularly important in maintaining performance, learning and teaching? If we look back at the competencies for the 'Management section (page 118-120), we see that learning and personal development skills are particularly important, followed by team working skills.

Let us look at the competencies that are being tested in this section:

Needs Further Development	Competent for licensing	Excellent	
Accesses the available evidence, including the medical literature, clinical performance standards and guidelines for patient care.	Judges the weight of evidence, using critical appraisal skills and an understanding of basic statistical terms, to inform decision-making.	Uses professional judgement to decide when to initiate and develop protocols and when to challenge their use. Moves beyond the use of existing evidence toward initiating and collaborating in research that addresses unanswered questions.	**1**

This first competency progression is about how we engage with evidence-based practice and illustrates how we move from:

Understanding the importance of accessing the available evidence, and doing so routinely. In addition, knowing what question to ask, where to look and doing so effectively and in a timely manner.

No longer simply *accepting* what is written , but using critical appraisal skills to decide whether what is suggested is valid and important enough to act upon.

Using critical appraisal and evidence-based skills to challenge recommendations that do not appear valid. Additionally, spotting the gaps and suggesting where protocols need to be developed or research needs to be initiated and being prepared to play a part in this process.

Looking at each of the word pictures in turn:

Accesses the available evidence, including the medical literature, clinical performance standards and guidelines for patient care

Evidence-based medicine is the cornerstone of modern medical practice and an important part of maintaining performance is to make routine use of it. Firstly, a word of warning. As we have seen elsewhere in this book (page 105), the evidence upon which recommendations (particularly therapeutic) are made, often come from secondary care settings where patients used in studies may not be representative of those seen in primary care. For example, many of the early recommendations on antidepressant therapy came from studies on inpatients with severe depression who were selected because they not have significant additional problems such as anxiety or alcoholism. However, in primary care, most patients who are treated for depression have mild/moderate forms of the condition and usually have significant co-morbidity. Mixed anxiety/depression is very common as is alcohol abuse, which can both be a cause and a result of the condition.

This does not mean that evidence should be disregarded, but the example shows that we need a sophisticated understanding of evidence-based medicine in order to apply the recommendations appropriately and challenge them when inappropriate, rather than following them unthinkingly.

The curriculum identifies the importance of being aware of relevant national guidelines. If you can't recall whether a guideline exists, a quick Internet search is often worth doing as a check. To make any sense of the outcome of a search, we need to know which guidelines are more authoritative or trustworthy than others. We will consider this in more detail later. Here are a few examples of what the curriculum recommends regarding searching EBM, the areas where evidence is important and key guidelines we should be aware of and use:

Searching

Be able to use decision support to make their interventions evidence-based e.g. Cochrane, PRODIGY, etc.
Search the internet for medical and scientific information including MEDLINE

Demonstrate understanding that evidence needs to be gathered from the most appropriate, rather than the most readily available source. You should be able to determine whether the evidence is sufficient and rigorous enough to be analysed in the context of a patient.

Guidelines

ENT: diagnosis and treatment, particularly with respect to ENT interventions of dubious efficacy. Having an evidence- based approach to antibiotic prescribing, to prevent the development of resistance e.g. otitis media.
Respiratory: BTS / SIGN guidelines on asthma management, the NICE guidelines on COPD management
Neurology: NICE guidelines on epilepsy diagnosis and management
Oncology: Knowledge of cancer treatment trials and how to inform patients about their participation
Musculoskeletal e.g. the NICE guidelines, RCGP low back pain guidelines, SIGN guidelines
Cardiovascular: NICE guidelines, British Hypertension Society Joint Committee recommendations, National frameworks and quality markers
Metabolic: Describe the role of particular groups of medication in the management of diabetes (e.g. antiplatelet drugs, angiotension converting enzyme inhibitors, angiotensin-II receptor antagonists, and lipid lowering therapies). Describe the key research findings that influence management of metabolic problems (e.g. UKPDS, DCCT
Mental health: adopting a critical and research-based approach to practice is particularly important in mental health, where evidence on effective treatment may be of poor quality.

Discussion point: obtaining evidence of 'accessing the available evidence'

You should be familiar with the relevant search engines/ websites that are commonly used. If the practice has not done this for you, you may wish to add some to your Internet 'favourites'.

Try to involve patients when you do searches during the consultation by showing them what you are looking for and discussing your interpretation of what you read. This is good practice in helping to develop your critical appraisal skills, and (if appropriately explained) enhances patient understanding and trust.

Patients are generally more confident of doctors who check by looking things up than those who appear to know it all. In addition, accessed material is sometimes useful to print off for the patient.

Assessors may see evidence of 'access' by observing your consultations.

Other issues

Being aware that recommendations may change across the four countries of the UK.

In the modern world and particularly medicine, we are bombarded with information so a key skill in 'accessing the available evidence' is knowing which articles are worth taking the time to read and which should be ignored. This process is sometimes called 'literature triage' and it can save a great deal of time to have a rational way of approaching it. Although the original article is not shown here, we can illustrate some of the principles of critical appraisal through an analysis of a paper in the following section.

Suppose we were interested in developments in the contraceptive pill and we saw an article on the combined pill, Yasmin, published in the drug and therapeutics bulletin. The manufacturer suggests that this pill has positive lifestyle effects, particularly on weight, acne and quality of life. How could we decide whether the article was worth reading in depth?

Is this article worth taking the time to review in depth? ***A 'stop' or 'pause' answer to any of the following should prompt you to question seriously whether you should spend the time to review the article critically***		
Is the article from a peer-reviewed journal? *Articles published in a peer-reviewed journal have already gone through an extensive review and editing process.* Yes: the drug & therapeutics bulletin is an independent review from the consumers association. Peer review indicates that the article has been assessed before publication. I am more likely to trust the results. Because the drug & therapeutics bulletin is independent, their opinion is impartial, unlike publications sponsored by drug companies and special-interest groups who will wish to put their own spin on the results	Yes (go on)	No (stop)
Is the location of the study similar to mine so the results, if valid, would apply to my practice? The review does not talk about the populations in this detail. The difference between populations would be important to know in certain situations (for example, lifestyle advice in Kensington would not be the same as in Barnsley!). However, Pill advice is likely to be the same in any community-it is not particularly different for different ethnic groups, for example. For this reason, the fact that populations are not defined more explicitly doesn't really matter.	Yes (go on)	No (pause)
Is the study sponsored by an organization that might influence the study design or results? *Read the conclusion of the abstract to determine relevance.* See notes above. The important thing is that the organisation is impartial.	Yes (pause)	No (go on)

