# The Effectiveness of Continuing Professional Development

**Final Report** 





Regulating doctors Ensuring good medical practice

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# The Effectiveness of Continuing Professional Development

A report prepared on behalf of College of Emergency Medicine, Federation of Royal Colleges of Physicians and Manchester Metropolitan University

by

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# Contents

Preface	5
Executive Summary	6
Chapter 1: Introduction	12
Chapter 2: Objectives, research design and methods	15
Chapter 3: Literature survey – a resumé	20
Chapter 4: Results and findings	25
Chapter 5: Discussion	32
Chapter 6: Conclusion	63
Bibliography	65
Appendix A1: Literature review	66
Appendix A2: Bibliography	92
Appendix B: Questionnaire	114
Appendix C: Letter to CPD Leads	120
Appendix D: Interview questions	123
Appendix E: Action Research and CPD	125

# **The Effectiveness of Continuing Professional Development**

# Preface

A report prepared on behalf of College of Emergency Medicine, Manchester Metropolitan University and Federation of Royal Colleges of Physicians and commissioned by General Medical Council/Academy of Medical Royal Colleges

This report is based on research carried out for a GMC study into the effectiveness of Continuing Professional Development (CPD). It has involved non-training doctors from staff grades to senior consultants, including those primarily involved in management, CPD provision and assessment; and institutional officials, such as in Deaneries and universities, across a range of specialties to determine their understanding of:

- their own learning, or the learning of other doctors within their organisations
- how this learning relates to conceptions of CPD, its provision and its uptake
- effective CPD

The research was conducted by a team comprised of clinicians and educators. The intention was to interview medical practitioners, educators and managers regarding their experiences from various expert points of view, supplemented by, and contrasting with, data collected by a more quantitative methodological approach.

There has been little literature in terms of the evaluation of the *effectiveness* of CPD. Thus this project had as a key aim to explore this.

# **Executive Summary**

This report explores how new consultants to senior consultants understand:

- their own learning, or the learning of other doctors within their organisations
- how this learning relates to conceptions of CPD, its provision and its uptake.

The report contains 6 chapters. Key points follow:

# **Chapter 1: Introduction**

This brief overview explores definitions of CPD, its nature and the somewhat elusive notion of effectiveness. It examines the potentially competing modalities (organisational and individual).

# Chapter 2: Objectives, research design and methods

The main aim was to identify what promotes and what inhibits the effectiveness of CPD. This was explored in terms of 4 broad objectives:

- 1. To compare and contrast the experiences of continuing professional development across the range of specialties
- 2. To identify and describe the range of different models of CPD employed across the different specialties and clinical contexts
- 3. To consider the educational potential of reflective practice in CPD and its impact on professional practice
- 4. To explore how different professionals judge the effectiveness of current CPD practices

The research design was developed to address 2 fundamental needs: i) covering the range of medical specialties and posts within those and ii) focusing on what happened in the clinical setting.

Data was collected through:

- *questionnaire*
- *letters to CPD leads*
- interviews
- shadowing

# **Chapter 3: Literature Review**

It is considered that CPD goes beyond what doctors do and that there is "no single, singular or correct way of doing CPD". In organisational terms:

- flexibility is of vital importance in the development and provision of CPD, as are principles of justification and transparency. Active modes of learning, linking of CPD with learning needs analysis and integration of knowledge with everyday practice were major contributing factors to effective CPD
- flexibility raised issues for assessing and accrediting and for recording CPD
- the range of providers of CPD is extensive and diverse
- the boundary between CPD and quality assurance can be a grey area

# **Chapter 4: Results and findings**

Key insights from the review of the literature informed questions which were asked in the questionnaire, letters to CPD leads and the interviews.

Questionnaire results:

- highest scores for CPD experiences over the past 12 months were conference attendance, local events and journals
- determinants of CPD with highest scores were interest, knowledge/skills gap and reflection on practice
- the greatest impact of CPD was "agreed" by the majority of respondents in the following contexts: change in treatment practice; knowledge acquisition and learner satisfaction
- the highest scores for attitudes towards CPD were as a natural part of professional life, necessary for patient safety and rewarding
- to the question of who should be responsible for CPD provision, the category of Colleges and Faculties was given the highest score
- the category of Colleges and Faculties also scored highest with regard to the question of who should be responsible for the content of CPD provision
- the highest score for how do consultants learn best was allocated to "experience"
- study leave availability, cost and work-life balance scored highest as barriers to CPD participation
- respondents gave College conferences, medical society conferences and speciality associations the highest scores for the most valuable contributors to CPD.

Letters to CPD Leads/interviews:

- guidelines/advice given to members was various and included recommendations on reflection and blended learning to details of the credit point systems
- provision of guidelines/advice was listed as being through one of three modalities: online, postal delivery or personal contact with designated member(s) from the College or Faculty
- members were described as being able to provide feedback in the following ways: informal meetings, using Directorate of CPD and organisational infrastructure
- the range of educational opportunities provided were listed as: local and national course provision, e-learning modules, seminars, workshops, conferences, journals and trainer training programmes
- guiding fellows to do specific CPD topics was described in terms of *"flexibility", "signposting", "kite-marking"* and communicated online, through postal services, at meetings and through allocation of credit points for specific CPD activities
- if uptake was measured, the mechanism used was described by a variety of auditing procedures of annual CPD returns
- the use of diaries (paper or online) was described as the most frequent method by which members recorded their CPD, with ePortfolios as the second most frequent method
- methods used by the organisation to evaluate the effectiveness of CPD were variously described as none to "*an open culture encouraging feedback in general*" to an audit of members' activities

• to the question of whether the organisation had any literature pertaining to effectiveness of CPD, respondents replied in the negative.

# **Chapter 5: Discussion**

The discussion of the findings was focused around questions derived from the research objectives.

Doctors' understanding of the term "learning" and the effect on CPD Learning and CPD:

- CPD is learning and both are inextricably linked into "doing the job"
- learning has two forms: i) the addition of something new and ii) verifying that practice is the same or similar enough to what everybody else is doing
- CPD can systematise learning by deliberately providing a range of different approaches, variations in practice, and changes in viewpoint in order to enrich the experience, practice and knowledge of professionals. This can be developed further into a more systematic, rigorous and robust tool for validity checking
- *"keeping up-to-date"* and *"confirming practice"* ranged from attending conference, workshops, external meetings, in-house meetings, through *"sharing surgical theatre sessions"* to interactions with colleagues
- professionals may stay within their "*comfort zones*" when selecting their CPD. Would they continue to do so if the scoring by which CPD is assessed were to change? Alternatives to the scoring system need to be identified and explored
- professionals should be able to appraise and critique their own practice.

CPD as learning:

- CPD is seen as essential to effective practice and to an individual's development within the profession whether or not that results in career progression
- it is linked to "*personal learning needs*" and often associated with appraisals and seen as a way of "*gap filling*"
- the continuous-ness, of CPD was often articulated as "moving on", "continuing to develop"
- the medical profession is a very heterogeneous group. CPD providers and assessors have to address how to formulate learning for this considerable variety.

Distribution of CPD across institutional and more personal (individual) settings:

- national provision favours those who live in London and the Home Counties for a number of reasons: financial, time, job demands, work-life balance
- external events were perceived as providing a wider diversity of CPD learning opportunities
- hospitals and general practice surgeries vary from teaching to non-teaching, from large to small, from being *"educationally active"* to being neutral or disinterested
- *"learning there and then"* is seen to provide significant learning experiences but the question remains as how to assess this rigorously and robustly.

What counts as CPD?

- being fit to practice is different to being safe to practice. This distinction leads to questions of whether the purpose of CPD is to raise everyone to a minimum standard or whether its purpose is to allow individuals to pursue learning interests more generally
- in the context of quality assurance, what is identifiable and claimable. However, networking and peer review on practice provides professionals with ways of comparing the quality of their practice
- there were some clear differences between what users of CPD considered it to be compared to those with some role in quality assurance.

# The status of workplace learning

- situated workplace learning outcomes are complex and resist quantification. This complexity needs to be reflected in the system
- occasions for feedback and dialogue as a basis for CPD in the workplace could be developed since "*most of what doctors do is talk*".

# What counts as effective CPD?

- effective CPD involves both *"learning"* and being *"fit to practise"*, knowing both the *"why"* and the *"how"* and putting learning into practice
- effectiveness is facilitated when professionals are able to determine their own learning needs through reflection within the totality of their practice. This means being able to go beyond what is quantifiable.

# Culturally embedded learning challenges: scientific and medical knowledge shaping conceptions and conduct of interactions

Expressions, modes of articulation and the metaphors used by professionals provide insights into the ways of seeing, thinking, doing and speaking and how these interlink into developing medical concepts and of the conduct of professional interactions.

How people talked about their ways of learning shaped their strategies for learning. Changing the metaphors employed may change the way they think about and undertake learning.