Could this information, if true, be important to the way I practice? I have to decide whether the information is important to me, i.e. whether it might have an effect on the way I practice. Equally, the condition should be considered important by my *patients*. However, they may not always be aware of what might be important to their health. In this situation, I might be influenced to read this article as my patients are already asking about this pill, so it is obviously important to them. If papers relate to areas of practice that I don't have responsibility for, it is probably not worth my while reading further although it may be worth making a colleague aware.	Yes (go on)	No (stop)
Is the intervention feasible and available to me? Sometimes, changes are recommended but the treatment that is being suggested is not available. For example, if Yasmin was not prescribable then this article would only be of academic interest. In this instance, I have responsibility in the family planning clinic and am able to make recommendations about treatment to my colleagues. Therefore, it is worth my while reading further.	Yes (go on)	No (stop)
Will this information, if true, require me to change my current practice? Yes. However, I have to remember that research must first be *statistically* significant. If it is significant (meaning that the beneficial effects are not just down to chance alone), I have to then decide whether it is also *clinically* significant. For example, any claims for lack of weight gain have to be put into perspective. Small amounts may not justify a change in treatment. If the results ***are*** clinically significant, I also need to think about whether they are *cost-effective* and whether the new treatment would be *acceptable* to patients. For example, Yasmin may have problematic side-effects of its own.	Yes (go on)	No (stop)

Judges the weight of evidence, using critical appraisal skills and an understanding of basic statistical terms, to inform decision-making.

Most doctors recognise the importance of critical appraisal, but many feel insecure about using these skills. With many of the best available guidelines, a critical appraisal process has already been carried out and so the need for practitioners to do so independently, becomes less necessary. However, as we have discussed above, doctors routinely access a wide range of material some of which is dubious value and most of wish has not been triaged. In addition, patients increasingly come with 'evidence' which without some knowledge of critical appraisal, we are in a poor position to evaluate, use or recommend.

In the previous section, we looked at how to decide whether an article is worth studying in depth. Let's continue this thought process by now considering whether the Yasmin article that we read is worth acting upon.

The table overleaf shows that although involved, the process of critical appraisal is not double-Dutch and it does have a useful outcome. Being able to reason in this way will become increasingly important as we become more involved in how finite resources are used at local level.

Tip: developing critical appraisal skills and obtaining evidence

Critical appraisal can seem abstract and therefore of low priority. The secret to developing the appropriate skills is to learn them in the appropriate practical context rather than simply from the books. That way, you will see their value and develop the *motivation* to want to be competent in this area.

Most practices have access to a prescribing adviser and these colleagues often have practical critical appraisal skills that they can share with you. Make time to discuss the issues they are working on in the practice and find out how critical appraisal helps them to give the appropriate advice.

Additionally, you could use the table shown in the text as a pro forma to work through, for example, with information on a new therapy. The *prescribing adviser could also provide evidence of your ability* that you could use for your portfolio.

Some practitioners get together to do a journal club, perhaps as part of a wider clinical meeting. Try taking an interesting article along and presenting a brief critique using the relevant parts of the table as a guide.

If the article passes the initial screening discussed previously, proceed with the following critical assessment by reading the methods section. ***A 'stop' answer to any of the following should prompt you to question seriously whether the results of the study are valid and whether you should use this new drug***		
Is the study a randomized controlled trial? a. How were patients selected for the trial? b. Were they properly randomized into groups using concealed assignment? At the top of the hierarchy of evidence in EBM is the randomised controlled trial. This is placed highest because the greatest efforts are taken to reduce bias. From the general population, patients are divided into those who receive the intervention and those who do not, by a process called randomisation. This reduces the bias that might occur if researchers decided who got the new treatment and who didn't (perhaps based on who they thought might benefit and who would not). Articles at the bottom of the hierarchy (case reports) take no steps to reduce bias and therefore are less likely to be acted upon, because they are anecdotal. There are exceptions to this when, for example, case reports suggest an important outcome such as mortality or severe morbidity following the use of a drug. The Yasmin report selects randomised controlled trials only, so I am more likely to take notice of the recommendations. The numbers involved were large (a good thing as this makes the results more likely to be definitive). The studies were *not* designed to test 'well-being' defined by the manufacturers as 'no associated weight gain, a positive effect on pre-menstrual symptoms and skin condition'. In fact, the studies were designed to look at inter-menstrual bleeding. This makes me suspicious that the manufacturer's claims that Yasmin produces greater well-being, may not be well-founded.	Yes (go on)	No (stop)
Are the patients in the study similar to mine? European study. This probably reflects my own population, as the number of ethnic minority groups in my locality is not high. This may not have been the case if I was working in an inner-city practice	Yes (go on)	No (stop)
Was everyone involved in the study (participants and investigators) 'blind' to treatment? Two published non-blinded trials were used. Blinding (where researchers and patients were not aware of who was receiving which treatment) would have been better in reducing bias.	Yes	No
Were the groups treated in the same way (aside from the experimental intervention)? We don't know. For example, some patients may have been given dietary advice to reduce weight. The weight loss noted in the study may have been due to this rather than Yasmin. The reviewers also comment that weight was measured by patients themselves (not by the researchers). The women were aware of which pill they were taking. This might have had an effect. For example, if they were expecting the new pill to help with weight reduction they may have mis-reported their weight	Yes	No

Are the results clinically as well as statistically significant? Were the outcomes measured, clinically important? Although not as medically important as, say, cardiovascular effects, the other outcomes are very important to patients and are therefore clinically important to me. There were problems with the outcomes, as follows: Weight was self-reported. The amount of weight loss was not clinically significant although it was statistically significant. Acne was not defined, so it is hard to say how much clinical improvement occurred. Again, how pre-menstrual symptoms were reported is not defined. The report doesn't state how severe the symptoms were, therefore we cannot say how clinically significant they were. Quality of life was measured by questionnaire. How this group was selected is not made clear. Only 10% of the potential study population actually completed a questionnaire. This is too small to be a representative sample. Cardiovascular effects were reported by levels of cholesterol and triglyceride rather than clinical outcomes, which would have been more meaningful.	Yes	No
Were there other factors that might have affected the outcome? The studies were not designed to look at lifestyle effects. The researchers would probably not have thought carefully about how weight, skin condition and quality of life should be assessed. This is reflected in the fact that there are many problems (listed above) with how these factors were actually analysed. The manufacturers are seeking to use information from trials retrospectively to make a claim that is probably unjustified from the results.	Yes	No
Are the treatment benefits worth the potential harms and costs? No, as the drug and therapeutics reviewers make clear in their conclusion	Yes	No

The curriculum guides us that we need to understand the fundamentals of statistics such as the p value, incidence, prevalence, NNT (Number needed to treat), sensitivity and specificity of a test.

This terminology relates to *quantitative* studies. Of course, many questions don't have numerical answers and particularly in general practice where patient outcomes are complicated and not easily measurable, research often needs to be qualitative. *Qualitative* research in general practice may appear 'woolly' and even frustrating, because it produces grey rather than black and white outcomes. However, taken cumulatively, this type of research can guide us best because it can address the questions that most concern us in the community. For example, in the treatment of otitis media, we are more interested in whether fever, days off school and long-term complications such as deafness are reduced, than in whether a particular bacterium has been eradicated.

We've now considered how doctors can access the evidence and judge its weight. The point of this information, as this competency states, is to inform decision-making. In doing so, it's important not to use EBM in isolation. We must take into

account other factors that influence the decision, which include the patient's health beliefs and values.

The curriculum speaks of recognising the use of value-judgements to complement the evidence-based approach. This dual approach is explained in the curriculum statement 'clinical ethics and values-based practice' in more detail. Here are some practical examples of how the two concepts work together in helping doctors to arrive at the best decisions:

- Having an awareness of the range of values that may influence a patient's behaviour or decision-making in relation to his or her illness
- Knowing how to integrate knowledge of patients' values with the relevant scientific evidence and clinical experience to achieve the best outcome for the patient
- Having the ability to recognise the ethical issues raised by public health programmes and develop appropriate approaches to their implementation
- Being aware of tensions between science and politics of screening, which may colour the recommendations being made.

Uses professional judgement to decide when to initiate and develop protocols and when to challenge their use.

As we discovered, the critical appraisal process allows us to see when research guidance is or is not appropriate or applicable to practice. Once we have adequate skills to critique documents well enough, we are in a position to achieve this level of excellence.

Increasingly, the documents that most powerfully influence (some would say, constrain) medical management are in the form of guidelines or protocols. Although these documents look authoritative, it's important that we do not simply accept them at face value, but question their validity in primary care.

Guidelines have been defined as

'Systematically developed statements to assist practitioner decisions about appropriate health care for specific clinical circumstances'.

The ***benefits of guidelines*** are to make the process of decision-making more objective and transparent, to systematically introduce evidence-based decision-making, and to act as an assessment yardstick for use by patients, doctors and supervisors.

The ***problems with guidelines*** are that they may not be objective but reflect expert opinion, they may inhibit innovation and cause practices to 'regress to the mean', and that they may not be applicable at local level or within our own practices. Once again, there is a systematic way of critiquing the guidelines, and when we do so the following areas should be carefully thought about:

Choice of topic
Are the guidelines dealing with an important-enough topic? The topic should concern a high-volume, high-risk or high-cost issue. There may be large or unexplained variations in practice. There should be potential for improvement with the likelihood that there will be interest from professionals and benefits for patient care.

Objective
The nature of the health problem, the subjects and setting as well as the providers of care should be stated.

Options
The various approaches to dealing with the problem that were considered in the development of the guidelines should be discussed.

Outcomes
The health and economic outcomes used to compare the clinical practice options should be stated.

Evidence
How the evidence was gathered, selected and collated and by whom, should be known.

Benefits, Harms, Costs
These should be considered from the perspective of both the provider and the patient.

Validity and Applicability
- How strong is the evidence on which the guidelines are formulated?
- Are the guidelines applicable to general practice (or were they developed for use in secondary care?)
- Are the guidelines comprehensive? They should deal with most clinical eventualities. To be useful, guidelines should help us manage patients who fall outside the clinical mainstream.
- Are the guidelines feasible? Can I implement them in my practice, do I have the resources and would they be acceptable to my patients?
- Have the guidelines been validated by external review or clinical testing?

Sponsors
Is there a conflict of interest (such as pharmaceutical sponsorship) that may influence the applicability of these guidelines?

Authors
Look for objectivity. Paradoxically, experts are less objective at appraising evidence in their own specialty than in someone else's.

The closer to home the development of the guidelines has been, the more likely you are to implement them, both because you may have greater ownership of the development process and because the recommendations may be more applicable to your own population.

Moves beyond the use of existing evidence toward initiating and collaborating in research that addresses unanswered questions.

In general practice, unlike secondary care, research is not yet embedded as a routine part of our activity. This seems paradoxical considering the concerns we have about transferring hospital based evidence to primary care settings. However, the hope is that the situation will change in the coming years in line with changes to GP training. Certainly, there is no shortage of important research questions that we could ask!

This competency, at present in the 'excellent' category, describes how we show and apply our intellectual curiosity. To get into this mindset, try to move beyond asking yourself 'What?' and instead ask 'Why?' and 'What if…..?'

Although the vast majority of us will not become researchers, we can fulfil a vital function by facilitating research in primary care so that the evidence-base of the future is tailored to our needs rather than being imported from less suitable contexts. For example, we might allow bone fide researchers access to our patients to seek consent for studies or else we might participate in multi-centre trials on, for example, the treatment of asthma.

Establishing links with the research community also means that we can generate questions that the researchers may choose to investigate.

Needs Further Development	Competent for licensing	Excellent
Routinely engages in study to keep abreast of evolving clinical practice and contemporary medical issues.	Shows a commitment to professional development through reflection on performance and the identification of and attention to learning needs. Evaluates the process of learning so as to make future learning cycles more effective.	Systematically evaluates performance against external standards, using this information to inform peer discussion. Demonstrates how elements of personal development are related to the needs of the organisation. Uses the mechanism of professional development to aid career planning.

2

The second competency progression is thought by many educators to be the most important in this area of performance. It relates to the mechanism and effectiveness of learning and continuing professional development. The word pictures describe how we move from:

Putting time aside to keep up-to-date and doing so routinely

Beyond keeping up-to-date, being able to identify learning needs, act upon these and progressively become a more effective independent learner

Using learning in a wider context as part of the mechanism for maintaining standards, contributing to the performance of the organisation and helping career progression

Looking at each of the word pictures in turn:

Routinely engages in study to keep abreast of evolving clinical practice and contemporary medical issues.

At this basic level of performance, we have to have a systematic way of keeping up -to-date. Note that the competency is not about demonstrating clinical competence, but about showing that we have a *mechanism* of doing so.

Shows a commitment to professional development through reflection on performance and the identification of and attention to learning needs.

These attitudes and skills are so important that without them, safe practice is not possible, which is why they are highly rated by trainers and assessors. Changes to contemporary practice are always occurring and without a CPD mechanism, even doctors who at the time of licensing are well above average, will quickly become significantly underperforming. CPD may therefore be analogous to walking up an escalator that is going down. Stop moving and you go down, walk faster and you go up. A minimum is perhaps to walk fast enough to stay at the 'good enough' level.

It's a fact that competence decays over time without some mechanism of rectification. It also a fact that ***competence decays much more quickly than confidence***, which means that you may *feel* that you are up-to-date even when colleagues recognise, or the data suggests, that you are not.