## Organisational perspective shaping conceptions of CPD needs

- providers of external CPD need to i) attract large audiences, ii) offer a wide range of events of high quality to attract a broad spectrum of professionals, and iii) ensure that the audience keeps returning while iv) balancing those factors against costs in terms of finances & staff availability
- factors that limit attendance of external CPD events include the ease with which doctors can take time away from their clinical work/service delivery and the number of clinicians within the particular specialty. Trusts varied in terms of being generous in allowing time to those that were not interested in CPD opportunities for their staff
- on-line learning and CPD opportunities have become very popular with clinicians
- the annual CPD allowance was considered too small in the context of the costs incurred by attending an external CPD event

• the organisational perspective favours CPD activities that are recordable in some measurable and quantifiable way in order to be seen to be conducting a transparent and rigorous assessment procedure.

A conception of CPD: a single scale or an ideologically shaped alternative option

- *"learner-led CPD is the most successful because it encourages engagement and acknowledges professionalism"* and is most valid from and educational perspective
- CPD is understood differently by those with organisational responsibilities to those who see it as part of their professional development
- for CPD to be effective it must address the needs of individual clinicians, of the populations they serve, the organisations within which they work as well as broader system-wide, national policies
- the focus upon the acquisition of new or updated medical content knowledge in formal settings divides CPD needs and practice from everyday professional settings
- the complexities of clinical areas can require delivery of care when there is incomplete information. Thus an algorithmic approach to learning is not always effective.
- medical professionals form judgements, make decisions and execute them whatever their clinical specialty and yet differing roles and contexts within their posts make different demands upon the CPD needs and the apparent ease of fulfilling these needs for the purposes of assessment
- CPD has both professional and personal aspects and there is some danger that clinicians may choose to keep within their comfort zones when selecting their CPD activities
- that CPD can take place in the workplace is not in question, rather the question is can CPD in the workplace be systematically assessed
- formal CPD provision was perceived as undergoing changes in line with the proposed implementation of revalidation. These changes were perceived as *"industrialising"* CPD in order to make it more uniform.

# Reflection and its impact

- for many, reflective learning tended to be regarded as superfluous and a nuisance while actually doing it but it was regarded positively and appreciatively retrospectively. Others saw themselves as having incorporated it into their day-to-day work and not something they did as extra
- competition between the busy-ness of service delivery and time for reflection was often cited.

# Differences between specialties

- for the most part what doctors do it talk and thus communication, in all its complexity, is core to the entire profession of medicine
- *"the art of history taking"*, examining the evidence, forming judgements, taking decisions are all core
- some specialties, e.g., anaesthetics and emergency medicine have "very clear behaviour objectives"

- other specialties, e.g., Psychiatry, adopt other approaches as learning models that are better adapted to enabling "*a vast array of intellectual tying-together*" in all its "*complexity*"
- behavioural objectives are "visibles" that can relatively easily be measured whereas the judgements and decision making processes in Psychiatry for example are "invisibles" and qualitative.

# The impact of recertification on CPD needs

- many predicted that CPD assessment is more likely to become more quantifiable
- some believed this to be a positive move towards greater accountability, while others spoke negatively of an accountability that would reduce the flexibility they valued in the current CPD system.

# **Chapter 1: Introduction**

A recent definition provided by Directors of CPD Subcommittee of AoMRC is:

A continuing process, outside formal undergraduate and postgraduate training, that enables individual doctors to maintain and improve standards of medical practice through the development of knowledge, skills, attitudes and behaviour, CPD should also support specific changes in practice.

Arising from the literature review, it was considered that the definition of CPD could be divided into two parts:

- gaining knowledge
- improving patient care.

The procedures for recording CPD were perceived as needing to address both of these aspects. However, a body of literature claimed that a gain in knowledge does not necessarily result in a change in behaviour by the clinician (Schostak 2009: 77). If that is so, then other questions arise:

- will an improvement in patient care occur?
- and, if it does, how can it be measured? (Schostak, 2009: 77)

However, before those are explored there needs to be a focus on what the literature tells us CPD is.

#### The nature of CPD

The literature depicted CPD as keeping up-to-date with knowledge skills and attitudes (Schostak 2009: 67-8) clinically, managerially and professionally (Schostak 2009: 67) and saw it as being highly instrumental in coping with change at whatever level that occurs (clinical, managerial, technological, professional and so on (Schostak 2009: 69). It was seen as one of the key factors in delivering high quality care (Schostak 2009: 68) since the ultimate objective of engaging in it was to change the clinician's practice (Schostak 2009: 68).

CPD was often closely associated in the literature with appraisal and revalidation and was also linked to performance (Schostak 2009: 70; Guly's (2000) CPD cycle; Schostak 2009: 70-1). Not only was CPD described as *"aspirational"*, it was also be considered as being owned by the individual and not *"run by any agency"* (Schostak 2009: 71).

Despite this, CPD was defined in operational terms as consisting of attendance at conferences and workshops at internal, local and national levels. In short then, most CPD activities were constructed as taking place outside of the everyday workplace settings.

#### The meaning of effectiveness

Any meaning we attribute to "*effectiveness*" is to be left open because it is complex and multi-dimensional and accordingly, incompatible with measurement.

Its complexity arises from the need to improve practice (both personally and clinically) and to develop professionally, and from the dynamics of implementation in workplace settings, whatever they may be.

Accordingly, in its broadest sense, effectiveness of CPD involves changes in the totality of professional practice at both the personal and clinical levels.

#### **Developing principles for CPD**

As CPD was viewed as going beyond what doctors do, its assessment would not be possible through a simple audit conducted by Colleges and Faculties (Schostak 2009: 72). Given that the literature stated that there was "*no single, singular or correct way of doing CPD*" (Schostak 2009: 72), and that the content, context and processes chosen were going to depend upon spheres of practice, learning styles and personal preferences (Schostak 2009: 72), the provision and assessment of CPD was seen in the literature as a high stakes business. This was reflected in the diverse range of content in articles published in the literature expressing themes such as the expectations of and demands by professionals on CPD.

#### **Modalities**

For the purposes of this and the discussion chapters (see chapter 5), it is useful to take the perspective that CPD has two modalities, namely, the organisational and the individual. While this distinction was not explicitly made in the literature consulted during this study, its existence was strongly implied.

#### The organisational modality

There is a significant emphasis on flexibility of provision as well as a strong need for justification and transparency in making judgements about quality, both of provision and performance. The latter was invariably framed in terms of its relationship to work-based practice and ongoing learning. This inevitably raises the issue of its relationship to assessment, recertification and revalidation.

#### The individual modality

From the perspective of the individual doctor, the question that needs to be addressed is: what are the themes that CPD should address? The literature suggests eight of these:

- context and circumstance
- knowledge
- human factors/non-technical skills
- skills and practices (clinical know-how)
- professional values and identities
- decision-making
- realisation and performance
- approaches to identifying learning needs

This schemata has been constructed for the purposes of discussion in this report and as such, it is simplistic. In the real clinical day-to-day world, however, none of these constructed categories stand alone but interact in a complex way referred to as *"pluralism"*, i.e., as multiple domains of actions (Schostak 2009: 80).

A summary of the literature review is in Chapter 3. The literature review in full can be found in Appendix A1 of this report (Schostak, 2009).

# Chapter 2: Objectives, research design and methods

### **Purpose of the research**

The overall aim of this research was to identify what affects the effectiveness of CPD and thus formulate potential strategies.

### **Research objectives and emergent research questions**

The research had four broad objectives as shown below. Throughout the project, each objective has been explored in a number of ways as illustrated by one or more questions that follow each research objective. These questions emerged from analysis of the data and will be discussed in more detail in Chapter 5.

*Research objective 1*: To compare and contrast the experiences of continuing professional development across the range of specialties, in terms of:

• What do doctors understand by the term, "*learning*" and how does this affect their CPD? How are educational interventions distributed across institutional and more personal settings? How may workplace learning outcomes be noticed more effectively so that they can be included more fully in CPD accreditation?

*Research objective 2:* To identify and describe the range of CPD models employed across the different specialties and clinical contexts, in terms of:

- How are learning challenges culturally embeddeded<sup>1</sup> in organisational and workplace environments? How does/do scientific and medical knowledge[s]<sup>2</sup> shape the conceptions and conduct of professional interactions?
- How does an organisational perspective shape conceptions of CPD needs? In what ways does it seek to link these understandings to specific medical professional interests?
- Is the conception of CPD resolvable on a singular scale or will it necessitate several options with ideological factors necessarily shaping the options envisaged?

*Research objective 3:* To conceptualise the educational potential of reflective practice in CPD and its impact on professional practice, in terms of:

• What do doctors understand by reflection and what examples do they give of impact?

*Research objective 4:* To explore how different professionals judge the effectiveness of current CPD practices, in terms of:

• Are there differences between specialties?

<sup>&</sup>lt;sup>1</sup> Different cultural values, beliefs, knowledges and skills are implicated in or embedded in interactions, networks, practices and day to day life and these have an impact upon what individuals think, do and say.

<sup>&</sup>lt;sup>2</sup> An analogy would be thinking inside the box and being unable or unwilling to think outside of it.

# **Research Design**

In order to study the effectiveness of CPD it was necessary to develop a data collection that could cover a broad range of clinical specialties as well as being able to focus on what actually happened in the clinical area. Employing both quantitative and qualitative methodologies enabled an in-depth analysis of CPD experiences to be made. These were:

- an on-line questionnaire. The broad themes and issues identified through a questionnaire were then explored in more detail through:
- interviews. However, what is written in questionnaires and said during interviews does not always adequately represent the complexities of everyday clinical experience, therefore:
- research activities in clinical settings was also part of the research design

This combination of strategies was able to reveal more fully the influence of culture, organisation and resources on the clinician's ability to *effectively* apply learning.

# **Research Methods**

In accordance with the research design, the methods below are organised in terms of a) coverage and b) in-depth strategies.

# Coverage strategies

## Literature review:

A literature review was undertaken at the beginning of the project and constantly updated throughout the lifetime of the project. The review covered:

- articles from a range of online journals
- a small number of books
- a wide range of online non-journal materials.

See Appendix A1 for the full Literature Review with References and see Appendix A2 for the Bibliography.

However, there has been little literature in terms of the evaluation of the *effectiveness* of CPD. Thus this project has explored this concept.

## Questionnaire

Following a pilot study conducted face to face at a College annual scientific meeting, the questionnaire was placed online using Surveyor. This was made available on the Advanced Life Support Group website during spring and early summer 2008. While acknowledging the limitations of methodology, the research team thought there was some value in using its capacity to gain access to relatively large numbers of doctors across a range of specialties. The questionnaire was designed to gain information about the nature of CPD and other learning experiences, and contained descriptive and evaluative items and the opportunity for free comment. Invitations to participate in the survey were issued by College presidents during the spring of 2008. Quantitative data were analysed using the data collection tool and analysis of the free comments was facilitated by the use of NVivo. A copy of the questionnaire is appended in Appendix B.

# Letters to CPD Leads of all Medical Colleges and Faculties:

A letter containing 13 questions was emailed in October 2007 to the CPD Leads of all Medical Colleges (twenty-five in total) with the request that they answer the questions in situ in the letter attachment. A second mailing was undertaken through the auspices of the Academy of Medical Royal Colleges in January 2008. A copy of the letter is appended in Appendix C.

# In-depth strategies

# Interviews

The task was to explore in as much detail as possible the nature and effectiveness of interviewees' CPD. In particular, we wanted to know what they meant by CPD and how it related with other experiences of learning. During the interviews medical practitioners and managers described their experiences and each interview was recorded. This study sought to understand how doctors learn in the context of various institutional settings (clinical or educational) and how that relates to more personal or informal learning away from those institutions.

The interview strategy has involved covering a range of experience from CPD lead to CPD user:

- 1. interviews with a number of CPD leads in order to cover all specialties
- 2. opportunistic interviews (ten to fifteen minutes duration) with CPD users at conferences to identify what kinds of impact a conference has and use this as a way to talk further about how CPD impacts on practice
- 3. in-depth interviews of between half an hour to an hour (either telephone or face-to-face) with a range of respondents from academics, deans, consultants and GPs arranged in various ways:
  - by invitation through the auspices of some project team members
  - personal contacts of various project team members
  - further contacts suggested by a few interviewees themselves

In the final phase of the data collection in the research project the interview strategy focused upon:

- 1. improving/balancing the representation of the range of specialties as far as it was possible with the assistance from Royal Academy of Medical Royal Colleges and certain project team members
- 2. conducting in-depth 30 to forty-five minute interviews (mostly telephone) with a range of respondents from the questionnaire in order to gain a more systematic coverage of the range of CPD user views: 110 email invitations yielded 21 interviews

The aim was to analyse current practice, its effectiveness, the strategies employed at individual, organisational and system levels as a basis for identifying strategies for improvement.

# Research in clinical settings:

A key purpose of researching clinical practice was to identify learning opportunities and how learning can be documented in the context of everyday practice. Two strategies were adopted.

#### <u>Shadowing</u>

Shadowing by the researcher studied clinicians engaging in professional decisionmaking processes in order to elicit a rich in-depth analysis of a range of actual occurrences in clinical practices and clinical settings. Shadowing provided the opportunity to test out the extent to which learning in its most general senses can be integrated with day-to-day practice and the extent to which learning during formal periods of CPD could be applied during practice.

In more detail the objectives of the shadowing process were:

- 1. to identify the typical patterns of work during shifts
- 2. to build a picture of the pressures of everyday work
- 3. to experience and thus be able to describe in depth a range of actual events during which clinicians engage in professional decision making processes appropriate to their role
- 4. to reflect with the clinician on aspects of their work seen during the shadowing in order to:
  - a. identify particular CPD/work-based learning needs and opportunities as well as any issues that may hinder CPD/work-based learning
  - b. identify contextual factors that have an impact on the relation between service delivery and learning and the extent to which changes may be made following from CPD/learning
  - c. identify the extent to which the clinical area can support learning

This combination of in-depth strategies aimed to provide a comprehensive appreciation of the influence of culture, organisation and resourcing on how clinicians can *effectively* both learn and apply learning.

#### Action Research

For an action research perspective on ongoing research within the project, see Appendix E.

#### **Ethics of research design**

In chapters 4 and 5, all references to names of people and Trusts have been anonymised to maintain confidentiality. However, inasmuch as one of the objectives of the project was to report on a range of medical specialties, the name of the specialty is retained unless the actual naming of it compromises anonymity. Professionals from Deaneries and Medical Schools have been likewise anonymised and their actual physical locations are not referenced. Similarly CPD Leads, who were interviewed, have also been anonymised.

All interviewees were informed of the purposes of the research and the use of the data i) when initially approached to take part and ii) immediately before the research began and they could withdraw from participation at any time. Methods of ensuring anonymisation and confidentiality of the data were always discussed at length both at the initial approach and again just before starting the research process itself.

Shadowing was explained via leaflet provision and consent was obtained from those involved. Ethical approval was granted by Lewisham Local Research Ethics Committee.

# Chapter 3: Literature survey – a resumé

In order to provide a more informed introduction to the research findings, a resumé of the literature review is presented here as numbered themes and issues. Each of these focus around concerns to do with the notion of keeping up to date, how learning takes place, how learning addresses day-to-day needs as well longer term career and professional development and how learning can be recorded and assessed. These concerns will be further developed in the discussion on the findings of the research. Areas of concern are outlined in brief in Chapter 1. What follows is a more detailed exploration of the issues from the literature.

There are two key tensions to be addressed. The first is deals with learning and the ease with which it can be objectively recorded and measured.

The second tension is between learning and service delivery. Learning comes under the heading of education whereas service delivery comes under the heading of meeting patient needs. The literature only indirectly addresses this critical issue hence limiting the development of the quality and relevance of CPD.

#### The nature of CPD

The literature depicted CPD as keeping up-to-date with knowledge, skills and attitudes (Schostak 2009: 67-8) clinically, managerially and professionally (Schostak 2009: 67) and saw it as being highly instrumental in coping with change at whatever level that occurs (Schostak 2009: 69). It was seen as one of the key factors in delivering high quality care (Schostak 2009: 68) since the ultimate objective of engaging in it was to change the clinician's practice (Schostak 2009: 68).

CPD was often closely associated in the literature with appraisal and revalidation and was also linked to performance (Schostak 2009: 70; Guly's (2000); CPD cycle Schostak 2009: 70-1). Not only was CPD described as *"aspirational,"* it was also be considered as being owned by the individual and not *"run by any agency"* (Schostak 2009: 71).

And yet for the most part CPD activities were constructed as taking place outside of the everyday workplace settings.

#### **Developing principles for CPD**

CPD was viewed as going beyond what doctors do. Colleges and Faculties, therefore were not able to assess it by conducting a simple audit (Schostak 2009: 72). Given that the literature stated that there was "*no single, singular or correct way of doing CPD*" (Schostak 2009: 72), and that the content, context and processes chosen were going to depend upon spheres of practice, learning styles and personal preferences (Schostak 2009: 72), the provision and assessment of CPD was seen in the literature as a high stakes business. This was reflected in the diverse range of content in articles published in the literature expressing themes such as the expectations of and the demands made on and by professionals of CPD.

#### **Modalities**

For the purposes of the discussion in this chapter and the discussion chapter of this Report, however, it is useful to take the perspective that CPD has two modalities, namely, the organisational and the individual. While this distinction was not explicitly made in the literature consulted during this study, its existence was implicit.