This competency refers to two elements. Firstly, the need to reflect upon performance, which means that there must be some way in which we collect information on our performance (particularly the feedback of assessors) and try to evaluate what this means. How does this accord with our own self-assessment? The difference between what others think of us what we think of ourselves, is a measure of our **insight**. Provided that we are being honest when we make our self-assessment, the *gap* tells us something important about ourselves. Once again, doctors who underperform in the eyes of others, tend to rate themselves more highly than others do or in other words, their insight into their own performance is relatively poor.

The reason that this is important is that in independent practice, doctors depend upon good insight in order to pick up on *minor* aberrations and deal with these before they become major ones. Minor aberrations (i.e. small differences between what they do and what is generally held to be acceptable) are unlikely to be picked up by colleagues, which is why insight, having an effective CPD mechanism and the motivation to improve are critically important. If these are not in place, problems will not be recognised until they are large, by which time patient safety may already have been compromised and the corrective action that is needed may be significant. We might summarise this point by saying that insight is better than hindsight!

Additionally and importantly, the problems that we have to grapple with in primary care are complex and don't have their answers in textbooks. Insight is therefore vital in order for the right questions to be asked after which an effective learning mechanism is needed for them to be translated to answers that can help patient management.

Developing insight is important, but how do we attend to our learning needs? This is the second part of the competency. The schemata shown overleaf was produced for use by independent practitioners when writing their personal development plans (PDP) for NHS appraisal. The principles apply just as well to trainees, who, being NHS employees, are also required to undertake appraisal. With trainees, learning plans are reviewed more frequently and the amount of objective evidence of performance is rather greater than is usually available for independent practitioners,

Tip: evidence on keeping up-to-date

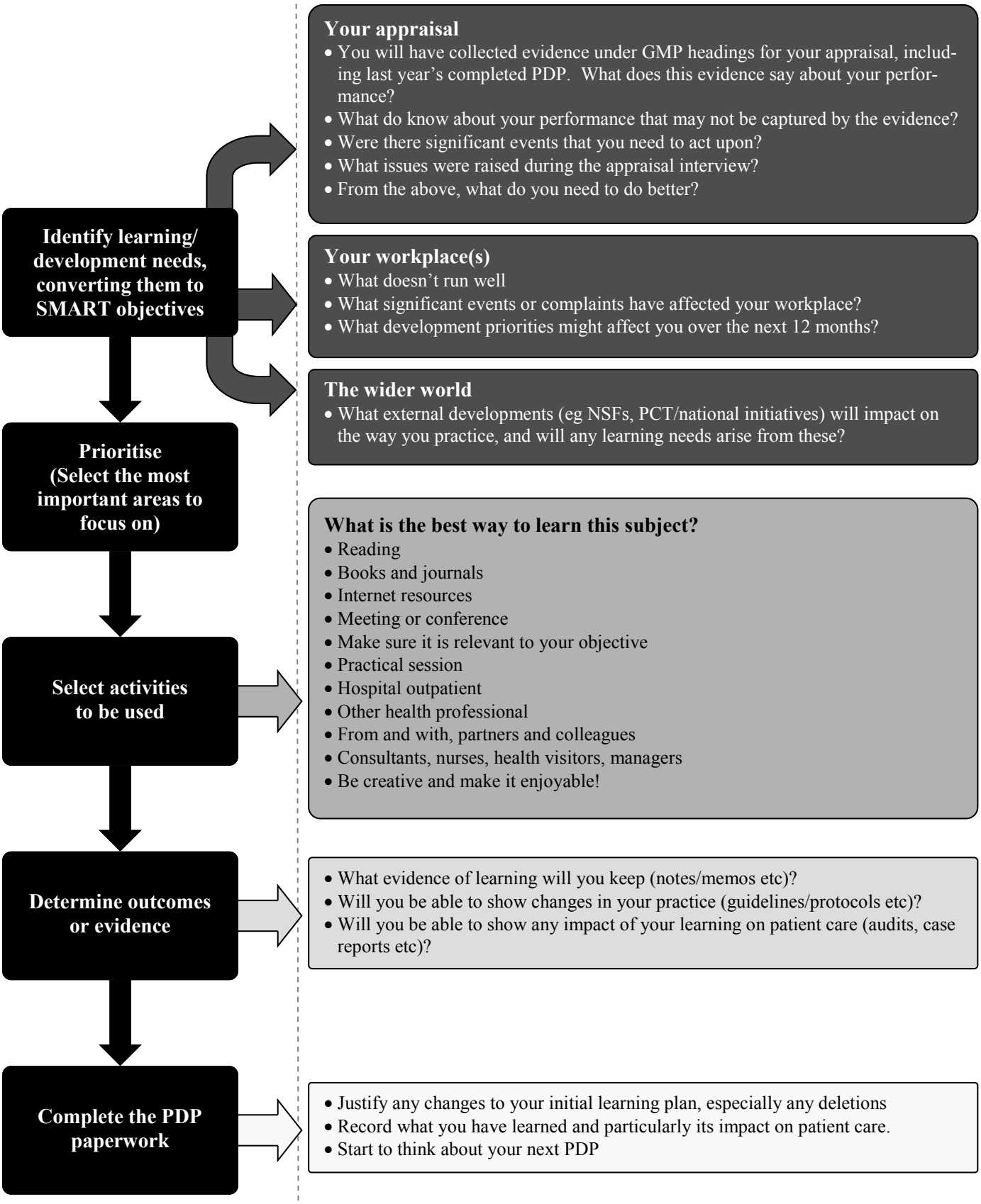
The evidence is not so much that you have put time aside for studying, but that through case discussion etc, you are seen to be in touch with recent developments and suggested changes to current practice.

Remember that 'keeping up-to-date' relates to all aspects of medical practice, including changes to service delivery, changing political and societal expectations and so on.

Health care and GP services are frequently in the news and it's a good idea to become familiar with one source of news such as a GP magazine, the health section on news websites etc. so that you know the hot topics of the day.

Events occur so frequently in general practice that even a week away from base can make you feel out of date!

which makes CPD easier to demonstrate during training than afterwards. In the schemata, the acronym **SMART** stands for Specific, Measurable, Achievable, Relevant and Time-Bound.



The competency requires evidence of **reflection**. This can be produced in free text form, either unstructured or using a structured reflective template such as the one shown in this chapter on page 167.

Evaluates the process of learning so as to make future learning cycles more effective.

The concept here is that doctors not only learn, but they learn how to 'learn more effectively'. They do this in a number of ways as suggested by the evaluation questions in the form shown below.

DEVELOPMENT PLAN -- EVALUATION
How did you identify your learning needs for this PDP, and what other methods might you include in your next PDP?
Which objectives were easiest to achieve and why?
Which objectives were most difficult to achieve and why?
Which were the most valuable learning activities and why?
Which were the least valuable learning activities and why?
In what ways have you been able to apply your learning to patient care?
What benefits to your patients do you feel have occurred as a result of your learning?
Are there any learning needs that you wish to carry forward to your next PDP?