#### Organisational modality Elevibility

# <u>Flexibility</u>

It can be seen from what has been already argued that flexibility was frequently cited as an important principle for developing CPD (Schostak 2009: 68, 71). Alongside this, the literature pointed to the need for principles of justification and of transparency to govern the procedures necessary for revalidation/poor performance (Schostak 2009: 72).

The evidence in the literature indicated that successful learning was much more likely to occur through active modes of learning than through passive ones (Schostak 2009: 73). This typically involved linking CPD with needs analysis assessments and the development of multiple learning activities (Schostak 2009: 74). Furthermore, CPD was described as being at the heart of knowledge translation, bridging the transitions from theoretical to practice (Schostak 2009: 73). Another recurrent theme, centred upon minimizing the gap between theory and practice, was the principle of ensuring that knowledge does not remain abstract, i.e., as something that is learnt outside the practice arena. Thus the literature recommended that effective knowledge should be integrated with everyday working practices, and combined with follow-up activities in order to ensure reinforcement and critical development, such as real-time or virtual discussion with peers (Schostak 2009: 74). This could be enhanced by developing partnership and collaborative activities (Schostak 2009: 74).

#### Assessing and Accrediting CPD: issues and/or questions

Evidence for CPD undertaken linked to an audit of adequacy of an individual's programme was described as a possible method of assessing CPD activities (Schostak 2009: 74). As seen previously, the need for flexibility had implications for assessment procedures. Self-accounting with quality assurance through the appraisal system was described as constituting one strategy capable of addressing the huge diversity of practice (Schostak 2009: 74).

The literature review suggested that professionals were more likely to change their practice after a learning needs analysis had been conducted.

Monitoring such diversity was seen to be a huge challenge. Strategies such as adopting an *"events or products"* (Starke and Wade, 2005, cited in Schostak 2009: 69, 74) approach raised as many questions as they solved (Schostak 2009: 75); particularly with regard to quality assurance.

## Providers of CPD

A typical list of CPD providers included Colleges, Faculties; in-house NHS programmes; management training; multi-professional trainers, e.g., the Kings Fund; commerce and industry; and Universities (Schostak 2009: 75-76). Online

provision examples cited in the Literature included the familiar and commonly used MCQs and the less frequently used podcasts, for example (Schostak 2009: 75).

#### <u>Recording CPD activities – questions and issues</u>

The definition of CPD was divided into two parts, firstly, it was described as gaining knowledge and, secondly, it was associated with improving patient care. The procedures for recording CPD were perceived as needing to address both of these aspects. However, a body of literature claimed that a gain in knowledge does not necessarily result in a change in behaviour by the clinician (Schostak 2009: 76). If that is so then how can effectiveness be measured? (Schostak 2009: 76).

What recording procedures should be adopted (Schostak 2009: 76)? The range suggested included: personal portfolios; competency frameworks; PDPs arising from appraisals; in an online diary held on each college's or faculty's website; a self-audit measured against peer group or national standards; case review and reflection; MSF; patient questionnaires (Schostak 2009: 76-7).

CPD was described as an activity or set of activities that cannot be viewed as an entity distinct from appraisal and revalidation (Schostak 2009: 77). It also followed that delivering a service and ensuring access to and attendance of educational CPD activities were similarly complexly intertwined (Schostak 2009: 77-8).

#### Boundary issues: CPD or quality assurance

A possibility explored in the literature (Schostak 2009: 78) was that there is a danger of CPD being confused with quality assurance.

One article described the Diamond Model of Quality Assurance which was adapted to produce the Quality Assurance CPD (QACPD) Framework as a potential workable model (Schostak 2009: 79) that would provide space for both CPD and quality assurance. In this Diamond Model, quality assurance sat in the centre of a diamond shaped figure bounded at its four points by one of four key components of organisational activity for CPD. These four key components were strategy, structures, resources and outcomes.

#### Individual modality

The literature was analysed with respect to eight issues/needs:

- 1) contextual and circumstance: taking into account the idiosyncrasies of the various medical specialities.
- 2) knowledge: typically this was viewed as something that could be added to, reaffirmed and refreshed (Schostak 2009: 81). The meaning of knowledge was also explored in the literature, given that we live in the real-world of changeable unpredictable situations (Schostak 2009: 81). There are many educational models cited in the literature and thus the process of selecting one or some of these is an important one since the selection will have implications (Schostak 2009: 81-3).
- 3) social: i.e. human factors or non technical issues for example, team-work and communication issues.
- 4) skills and practice(s): in the literature this took the form of adding to a repertoire of clinical know-how; affirming practice; the use of and place for

adherence models, e.g., following guidelines; engaging in critical thinking only when it is called for; sequencing models; developing a notion of a standard of care that is situation specific that defies definition but revolves around contexts of expert witnesses, clinical guidelines, journal articles, pharmaceutical packet inserts and manufacturing instructions, etc., (Schostak 2009: 83).

- 5) professional values and identities: the literature supported a common core for all medical specialties but the differences between specialties were also celebrated. A mini-scoping exercise revealed, for example,
  - <u>Psychiatry</u>: made use of peer groups to validate CPD activities and of personal plans. Often these groups become action learning sets (Revans 1982);
  - <u>Paediatrics</u>: in America, the specialty has launched the Internet Learning System known as PediaLink) (Schostak 2009: 83). It was based on a theory of clinical problem solving adopted from Donald Schön's cycle of learning (1983). Thus members were able to facilitate and document the process of self-directed learning (Schostak 2009: 84);
  - <u>Surgery</u>: the specialty emphasised the quality of learning and the appropriateness of CPD to individual practice and career development and was trying to get away from the practice of accruing points (Schostak 2009: 84). The November 2004 dossier emphasised the "value and nature of reflective practice" pointing out that "reflective learning is rooted in clinical and professional practice" (Schostak 2009: 86);
  - <u>General Practice</u>: the RCGP website detailed the co-ordination between the different organisational bodies related to and instrumental in the working of general practice. These included the GMC, PCOs, Deaneries, PCTs and of course the RCGP itself (Schostak 2009: 86).
- 6) decision making: the literature indicated that there were two types of decision making processes. The first was the normative/ formalized idealized type. The second was the descriptive/practical approach, e.g., Croskerry's (2003 cited in Schostak 2009:82, 89, 90) *"flesh and blood"* decision making in which mental simulation is combined with situation assessment in order to assess courses of action following the *"recognition primed decision"* model of Klein et al (Schostak 2009: 89).

As would be expected, decision making was seen as very dependant upon the data gathered, e.g., from history-taking, physical examination, investigatory tests etc., (Schostak 2009: 89). It was also dependent upon models of judgement such as i) pattern recognition; ii) ruling out the worst case scenario; iii) exhaustive method; iv) hypotheticodeductive method; v) heuristics; vi) the event in which symptoms are treated and then re-evaluated after evaluation of the response to treatment (Schostak 2009: 89).

The literature claimed that clinicians believed they were making naturalistic schema driven decision approaches. They always compared the relationship between the patient's story and the "textbook" norm, although this action is not a simple case of comparison and contrast (Schostak 2009: 89).

Nevertheless models remained models and were viewed as being too crude to describe how salient professionals make clinical judgements that inform realtime complex decision making processes (Schostak 2009: 90). The need for critical thinking was seen as imperative in order to distinguish foreground from distracting background stimuli, bias, irrelevance and propaganda (Schostak 2009: 90).

- 7) knowledge and performance: the role of the literature here was to examine the issues around the boundary between CPD and quality assurance, for example in medical error reduction (Schostak 2009: 90).
- 8) identifying personal learning needs,: the literature provided a range of models, e.g., Guly, (2000) Kolb (1984), Daley (1989), an educational model that distinguished between education as a product, or process, or research. Critical thinking was deemed essential, as was the ability to find evidence. Wears and Nemeth (2007) suggested that making a diagnosis should be viewed as operating through perspectives and sense-making because this type of model changed to real-world problems that relate more directly to medical problems themselves (Schostak 2009: 91).

This schemata of categories as constructed for the discussion in this report is too simplistic, however. In the real clinical day-to-day world, none of these constructed categories stand alone but interact in a complex way referred to as pluralism, i.e., as multiple domains of actions (Schostak 2009: 80).

# **Chapter 4: Results and findings**

The results and findings address both the need to cover the range of experience and opinion as well as explore these in-depth by interview and observation/shadowing.

The first section will focus upon coverage in terms of:

- 1. summarising results from the questionnaire
- 2. summarising findings from the letter to CPD leads

and the second section will focus upon findings from the in-depth strategies in terms of:

- 1. themes and issues that have been drawn from interview transcripts
- 2. themes and issues that have been drawn from carrying out shadowing activities

## **Coverage strategies**

# Literature Review

The key issues that have been identified in the literature review provided insights into the kinds of questions to ask by questionnaire and in interviews. It also identified key issues in relation to current CPD practices (see Chapter 1). These included: the education versus service polarities; the education versus training debates; the importance of work-based learning in achieving changes in practice and benefits for patient outcomes (thereby incorporating the two basic tenets of the GMC definition of CPD); the changing learning needs and therefore CPD provision that occur as the clinician progresses along the career path.

#### Coverage

#### Questionnaire

There were 1016 respondents but 113 were disqualified as they were not consultants, staff grades or Associate specialists. These data, however, will be processed in order to compare responses with their consultant colleagues for a future report.

The 902 returns are only slightly less than the 1000 anticipated. There were 635 male and 267 female respondents with a combined average age of 48. Respondents have been in post for an average of 10 years.

#### CPD experiences

Candidates were asked about the CPD that they had engaged in the previous 12 months:

CPD	%
CD rom/DVD learning	27
Conference attendance	89
Drug company materials/events	44
eLearning modules	54
Informal consultations	40
Local hospital events	80
Non-clinical training	52

Online conference	8
Podcasting	8
Reading journals/articles	93
Skills training	43
Teaching	80
Web-based subject content	34
Table 1. CPD experiences	

Table 1: CPD experiences

Conference attendance, local events and journals are the most frequently mentioned with some new and older technologies scoring low.

## Determinants of CPD

Respondents were asked to consider their motivations for attendance at CPD:

Motivation	%
Appraisal	50
Career progression	40
Collecting CPD points	54
Department/section policy	19
Discussion with colleagues	33
Formal needs assessment	8
Interest	87
Knowledge/skills gap	59
Mandated	18
MSF	1
National Policy	11
Patient feedback	3
Performance review	5
PDP	50
Reflection on practice	68

Table 2: Motivation for CPD attendance

#### The impact of CPD

Respondents were asked to choose an appropriate response to the question "In what ways was the CPD successful/worthwhile/inspirational or otherwise, using a five point Likert-type scale:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Change in attitude	2	10	38	46	4
Change in practice	4	17	37	39	3
Change in diagnostic practice	2	11	30	54	4
Change in treatment practice	2	6	23	61	8
Impact on immediate colleagues	4	16	46	31	2
Impact on PAMS	5	13	66	15	1
Improved practical skills	3	12	32	45	7
Knowledge acquisition	1	1	4	70	24
Learner satisfaction	1	1	11	69	18
Patient outcome	2	5	40	48	5

Patient and family satisfaction	3	8	52	34	3

 Table 3: Impact of CPD

# Attitudes towards CPD

Respondents were asked about their attitudes towards CPD:

	Yes (%)	No (%)	Mean score
Chore	14	86	1.85
Bureaucratic	27	73	1.73
Enjoyable	55	45	1.45
Natural part of professional life	91	9	1.09
Necessary for patient safety	57	43	1.43
Necessary for career progression	45	55	1.55
Rewarding	59	41	1.41
Threatening	1	99	1.96
Unnecessary	0.4	96.6	1.97

Table 4: Attitudes towards CPD

## Who should be responsible for CPD provision?

Respondents were given the opportunity to consider who should be responsible for the quality of CPD provision (all that apply):

Agency	% support
College/faculties	88
Deaneries	35
GMC	18
Government	6
Local providers	36
Specialist societies	62

Table 5: Quality assurance of provision

## Content of CPD curriculum

Respondents were asked who should be responsible for the content of the CPD curriculum:

Agency	% support
College/faculties	83
Employers	19
GMC	18
Government	2
Patients	9
Self directed	73

Table 6: Responsibility for curriculum content

## How best do consultants learn?

Respondents were asked to rank a number of teaching modalities in order of preference in terms of their own learning:

Modality	% 1st	% 2nd	% 3 <sup>rd</sup>	% final
	choices	choices	choice	choice
Experience	42	12	9	4
Group work	2	4	4	11
Lecture	7	12	10	8
Online courses	2	3	0	21
Problem solving	9	14	12	2
Reading	9	11	12	3
Simulator	1.3	3	3	35
Talking to colleagues	9	20	17	2
Teaching juniors	2	5	9	6
Work-based learning	10	11	11	4
Workshops	7	7	8	4

 Table 7: Learning modality preferences

#### Barriers to participation in CPD

Respondents were asked to identify barriers to their greater participation in CPD:

	Yes %	No %	Mean score
Availability of study leave	54	46	1.46
Cost	69	31	1.31
European working time directive	11	89	1.89
External demands	51	49	1.49
Inadequate preparation	8	92	1.92
Motivation	11	89	1.89
Past negative experiences	8	92	1.92
Work-life balance	62	38	1.38

Table 8: Barriers to participation

## The most valuable contributors to CPD

Respondents were asked to identify the organisations/systems that made the best contribution to their CPD

Agency	% 1st	% 2nd	% 3 <sup>rd</sup>	% final
	choices	choices	choice	choice
College conference	20	22	16	4
Drug companies	2	4	5	36
eLearning	7	7	10	10
Local provision	14	14	16	2
Medical charities	3	2	3	24
Medical society conferences	17	19	17	3
Medline	3	7	11	7
Other internet	3	6	7	13
Speciality associations	31	20	14	2

## Letters to CPD Leads

The CPD Leads of nine Colleges responded. A summarized overview of the responses is as follows:

Q1: What guidelines/advice does your organisation give to its members about undertaking CPD activities?

Responses varied widely from recommendations on reflection and blended learning to a description of the credit points system and individual credit point categories.

- Q2: How are guidelines/advice provided? Methods of communications were: online (emails, web, Bulletins), mail (letters) and organisational infrastructures (CPD Advisors, College Tutors, CPD Forum)
- Q3: Do members provide feedback to your organisation on the guideline/advice offered? If so, how?

Responses pointed to the use of meetings, informal queries via DoCPD members and of web-based systems.

Q4: What is the range of educational opportunities provided by your organisation?

Responses indicate local and national provision of courses, e-learning modules, seminars, workshops, conferences, journals and training trainer programmes.

- Q5: How do you identify the need for specific CPD topics?
  - Responses varied from micro-level approaches, e.g., sounding out members at Congress, discussion with colleagues, from learning needs analysis for interests groups, and through efforts of enthusiasts, to the macro-level of local and national support systems, from CPD returns and by setting up educational resource centres.
- Q6: How do you guide your fellows to do specific CPD topics? Key themes were flexibility and signposting and thus methods of guidance ranged widely from publicity at meetings, or online on websites or web-based tools designated for this purpose, or via presidential bulletins. Use was also made of newsletters, of designating and kite-marking specific courses, or allocation of credit points for specific categories of CPD activity that include a variety of possible activities (e.g., external/internal scientific to private study).
- Q7: Is the membership uptake measured? Responses range from confirmation to an intention to measure it in the future.
- Q8: If so, how is it audited?
  - A variety of auditing procedures on CPD annual returns where used. This will be discussed in greater detail in the Discussion Chapter.
- Q9: How do your fellows record their CPD? The use of diaries (paper or online) was the most popular method with ePortfolios second.
- Q10: What are the characteristics of your organisation's CPD target audience? Male to female ratios varied within Colleges/Faculties. The ratio approached the 50/50 mark in one, and it was approximately 60/40 in two other colleges. A number of other Colleges/Faculties declared they did not measure their audience's characteristics.
- Q11: Do members provide feedback to the organisation on the guidelines/ advice offered? If so, how?

Responses indicated use of organisational infrastructures such as an online forum, email options, as well as use of CPD coordinators and filling in feedback forms having attended ear-marked conferences.

Q12: What methods does your organisation use to evaluate the effectiveness of CPD provision?

Responses ranged from none and no formal methods through evaluation forms at meetings and "*an open culture encouraging feedback in general*" to an audit of member's activities.

Q13: Do you have any literature on effectiveness of CPD in your specialty? If so, please could you list the relevant references.

All those Colleges/ Faculties who responded replied that they had no such literature.

## **In-depth strategies**

#### Interviews

Eighty-four interviews have been completed and the range of interviewees included managers, CPD Leads and consultants across a broad spectrum of medical specialties and Post Graduate roles. The aim was to compare and contrast the perspectives of CPD providers and users.