Systematically evaluates performance against external standards, using this information to inform peer discussion.

This competency is categorised as 'excellent' because it requires us to look for external standards against which to compare our performance and to have both the motivation and mechanism for doing so systematically. Additionally, the outcomes of this process are used for discussion with colleagues in order to inform personal development. To do all this requires us to have a high degree of professionalism, self-awareness, initiative and the ability to constructively accept criticism. These attributes are not acquired quickly or without discomfort.

The training system requires young doctors to be judged and to act upon feedback, which on occasion they may perceive as criticism. Doctors in independent practice are in a different relationship with their peers and work in an environment where autonomy is greater, formal supervision is absent and mutual respect is just as important and just as fragile. In these circumstances, being open about performance and being able to accept and act upon criticism is hard because relationships and reputations are at stake. Nevertheless, it is important that all doctors do so and the cultural change to bring this about will be catalysed by doctors who are currently in training.

To achieve this competency requires us to look for relevant external standards. This means comparing performance against what the profession regards as adequate rather than what *we* feel is good enough. These standards may be available through quality frameworks such as QOF or through the medical literature.

Tip: evidence on learning

Reflection on performance is vital as this is the main evidence of insight. Assessors will gauge this through your learning plans, including the PDP that is produced for NHS appraisal.

The schemata shown on p160 should be used so that a rational approach to learning can be demonstrated. The PDP *evaluation questions* should also be answered as these show evidence of targeted reflection and also help you to become a more effective learner.

Tip: evidence of tie-in with the needs of the organisation

This can be achieved by showing that some of your personal objectives lie within the practice professional development plan.

Alternatively, you could comment on how your personal need was related to the development of the practice.

Where no such objective standards exist, comparison against peer performance is an appropriate and accessible alternative. Except in very small practices, this can be easily done by comparing performance of individuals with the performance of colleagues. Revalidation requires doctors to demonstrate evidence of *personal* performance. Practice audit where the data is presented so as to allow individual and group performance to be displayed is an ideal way of achieving this.

The competency speaks of using this information to inform peer discussion. This could occur on a one-to-one basis or alternatively, practices may use attributable audit data to prompt group discussion. As long as this is not done on a 'name and shame' basis, such discussions can be productive and can motivate practitioners to change behaviour.

Demonstrates how elements of personal development are related to the needs of the organisation.

Although 'learning for learning's sake' is valuable, as our job is to deliver a service, it is appropriate for some of our learning to be directed to the needs of the practice/organisation. This does not mean that every element of learning is targeted to a pre-defined practice need, but it does mean that it would be inappropriate if *none* of it did so.

Practices vary in how they define their needs. Many needs arise spontaneously and are acted upon opportunistically. In other more predictable situations, there may be a formal process of producing a practice development plan/business plan that formulates mutually agreed needs and sets objectives over a specified timescale. Some practices formally align the learning activity of the practice members with the needs of the organisation through a practice professional development plan (PPDP) which has the advantages of concentrating the group's efforts on the practice's needs and of allowing resources to be obtained to meet the learning needs, some of which may be common to several members of the practice.

Uses the mechanism of professional development to aid career planning.

Career planning is often neglected by practitioners. When we move into different areas of responsibility or make significant changes to our working lives, this often happens without planning, simply because the opportunity arises. This is not *wrong*, but the notion that we can plan ahead for significant changes, and thereby make it easier for ourselves, is often overlooked. Reflective practitioners can learn as much about themselves as about their learning needs through the process of professional development. This information is precious because it can help us to recognise what motivates us, where our strengths and weaknesses lie, what our capacity for change might be and how effective we are in achieving our goals.

Given the right circumstances, for example through discussion with an appropriate person such as a mentor, these insights can be used to plan for significant changes in our careers and our lives. Some of these changes are predictable, such as the years spent as a parent, as the head of a practice or the years in retirement. Even for such commonplace but important life changes, discussion about the implications and how best to prepare can be enormously valuable.

Needs Further Development	Competent for licensing	Excellent	
Changes behaviour appropriately in response to the clinical governance activities of the practice, in particular to the agreed outcomes of audit and significant event analysis. Recognises situations, e.g. through risk assessment, where patient safety could be compromised.	Participates in audit where appropriate and uses audit activity to evaluate and suggest improvements in personal and practice performance. Engages in significant event reviews and learns from them as a team-based exercise.	By involving the team and the locality, encourages and facilitates wider participation and application of clinical governance activities	**3**

The third progression shifts the focus away from the individual and considers the practice-wide measures taken to improve quality and protect patient safety and how these can inform our learning. We move from:

Responding to the outcomes of audit, patient safety incidents and significant event reviews.

No longer acting in isolation but participating in and initiating audit and significant event reviews and making suggestions about personal and practice improvements based on these.

Using these performance review activities in a wider context to improve health services in the locality.

Looking at each of the word pictures in turn:

Changes behaviour appropriately in response to the clinical governance activities of the practice, in particular to the agreed outcomes of audit and significant event analysis.

The competencies in the NFD column are extremely important, because they underpin our ability to monitor and maintain performance when we are no longer being closely supervised through training.

The first competency requires us to respond to the clinical governance activities of the practice. Clinical governance (CG) is a framework of accountability that governs and promotes the efforts an organisation makes to continually improve quality. The first requirement is to understand what the CG activities of the practice are. Any process that promotes quality of care and can be evaluated, is a CG activity. The most important are audit and significant event analysis, but there are a range of CG activities that can give feedback on the performance of individuals, such as:

- Incident reporting system
- Risk assessments
- Infection control
- Prescribing review
- Conformation to NICE guidelines
- Participation in clinical audit
- Fraud policy
- Equality and diversity training
- Management of records and patient information
- CPD in the practice such as clinical meetings/journal clubs
- Compliance with research governance processes
- Confidentiality and consent systems
- Complaints procedures
- Health and safety protocols in the practice

The competency requires us to 'change behaviour appropriately'. This means that if performance is adequate, changes may not be needed. However, as insight is always being developed and confirmed, it is good practice to discuss our performance with more senior colleagues and then decide whether changes are needed or not. The outcomes of significant discussions provide good evidence for the portfolio.

'Changing behaviour' also involves demonstrating a commitment to improvement. Audit and significant event analyses are specifically mentioned because these are important sources of information and are usually discussed in a team-based exercise from which action points arise. We would normally follow through these action points as part of our commitment to the team and the service.

Tip: collecting evidence on response to clinical governance activities

Doctors who are temporary members of a team will have difficulty in obtaining information from many clinical governance activities, because data on their performance may not be routinely collected.