The table below summarises the Specialties and professional roles of interviewees:

Medical Specialties	Total number of interviews
Emergency Medicine	15
Physicians	16
Surgeons	10
Paediatricians	2
Anaesthetists	2
General Practitioners	4
Psychiatrists	7
Obstetrics & Gynaecology	1
Public Health	1
Pathologists	4
Opthamologists	1
Occupational Health	1
Registered Paramedic	1
Public Health	1
Postgrad Deans	5
Associate Deans	3
Executive Directors	1
Assistant Directors	1
Directors of CPD/CPD Leads	4
Academics/Medical School	4
Total number of interviews	84

[Key: no names of interviewees have been double-counted, e.g., if they are listed as CPD Leads then they are not counted again in their particular specialty]

#### Research in clinical settings

Shadowing by the researcher has taken place in i) an Emergency Department in an urban DGH; ii) in an outpatients clinic in a metropolitan DGH; and iii) on a post-take ward round in an urban DGH. A small excerpt from the researcher's field-notes illuminates one of the findings from the literature review as follows:

The continual tension between service delivery and training or educational needs is illustrated, for example, when the specialist registrar sits down to write up the notes of the patient last seen. Head down, pen poised, mind focused on the clinical details of history taken, physical examination performed and investigations ordered, that have just occurred prior to returning to the office, the registrar begins to write the first sentence, but, no sooner has he started than he finds himself interrupted by a case presentation from a doctor more junior to himself. It doesn't happen once or twice either. Mostly it's a more junior doctor requiring anything from reassurance through guidance to an explicit "how to do" advice, occasionally it's a nurse needing the registrar's informed signature, (i.e., he skims the clinical notes, approves the designated medication and checks the dosage) for a drug prescription. (Schostak; excerpt from field-notes: April 2008)

This excerpt attempts to convey something of the dynamics of clinical practice in action together with the complexities of the clinical settings against which educational opportunities and service delivery requirements interact with each other in positive ways at times and vie with each other for resources of various kinds at other times. This is the backdrop against which CPD must function effectively: this is the reality test for CPD, in other words.

# **Chapter 5: Discussion**

This chapter will explore the results and findings by developing the following key questions that emerged from the research objectives (see page 4) and from analysis of the data:

- 1. What do doctors understand by the word "*learning*" and how does this affect their CPD? How are educational interventions distributed across institutional and more personal settings? How may workplace learning outcomes be noticed more effectively so that they can be included more fully in CPD accreditation?
- 2. How are learning challenges culturally embedded in organisational and workplace environments? How does scientific and medical knowledge shape the conceptions and conduct of professional interactions?
- 3. How does an organisational perspective shape conceptions of CPD needs? In what ways does it seek to link these understandings to specific medical professional interests?
- 4. Is the conception of CPD resolvable on a singular scale or will it necessitate several options with ideological factors necessarily shaping the options envisaged?
- 5. What do doctors understand by reflection and what examples do they give of impact?
- 6. Are there differences between specialties?

The focus of the discussion will be to identify the range of arguments that can be taken on a given issue posed by asking these questions. Although the questionnaire data provides some indication of the pervasiveness of views, the strength or significance of an argument does not rest upon the number of people making a particular claim. Interviews enable arguments to be explored irrespective of whether or not, such arguments influence policy. They also enable the assessment of what is at stake in adopting particular arguments for policy making.

# **Doctors' understanding of the word** *"learning"* **and the effect on CPD** *Learning and CPD*

All clinicians when interviewed described CPD in terms of learning. "*The day you stop learning is the day you shouldn't be doing the job*", one consultant said in an interview. This learning was described as being of two types: either it was learning something new or it was learning that what they were doing was what everybody else was doing and therefore indicative of "good practice". This is a form of professional triangulation, that is, a process of comparing experience about similar activities across a range of professional perspectives in order to find what is common, what is different and what is contrasting. It is not carried out in a systematic manner as would be the case in research procedures. Nevertheless, it is a way of constructing what may be called a process for the public development and sharing of professional knowledge, skills and experience. However, just because everyone is doing something does not necessarily mean it is good or indeed the best practice possible, but it does provide a quasi-public base-line from which to reflect upon evidence and assess practice. This description was generic across the respondents. It suggests that CPD could be employed to make this process more

systematic, rigorous and robust in terms of formulating procedures for "*validity checking*".

Validity checking is part of professional reflection where, in the words of one interviewee: "Learning is not just acquiring information. It's learning what you've done wrong and doing it right, learning from what you're doing right and doing it better, learning what you are doing very well and, perhaps, passing that message onto your colleagues who may be doing not quite as well". The issue for CPD is how to elaborate, in a systematic way, upon the normal practices of professionals as they endeavour to assess and communicate their own practice. It is about taking advantage of what professionals already do by embedding more systematic procedures of CPD into everyday culture. How this might be done, however, is problematic.

A vital role of CPD is that of ensuring that everyday practice is best practice. The latter is always informed by research on new knowledge, skills, techniques or innovatory practice. Learning something new was described as *"keeping up-to-date"* and as *"keeping my practice up-to-date"*. This learning might have involved something new, or something to be *"re-learned"* because it wasn't *"quite at the front of your brain"*, or it might have involved looking at something from *"a different angle"*. This again, is a process of triangulation where the different viewpoints on an object reveal different qualities, features or structures. CPD can systematise such naturally occurring cultural practices by deliberately providing a range of different approaches, variations in practice, and changes in viewpoint in order to enrich the experience, practice and knowledge of professionals.

The nature of what was newly learned varied according to professional roles and from specialty to specialty. It ranged through such categories as knowledge, psychomotor skills, managerial skills, leadership skills, technological skills, implementation, appraiser of literature, screening of research proposals and mediation. The other dimension to learning was variously described as *"affirmation"*, as *"reaffirmation"*, as *"confirming my own practice"*, as *"having my thoughts confirmed by somebody else"*, and *"something that [...] confirms any uncertainties I may have had about my own level of knowledge, [and] so reassures me that I know what I'm doing"*.

The questionnaire results supported the interview findings. They indicated the extent to which the engagement with CPD was a consequence of interest in the subject matter, the opportunity to reflect on practice and to fill a knowledge or skills gap. All of these could contribute to changes in treatment practices (69% agreement). One respondent wrote about the value of "attending an international conference in my specialty which afforded me learning in the practicality of my specialty but also importantly allowed me to reflect on how the current practice within my own department stacks up against National and International standards".

There were variations in articulations of "*keeping up-to-date*" and/or confirming good practice. Attending conferences, workshops and in-house meetings, such as grand rounds and journal clubs were all mentioned in interviews. Other modes included consultants "*sharing surgical theatre sessions*" and interactions with colleagues (peers, juniors, other healthcare professionals). Not only was a

conference a "chance to network and to talk to colleagues", explained the interviewee, but it's "rather like going round a library in that you serendipitously find out things that it wouldn't have occurred to you to look for in the first place".

Is it the case though, as one interviewee working in a Postgraduate Deanery put it, that, instead of "using CPD as a real opportunity to uncover their unknowns", most individuals will use the CPD and learning cautiously and not venture out of their comfort zones? This was because of the "scoring" through which CPD is assessed and accredited, observed another interviewee whose post involves a half-time clinical role and half-time academic role. That consultants tended to stay in their comfort zones is like junior doctors deliberately selecting their non-contentious cases for the assessment procedure. Not only does this behaviour make a doctor look competent, it is also a relatively easy option compared to taking a risk with something with which is unfamiliar and that would take more effort and time to master. "Scoring" fosters such behaviour. Another consultant told the interviewer that, while he "feels very small" for doing so, nevertheless, "for my appraisal, I keep all my thank you letters and any cards that I receive" from former patients as a measure of his competencies and of his performance level. In this interviewee's eyes, such actions were not those of a professional since professionalism is concerned with self-regulation and with notions of trust with members of society.

Nevertheless he continued to do what made him "*feel small*" in order to best represent himself within the appraisal and CPD systems in use at this time. This is yet another manifestation of scoring. And this is accompanied by an institutional privileging of a tick-box approach to CPD assessment. What is at stake in adopting approaches that score CPD? How can they not have an impact on a sense of professionalism and upon the ways in which professional practice is undertaken?

A large number of interviewees believed that alternatives exist. The interviewee cited above, talking about the problems with scoring, articulated his thoughts further, saying, rather "it's this ability to be able to critique yourself and be able to look at what your decisions are and look at it critically and learn from the process" that is important in professionalism. This interviewee emphasised his point even further by saying he would be "far more confident" about a doctor treating him if that doctor had been "through an appraisal process in which they had to critique their own performance and actually had admitted they had got some stuff wrong and learnt from the process" than being treated by a doctor who had gone "through an appraisal process in which they said, 'oh yes I'm still up to date and I've ticked all the boxes and I know everything'." Making this distinction between performance and the judgements and decisions that led to that performance is a subtle act but necessary and "I think it is that structure and the process of being able to appraise your own performance that we need to get better at". Performance is a visible entity: it can be seen and that in itself leads to an enabling of mechanisms for measurement and standardisation to be put in place. However, the formation of judgements and the making of decisions are much less visible and thus resistant to quantitative systems of measurement and standardization. In the words of Fish and de Cossart (2007), performance is more "visible" whereas judgement and decision making are "invisibles", being different and more reflective (and, in the words of another interviewee (see page 57ff in this chapter), compatible with a more qualitative assessment procedure. We will return to this point later.

## CPD as learning

When asked to talk about CPD in the context of learning, interviewees from all specialties often linked CPD to "that which I need to do my job effectively", and a number talked about it as "that which I need to do to develop me as a person because I need to move to the next level". One consultant explained that, while she tended to "equate CPD with learning", she did not equate it "with formal attendance at a conference". Often it was linked to personal "learning needs" and therefore it would involve activities that would be i) "appropriate for those learning needs, in [one's] preferred learning style" and ii) that would "result in learning outcomes that are mostly translated into practice". Thus it appears that interviewees envisaged CPD as a particular approach to learning that involved being a professional, and with moving on along a career path.

Frequently, in both interviews and questionnaires, CPD was also explicitly associated with appraisals. Fifty per cent of the questionnaire respondents considered appraisal to be a motivation for CPD. One interviewee explained, "I'm either reaching the mark or there are things I need to do to improve, otherwise it's not development". This particular explanation implied the need in the professional role to i) attain a standardised threshold; ii) undergo a measurement procedure; iii) set about implementing improvements if necessary; iv) be committed to development, viewing it as an integral part of working life' and v) in this particular context apparently be accepting of this system. There is a simple logic to this perspective: a doctor is either good enough or not and, if the latter is the case, steps have to be taken. If there is a deficit, it needs to be remedied. One way of doing this is to engage in a learning needs analysis, with the appraiser, for example. This identifies a gap in skills (clinical, leadership, communication, management, etc.) or in knowledge and so on. Shortcomings can then be addressed and remedied over the forthcoming year. At the end of that year, at the next annual appraisal, a return to the appraiser with an indication of what has been done, can demonstrate that a, b and c have been learned and will be incorporated into professional working life in order to become a more effective practitioner/professional. This may be called the engineering model of CPD. It may be that the simple logic of seeing a gap and filling it is not actually appropriate for all learning opportunities. In the words of one interviewee: "Doctors don't work like that".

If a patient arrives with a clinical problem with which a doctor is unfamiliar, the doctor cannot wait for their appraisal to show that they have looked into the problem and learned from these searches for further information on what it is, what to do, and how to do it. Doctors may need to look into the problem immediately as a matter of urgency or they may have a longer time period in which to update themselves and their practice. Given that some assessment is required, this borrowed managerial model linking CPD to the appraisal system might make sense bureaucratically in keeping with a managerial model, but for clinical practice it makes no sense. While this is a fairly simplistic response to the example of simple logic given above, the argument it presents is not to be dismissed so easily. To return to the notion of the visibles and invisibles discussed above, it is interesting to note that the simple logic is explained in a language that evokes the visible performance with its reference to "*reaching the mark*" and of "*things to do*" if that mark is not reached. However, the interviewee who argued that this is not how

doctors work, used words to paint a scenario to suggest the invisibles of judgements and decision making make for a more complex picture for professional medicine. Furthermore, what was also implied is that, at times, the use of simple logic will not be sufficient to deal with the complexities of medical practice. If CPD activities are to address these complexities, then recording and assessing CPD activities would have to be flexible enough to address what is actually involved in changing what doctors do and how they do it, as a basis for improving patient care. Thus what is at issue here is the scope of CPD – where does it begin and end? For example, occasionally interviewees linked CPD with Personal Development Plans. One interviewee explained "our PDP structure" is all about "professional development …except a section of it is learning activity and that is CPD". This boundary between the two activities may help or hinder the capacity of CPD to bring about change.

While interviewees associated CPD with the notion of development they rarely examined its various facets. The explicit notion of moving on, of professional progression, and of development was articulated clearly and precisely by far fewer interviewees, and those who did articulate it tended to have either more specifically designated managerial or teaching roles to their professional posts. Those individuals working in Deaneries, Universities and other institutions often held responsibilities for implementing ways of moving people on in their careers and thence the notion of continuous-ness and of progression was high on their professional agendas whereas it was more likely that case-based scenarios took precedence for busy NHS consultants. While all interviewees were members of the medical profession, the nature of progression and moving people on was much more visible for a clinician whose post comprised of being a clinician for half a week and working at the Deanery for the rest of the week when compared to a busy NHS consultant working in a small department in a DGH, for example. Individuals were much more likely to talk about the more visible and the more frequently occurring parts of their roles. Data from the questionnaire, however, indicated that 40% of respondents saw progression as a key motivator.

Professional roles within medicine range from what a number of interviewees called the "*jobbing day-to-day doctor*" in clinics, on wards, in operating theatres, in laboratories, in mortuaries, through to clinical managers and/or leaders, to academic researchers and up to CPD 'Leads' in institutions such as Royal Colleges, Faculties and out to members in Deaneries and Universities. The term "*jobbing day-to-day doctors*" suggests a homogeneous group, but that is far from the truth. Some busy NHS consultants spent their clinical day carrying out specialised medicine, such as kidney transplants, and yet nevertheless, since they were surgeons, they were part of the emergency surgical take rota, and, in this role, their general surgical skills were what was required and what had to be kept up to date. Attending particular conferences, for example the Association of General Surgeons of Great Britain and Ireland, and targeting specific parts of the conference programme were described as useful for ensuring that the clinical knowledge, skills and management were all kept up to date.

A broad range of professional roles demands a long list of different professional requirements and thus the CPD activities that are available must meet these very diverse needs in order to be effective. While there is no denying core similarities in

terms of the clinical knowledge of an individual's specialty, clinical management skills, inter-personal skills, leadership, team-working, decision making, presentation skills, and so on, the contexts in which these are used is the key to the range of differences. Those professionals whose roles are split between clinical and managerial or academic responsibilities face a particular set of issues with regard to CPD and the need to keep up-to-date in order to be safe to practice. Often their nonclinical roles left them "out of the loop of a lot of practice activities that keep a very active partnership up to date", as in the case of GPs for example. More effort to keep on top of new therapies, for instance, had to be made, and in some instances, interviewees found that since the major part of their working week was spent on non-clinical activities, they could not spend sufficient time ensuring that they were safe to practice, and therefore they decided to opt out of their respective clinical roles altogether. Others found ways of managing this problem. Like the kidney transplant surgeon example, given in the paragraph above<sup>3</sup>. A few interviewees explained that going to conferences and targeting specific parts of the programme provided a workable solution to their problem, by enabling them to i) refresh their clinical knowledge; ii) discover what was new in both clinical knowledge and in clinical management; and iii) become updated quickly and efficaciously in terms of the time taken.

#### Distribution of CPD across institutional and more personal settings Institutional: Local versus national provision

In the context of national provision, one questionnaire respondent's reply that, since he was based in Scotland, he "often had problems accessing courses because of the distance from North Scotland and the travel time needed". This comment was similar to those made by other respondents and also by those consultants who lived and worked in Scotland and took part in telephone interviews. Other questionnaire respondents indicated that the situation was much worse for clinicians who worked part-time and this point was also picked up in the interviews conducted. But the problem is not just limited to Scotland. Many interviewees working in the North of England also expressed their views that meetings in London were very expensive both in terms of finance and of time. Indeed, meetings are so "Londoncentric" and this should be addressed, said one consultant, via allocating financial resources for the North and Scotland and through the provision of online "e-packages". Part-time clinicians who were interviewed tended to have difficulties accessing national courses if they lived outside of the Home Counties.

Local provision was identified as relevant by 80% of questionnaire respondents although no individual commented on its significance in response to open questions. A number of female interviewees explained that they deliberately selected locally provided CPD activities while their children were young as it was a question of lifebalance choices.

Time and travel distance were not the only difficulties with regard to accessing nationally provided CPD activities inasmuch as several interviewees pointed out

<sup>&</sup>lt;sup>3</sup> There is a core of practice-based clinical knowledge, psychomotor skills and management to surgery and thus keeping up to date with a specialist area (kidney transplants) *and* with general surgery is quite different to somebody who is attempting to keep up to date in clinical practice while spending half a week doing a desk job, even if that does entail being involved in medical education, management of others, assessment procedures and so on.

that notification of CPD activities and events was not always sufficiently in advance in order for busy professionals to be able fit them into their diaries.

#### External versus internal CPD activities

89% of questionnaire respondents referred to the importance of conference attendance and one hundred and sixty-one respondents wrote additional comments in support of its value. A small sample of these comments has been included here in order to give a flavour of the breadth and multiplicity of what counts as CPD for a professional at any one point in time and in their career and the activities that attract professionals to attend. These included such factors as "up-to-date common practice", "specialist approaches", "technical teaching", "career discussions and peer discussions" (Vascular Society Annual Meeting); "high quality learning and lectures for Emergency Medicine not available locally" (ACEP); "interaction between senior and junior doctors, paramedical staff, patients"; "experience was shared whether you were in the lecture theatre, looking at the exhibits, eating"; and "it was HIV in the eyes of the Scientist, Clinicians in rich and resource poor countries, nurses, patients, the HIV Association who talk the language which the patient understands" (The British HIV Association in Edinburgh, April 2007). Even a short list like this shows the scope as well as the diversity that is to be found in Medicine and medical practice and thus the sheer complexity that CPD has to address in terms of provision, resources and assessment.