Look at the list and highlight the ones that you feel you could obtain information from.

Discuss your thoughts with doctors/managers early on as they may be able to help you collect information, for example by adjusting computer data gathering systems to collect information on your referrals.

If audits are taking place, find out how your activities could be included in the analysis. Make a note of your engagement with governance activities such as health and safety training.

Your response to this information can be shown by a subsequent data collection or through activities in your learning plan.

Recognises situations, e.g. through risk assessment, where patient safety could be compromised.

Patient safety, as a concept, is becoming increasingly prominent and is now explicitly addressed as a major section of Good Medical Practice. Before discussing this competency, let's consider patient safety in more detail.

Patient safety is defined by the National Patient Safety Association (NPSA) as a process by which an organisation makes patient care safer. **This should involve**: risk assessment; the identification and management of patient-related risks; the reporting and analysis of incidents; and the capacity to learn from and follow-up on incidents and implement solutions to minimise the risk of them recurring.

How widespread is the problem? It has been estimated that around 10% of patients admitted to NHS hospitals have experienced a patient safety incident, and that up to half of these incidents could have been prevented.

For patient safety to be improved, there are two widespread myths that need to be scotched. These are:

The **perfection myth**: if people try hard enough, they will not make any errors;

The **punishment myth**: if we punish people when they make errors, they will make fewer of them.

Errors are inevitable because health care is complex, recommendations are constantly changing, people are human and make mistakes and no system is ever 100% reliable. This is not an argument for complacency, but the focus of patient safety needs to be clearly stated. The best way of reducing error rates is to target the underlying systems failures, rather than take action against individual members of the team.

The NPSA suggests seven steps to patient safety:

Step 1 Build a safety culture
Step 2 Lead and support your staff
Step 3 Integrate your risk management activity
Step 4 Promote reporting
Step 5 Involve and communicate with patients and the public
Step 6 Learn and share safety lessons
Step 7 Implement solutions to prevent harm

We can see from this that it is important to assess the practice's safety culture, perhaps by conducting a survey. For example, do team members feel able to talk about their concerns and report incidents without fear of recrimination?

The curriculum suggests that in addition to being aware of the concept, we need to acquire some specific skills, for example we should be able to:

- Describe the tools that can be applied in risk management and patient safety issues e.g. those accessible from sites such as www.saferhealthcare.org.uk and medical indemnity sites.
- Describe the basic principles of human error.
- Describe the basic principles of risk assessment.
- Demonstrate how to compile a simple risk matrix.

Risk assessment involves collating information on incidents that the practice becomes aware of. There are three types of incidents that should be reported:

- incidents that have occurred;
- incidents that have been prevented (also known as near-misses);
- incidents that might happen.

To learn the most we can from patient safety incidents, we should apply Root Cause Analysis (RCA) or Significant Event Audit (SEA) techniques.

These are techniques to review a patient safety incident to find out what, how and why the incident happened. They pinpoint areas for change, and they prompt recommendations for sustainable solutions that reduce the chances of the incident happening again. Further information on the RCA can be obtained from

http://www.msnpsa.nhs.uk/rcatoolkit/course/iindex.htm

Tip: looking for evidence on response to change

It may not be possible for change to occur quickly, but you should have plans and a reasonable timescale.

Evidence can arise from debriefing, MSF as well as from future data collection.

If trainees do not take action even when the need for this has been discussed, there may be other issues, for example difficulty in understanding the need for improvement, difficulties with time management, poor organisation skills or (more worryingly) poor attitude in not accepting the need for change.

Tip: collecting evidence on patient safety awareness

This competency requires us to show awareness of safety issues. Evidence can arise through case discussion, where we may be asked to identify areas in which things might go wrong and safety might be compromised.

The range of areas is extensive, for example risks inherent in inadequate diagnosis, management and follow-up, risks that arise through poor teamwork (especially communication) and risks attributable to patient behaviour.

Additionally, our behaviour such as incident reporting or participation in clinical governance activities, shows our awareness of safety.

Likewise, those who actively seek information on errors, perhaps by asking to be informed when things go wrong, are demonstrating a solid understanding of this competency.

At this basic level of performance, our focus should be on recognising the *range* of areas in which things might go wrong. In particular, we should understand that risk is multifactorial and things go wrong because a number of suboptimal circumstances come together to cause a near miss or actual patient harm. The *sources* of these problems are not just ourselves and the practice, but may include colleagues in the community or hospital, communication and data reporting systems and sometimes, the behaviour of patients themselves. Even if the factors that give rise to a particular patient safety incident are recognised, not all of them may be amenable to improvement.

Learning to recognise the range of factors allows us to make better safety netting arrangements. To take a simple example, we may tell a patient at the time of urgent outpatient referral to contact the practice if they have not had an appointment or a letter of acknowledgement within a defined time period. At a more sophisticated level, we may routinely look in the medical records to see if the presenting problem links with previous consultations, so that an important emerging pattern is not missed. For example, previous presentations with hoarse voice, discomfort on swallowing and occasional dry cough may not be recurrent URTIs but may be the early signs of malignancy.

Participates in audit where appropriate and uses audit activity to evaluate and suggest improvements in personal and practice performance.

This is the first of the 'competent' descriptors. We have now progressed to a stage where we do not respond in isolation to quality issues but see ourselves as part of a mutually-dependent team. Excellent performance in one team member cannot be made up for by suboptimal performance in another; i.e. we are only as good as our weakest link. For example, suppose an excellent practice nurse triaged a call from a patient with an acute blistering rash on the right shoulder and decided that a GP consultation was needed. On speaking to the nurse, we decided to prescribe a cream rather than see the patient, who later turned out to have shingles complicated by neuralgia. The latter could have been prevented with prompt antiviral medication had the patient been examined.

This competency refers specifically to audit activity. It still remains important for us to understand and implement the audit cycle. However, because of automated data collection, audit activity against certain national standards such as QOF occurs on a continual basis. Therefore, rather than waiting for an occasional audit to be performed, we have a wealth of information that can be used to continually profile our performance. Data can arise from a number of sources of which audit is one of the most important (see page 168).

To show competence, we should look at audit activity and suggest (where appropriate) improvements at a personal/practice level. QOF is not person-specific and therefore if there are areas of concern, these could be addressed by raising awareness in the practice and/or by looking in detail at the performance of individuals to see if the problem is specific or widespread. Sometimes, this is not necessary as, once the problem is identified, individuals may know from knowledge of their own behaviour whether there is need for change. Audit can be particularly useful where individuals are not aware of a problem because of lack of information, lack of insight or (rarely) denial.

Although many clinical markers exist in QOF, there are many other areas of personal and practice performance that will not be addressed through automated systems. In particular, we become aware when changes in clinical management are proposed or reminders about best practice are given. These can prompt an ad hoc audit, as can significant events in practice life.

When audits are prompted in this way, doctors can reflect upon the outcomes and consider whether changes are needed and following these, when to look for

improvement. The following structured reflective template assists this process and provides good evidence for the portfolio both for training and for appraisal.

This competency mentions our ability to 'suggest improvements'. This means that we must not only correctly identify significant deficiencies in performance, but should be capable of making sensible suggestions about improvements. For example, the **suggestions should be:** relevant to the problem, feasible to undertake given the available resources, acceptable to those who are affected (including the patients to whom they apply) and preferably have measurable outcomes so that the degree of improvement can be gauged.

Data collection/audit structured reflective template
Name of doctor: GMC No:
Measurement/audit title: Date of data collection/audit:
Reason for choice of measurement/audit:
Audit findings:
Learning outcome and changes made:
New audit target:
Final outcome after discussion at appraisal: (Complete at appraisal considering how your outcome will improve patient care)

Tip: collecting evidence on the use of audit

You should be able to demonstrate that you are aware of the audit that goes on in practice and you should show that you learn from the audit outcomes.

You can show evidence of this by using tools such as the structured reflective template.

Additionally, you could suggest/conduct an audit that isn't already being done and is prompted by awareness of contemporary best practice, new developments or significant events.

Audit can also be used to see whether steps that are taken to improve personal/practice performance have actually been successful. This activity is called 'completing the audit cycle'.

Engages in significant event reviews and learns from them as a team-based exercise.

The second word descriptor in the 'competent' column follows on from our engagement with audit. Similar attitudes and principles apply in that we should recognise that significant events (which are positive as well as negative) are powerful sources of learning, provided they are discussed in suitable settings. Medical communities have mostly moved beyond the culture and expectation of omniscience and the associated reluctance to identify problems or admit errors. Nowadays, significant event reviews are not juries or confessionals, but are meetings in which the complexity of significant events can be understood. Even the most straightforward problem often has structural as well as human dimensions and cumulatively, such events do a great deal to improve patient care (particularly patient safety) and build trust within a team.

A significant event template might contain the following headings:

- **Date** of the event
- **Who the event was discussed with** (e.g. medical colleagues, nurses, team members etc)
- **Description** of the event
- **Issues raised** (consider the issues for yourself, others involved & administrative systems)
- **Learning outcomes**: what went well? What could have been improved upon? Any learning needs identified?
- **Action points**: how were the issues addressed?
- **Changes**: what changes were made? (Consider the issues for yourself, others involved & administrative systems)

Tip: producing evidence of engagement with significant events

The word descriptor is quite specific in that it requires doctors to take part in the process, rather than just understand the theory.

Good evidence would show, preferably from a reflective log such as that shown in the text, that you have picked up on the key points of the discussion, have thought about whether any of these points apply to you and then developed a learning plan related to these.

Even better evidence arises when you bring one of your *own* significant events to be reviewed by the team.

By involving the team and the locality, encourages and facilitates wider participation and application of clinical governance activities

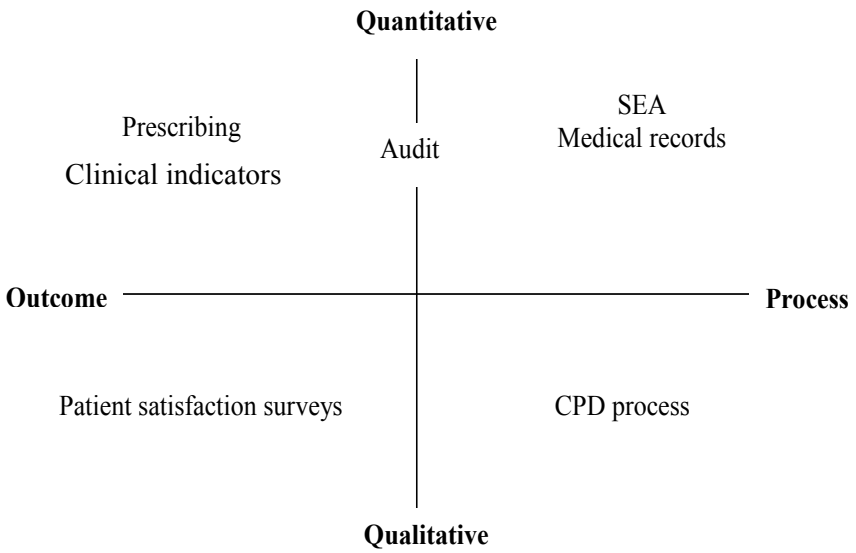
This competency is classed as 'excellent' because having mastered and applied the principles of clinical governance to our own team, we now involve wider groups to improve quality more generally. This degree of expertise requires us to understand the factors that influence quality at locality level and above.

As with several other 'excellent' competencies, we need to show wider awareness of service delivery, the management processes involved and the quality assurance mechanisms that apply. Primary care organisations (PCOs) are relatively strong in dealing with the management and administration aspects of local health care services. However, clinical governance is in comparison, relatively poorly developed in most countries of the UK. This is an area where doctors have a great deal to contribute in that they can comment on the quality markers that might be appropriate to a service. Remember the old adage that **'What is measurable is not always important and what is important is not always measurable'.**

To demonstrate this competency, having understood the wider picture, we can contribute to the data collection required for clinical governance in the locality. More proactively, we might educate the team and other colleagues and encourage them to participate. Beyond this, some doctors advise the PCO on clinical governance, often in relation to areas of special interest in which they have expertise. Many enhanced services have started because of the enthusiasm of local practitioners, who have not only helped to develop the service but also advised on the quality markers that are appropriate. The involvement of clinicians in the development of QOF criteria is another example of this, on a national scale.

What sort of evidence of quality might doctors recommend? Such evidence is of different types and can be used in different ways to support CG. One approach is to think of this evidence as being quantitative or qualitative and as being related to process or outcome. The evidence from QOF can be applied to this framework as shown by Rambihar in the figure below (*Rambihar, B.V. 2005. Defining Evidence of relevance to the Revalidation of General Practitioners that could be developed in Appraisal. University of Dundee. (MMEd-thesis*).

All four quadrants provide valuable material for CG and from the perspective of developing the quality of the service, there is no intrinsic superiority of one type of evidence over another.



The figure shows how evidence is distributed, but what it does not indicate is that the bulk of the evidence often resides within the upper left quadrant (quantitative outcomes data). These may be regarded by some as 'good' or 'robust' data on the basis that they are numerically measurable and potentially reliable.

However, we should be wary of making such value judgments. Quantitative evidence is valuable but is not necessarily more important than data derived from qualitative sources. Thus SEA may be of more significance in terms of identifying the need for change than statistical data about the service.

Both quantitative and qualitative information should be gained where possible, as the two approaches are complementary in building up a better picture of performance. This principle applies just as much to the performance of *individuals* as it does to the performance of a service.

Tip: developing a wider awareness of clinical governance

PCOs usually have a lead person dealing with clinical governance, who can advise on the locality-wide indices of quality that are used. Most of these are quantitative and are presented as graphs to allow inter-practice comparison.

Look at one of these comparisons and, in discussion with the practice, identify significant differences and suggest why these might be.

What do you think of the indices that are used? Are these relevant/important? Are they measuring simply what *can* be measured, or are they measuring what *should* be?

Is the practice offering any enhanced services on behalf of the locality? If so, look at the contract made with the PCO.

What aspects of the quality of this service are being reported upon? Again, what are your comments on the measures used?

Needs Further Development	Competent for licensing	Excellent
Contributes to the education of students and colleagues.	Identifies learning objectives and uses teaching methods appropriate to these. Assists in making assessments of learners.	Evaluates outcomes of teaching, seeking feedback on performance. Uses formative assessment and constructs educational plans. Ensures students and junior colleagues are appropriately supervised.

4

The fourth competency progression takes us into a developing area, that of doctor as teacher. It illustrates how we move from:

Being available and prepared as a non-expert teacher to be involved in the wider educational process

When engaged in teaching, using basic educational principles to teach appropriately and also being prepared (for example by giving feedback) to provide formative assessments of the learner's performance.

Seeking to improve personal standards of teaching. Becoming more proficient as a teacher by undertaking more structured evaluations and by helping learners to develop educational plans.

Looking at each of the word pictures in turn:

Contributes to the education of students and colleagues.

The first competency is at a basic level and requires us to engage with the education that goes on around us. 'Good medical practice' encourages doctors to regard teaching as being part of routine medical practice. For a non-specialist teacher, this can simply involve playing a role in the educational programs that go on in the practice, for example by allowing students to sit in and observe the consultation, by answering queries of those in training or by becoming more involved in debriefing and case discussion.

The curriculum has a statement devoted to this area, in which it suggests that we should be able to:

- Understand how adults learn
- Demonstrate an awareness of the differing learning styles of individuals
- Demonstrate a learner-centred approach to teaching
- Demonstrate the ability to facilitate the learning of a small group
- Deliver a presentation clearly and effectively, Contribute positively to a culture of teaching and learning within the practice organisation
- Understand the benefits of interprofessional and multiprofessional learning
- Demonstrate the ability to give effective feedback to a colleague

We will consider some of these issues below:

The learners that we come across in general practice are adults, rather than children, and 'adult learning' has some particular characteristics. Being mature and independent individuals, adults particularly value their autonomy and usually, they learn better if allowed to be self-directed. This is not an absolute. For example, it does not mean that learners should be allowed to sink by virtue of having no direction at all. If they are in situations that are entirely new to them, it would be appropriate for the GP to direct their learning rather than leave them to flounder and become dispirited.

Learning through experience is particularly valuable, especially if new experiences are embedded or purposefully connected with previous experiences and insights. In this way, learners can put new knowledge, skills and attitudes into a context that they already understand. Connecting new experiences with old ones is also a mechanism that allows new learning to gain a sense of proportion. We have a role in creating these important connections, for example by asking 'how does this differ from what you already know', 'what would you now do differently?' etc.

The discomfort that learners experience when exposed to situations that they find difficult, is a powerful motivator for learning. Teachers can hopefully 'sensitise' learners so that they learn to recognise their own areas of discomfort and act upon them, rather than ignoring them.

People learn in a variety of ways and no one style is better than another. Doctors can tailor their approach according to what they are trying to achieve and the preferences of the learner. This is explored in the box below:

Main process	Role of teacher
Telling	Passing on knowledge
Questioning	Facilitating learning through awareness-raising questions
Encouraging learning through discovery	Promoting the learner's autonomy and self-directed learning
Exploring feelings and assumptions	Encouraging self-awareness, self-discovery and reflective practice through exploring feelings. Examining assumptions through discussion and judicious challenge

In summary, adult learning is most effective when it is clearly **relevant** to the reality of working life, relates theory to solving **practical** problems and encourages **reflection**. All of these components need to be considered in preparing for teaching.

Learning in primary care is a team exercise. Therefore, learning with other doctors (inter-professional learning) and with other members of the team (multi-professional learning) can be invaluable provided that it addresses shared needs. For example, revising the family planning protocol is better if the doctors and the nurses who run the clinic do so in collaboration.

Teaching is not entirely for the learner's benefit. Indeed, preparation for teaching is an excellent form of continuing professional development because it influences attitudes and behaviour in the consulting room and thereby improves patient care. Educational skill and insight encourages doctors to *see patients as both learners and teachers*, improving shared understanding and therefore the quality of patient management.

Identifies learning objectives and uses teaching methods appropriate to these.

To be 'competent' doctors should demonstrate that they are able to help learners convert broad areas of educational need into manageable tasks or 'objectives '. Objectives should be written in such a way that the task is clear. Good objectives are said to be SMART, meaning that they are:

Specific: clear and concise.
Measurable: written as verbs (e.g. analyse, design, prescribe, inject etc.) rather than as vague objectives (e.g. become aware of, understand, appreciate etc.) which cannot be easily defined or measured.
Achievable: by ensuring that resources (e.g. expertise, time & funding) are available and that the goals are attainable.
Relevant to the aim
Time-bound: with the date for completion being both explicit and realistic.

The teaching methods should address these, but again they need not be complicated. For example, if a learner lacks a skill such as soft tissue injection, s/he may learn better by going to a clinical skills lab or being taught through practical demonstration than by being given a talk or shown a video.

Assists in making assessments of learners.

The second of the 'competent' descriptors refers to our willingness to engage in making formative assessments that assist the learner's development. These assessments need be no more complicated than giving constructive feedback. Many doctors are asked to do this as part of multi-source feedback. Where there is opportunity for the feedback to be more detailed, the principles of doing this effectively should be observed. For example, feedback should be specific, based on evidence such as the observation of behaviour, actionable (i.e. something can be done in relation to it), balanced and feasible.

There are other guidelines about how best to deliver feedback, such as Pendleton's rules, which are worth knowing about.

Evaluates outcomes of teaching, seeking feedback on performance.

Uses formative assessment and constructs educational plans.

Ensures students and junior colleagues are appropriately supervised

These 'excellent' competencies require doctors to show more advanced educational expertise. At present, these abilities may be witnessed in many training practices but doctors who are not involved in education are unlikely to have the need or the opportunity to demonstrate these skills.

In the future, involvement in the teaching of doctors and other primary healthcare professionals will become a more routine part of every GP's core functions at which time, these skills will no longer be the sole concern of specialist educators.