#### More personal settings

The settings in which individuals carry out their particular professional roles vary quite significantly, but for the purposes of this discussion, a broad distinction between clinical and non-clinical contexts<sup>4</sup> is sufficient. Taking the clinical contexts first, there were teaching and non-teaching hospitals; small and large departments; departments whose staff not only expressed their interest in education but put that interest into action somehow and departments that didn't do this; Trusts who were more supportive of CPD and those who were less supportive. Settings within non-clinical contexts would include the many different roles undertaken for the Colleges, Faculties, Deaneries, Universities, Medical Schools, the Royal Society of Medicine and so on.

Large departments were better able to facilitate more interactions between clinicians as well as between clinicians and other healthcare professionals simply because increased numbers of personnel within a particular location will affect the probability of interactions. Conversely small departments were not able to provide such opportunities and there was more difficulty in attending external events. Moreover, if one or two individuals did not get along this was likely to be more noticeable within a small department. The changing staffing levels may lead to further reductions in learning opportunities<sup>5</sup>. If the department was understaffed rather than small then further reduced learning opportunities were much more likely. If staffing levels were maintained through potential changes in employment

<sup>&</sup>lt;sup>4</sup> These contextual categories named in this chapter are discursive ones created for rhetorical purposes in order to contribute to the debate; they are sufficiently representative of the real to be a useful model but are not being presented as an exact portrayal of what goes on in the real world of medicine.

<sup>&</sup>lt;sup>5</sup> This may be exacerbated by the increase in SpRs with CCST who will be given more clinically based sessions at the expense of SPAs from 2012 onwards.

practice, then it's also likely that learning opportunities will also be adversely affected in the potential reduction in non-clinical sessions (SPAs) for individuals, thereby reducing motivation.

Turning to the educationally active departments, these were the places where the interests, motivation, numbers of committed people around will be more conducive to positive attitudes and values towards learning. What looked routine work to some, became an *ad hoc* learning opportunity for these others because they saw things with different eyes. The departmental size was no bar to being educationally active, rather it was motivation that was important. For example, one GP commented that in his two-person practice, he found medical students "helpful" because they made "you think about what you are doing". After twenty-five years of practice, with "nobody looking over my shoulder", he explained, he just tended to get on with it, but the presence of the students created a real educational opportunity. 80% of questionnaire respondents experienced teaching as CPD during the previous 12 months. The GP and other interviewees also commented that junior doctors often provided learning opportunities simply because they were "more upto-date with basic sciences". However, it may well have been the case that bigger departments were a more prominent feature of this category simply because an increased number of staff made it more likely that people interested in educational opportunities would interact together with educationally positive spin-offs.

The experience of sorting out a clinical problem "there and then" was a "much better learning exercise" than going to a meeting where you hope you might get some information that may be useful to you later. But does this learning influence clinical practice? That is "a very difficult one to measure", commented one interviewee. He continued, "I've got this clinical problem today, what am I going to do about it? That's the least measurable because there is no way that external validation of that process of learning can be established, whereas a meeting is relatively easy. You can say, well, at least the objectives of the meeting were satisfied and you can ask the participants whether they felt the objectives were satisfied. You cannot do that when you are trying to learn on an individual case and yet that's the most valuable type of CPD and the one that's most likely to influence clinical practice and to influence how you treat a patient."

This formal/informal CPD split was articulated by one interviewee as follows: "there is that element of CPD which you have to sort of just do for formal mechanisms to get through and to tick boxes essentially. And then there's the CPD which is ongoing within your normal daily working practice, about just developing your own skills, developing your own clinical practice, developing the service, all of which involve you acquiring new skills and things like that". In other words, "CPD itself isn't a driver it's just a, it's just recorded as a side-effect for what we're normally doing". Professionals engage in activities that keep them fit to practice (i.e., CPD activities) and these activities vary enormously depending upon experience, roles, expertise, and as such they tend to defy being captured for assessment purposes. They are "qualitative" rather than "quantitative" as one interviewee commented, soft rather than hard and thus invariably but erroneously perceived as resistant to robust and rigorous assessment since "it would be difficult to police" and "to really quantify". After all "how do you know that a chat that we're having in City X is actually a good quality chat or whether we're just perpetuating some bad practice?" Of course the mechanisms set up to quantify are simply not appropriate to assessing the qualitative but that is not to say that no robust and rigorous assessment mechanisms exist to do that. "One of the problems is", said another interviewee, "if the scientific frame, within which you are working, counts and puts great value on numerical things, then in fact you will go looking for numerical solutions and you won't worry very much about the history behind the number, providing the number is what was called robust and be robust for all sorts of reasons and none of them to do with validity, or real validity".

As far as questionnaire respondents were concerned, the notion that more personal settings i) became recognised as valid vehicles of CPD activities and ii) became significantly higher on the institutional agenda for the assessment of CPD, was strongly supported. Notably they cited "*experience*", "*problem solving*" and "*talking to colleagues*". Work based learning, such as "*discussing difficult cases with colleagues*", "*discussing operative techniques and watching other colleagues in action*", also gained a significant mention. The critical element affecting validity here is discussion between colleagues where multiple viewpoints can be focused upon an issue or a case. The topics for such discussion can be wide-ranging.

What to some is "routine activity" to others can be "a CPD experience, such as attending a coroner's court or attending a Mental Health Act Tribunal", and *"involvement in local service provision can also be quite effective CPD when one* learns the views of managers, users and carers". A significant number of questionnaire respondents (89%) indicated support for the contribution of reading since, as one individual respondent so clearly stated, "the ability to sit and read without distractions of clinical commitment and to reinforce this with discussion at taught courses gives me the most valuable learning experience" and furthermore, "I undertake reading in my own time as I then have control of how I learn rather than it being dictated by an external body". All of these examples are recognised and accepted learning opportunities, and, as such, they are thus potentially capable of being referred to as a CPD activity. What is more is that, given that the medical profession historically followed the apprenticeship model, although contemporaneously it relies less on this model for training, it seems illogical that these sorts of activities are not rated higher in the assessment stakes than those of conference or workshop attendance.

#### What counts as CPD?

Is the purpose of CPD "to make sure that people meet a minimum standard or is it to allow them a tool to develop particular interests to a greater degree? So are we looking for a kind of everybody at the same level of minimum, just about cope-able or are we looking to help people get better in certain areas?" This is the comment one interviewee made during an interview. The notion of associating CPD with minimum standards links it to the validation process whereby a doctor is designated fit to practise. However, this does not accommodate promotion of life-long learning. "Just about cope-able …" is associated here with being "good enough". But this is not a suitable attribute for the practice of a profession. The phrase "help people to get better in certain areas" could imply a remedial approach where it is judged that a gap exists which needs to be filled. However, if it is intended that CPD provides a way in which individuals can specialise in the areas that most interest them in order to become an expert in that specialised area then getting better at being able to cope in areas outside that specialism is arguably an appropriate aim.

Other interviewees came up with further complicating issues in the course of their interviews. It was described as "an individual activity" or "something you do" with others such as networking, peer review and so on. "No two people are the same, no two people have the same experiences, but you can use group settings to actually network"; continued another interviewee. "I think networking is an important part of CPD and reflection" and group settings are important in facilitating that. Networking and peer review<sup>6</sup>, for example, were seen as setting up environments to encourage dialogue, thoughts and ideas flow between individuals, all of which contribute to and feed into reflection, learning and development.

However, what counts as CPD to those involved in quality assurance inevitably depends upon what is identifiable and claimable as CPD. "You have got to have the evidence to show you are continuing [to develop]", said one interviewee. But interviewees did not always consider the identifiable and claimable as effective. Disparity between some of the things that could or could not be claimed was one theme that interviewees often referred to. Reflection was a case in point. Thus, as the interview schedule progressed, it became clear that the Royal College concerned did permit the use of reflective notes on these activities that, according to these particular few interviewees, supposedly were not claimable as CPD. The discrepancy arose because these particular interviewees were reluctant to spend time writing reflective notes and, instead, preferred to "just tick a number for turning up to sessions", while implicating that it was not an acceptable CPD activity for their College. It may also be a response to the auditing exercises by CPD Leads. For example, one CPD Lead in an e-mail response explained that their own institution conducts an annual audit of CPD activity by selecting "5% of participants (in practice often 6% are needed) and requesting them to submit the following documentation":

- "a completed record of Continuing Professional Development Activities. A completed diary on the online CPD database is acceptable in place of the hard copy of Record of CPD Activities";
- "a completed Professional Development Plan for a given year (College of Department of Health format). The PDP must be signed";
- "evidence of all external CPD activity. Evidence of 25 external CPD points will be considered as the minimum acceptable total";
- "evidence of internal CPD activity. Evidence of internal CPD points to make up a total score of 50 points (i.e., internal CPD points plus external CPD points)".

The institutional nature of the discourse in this excerpt from the email response is in stark contrast to the language used by the interviewees in the examples given above. There can be no mistaking the regulative terminology used: it is precise as well as being concise; and its overall tone is instructional and directive. It is typical of the

<sup>&</sup>lt;sup>6</sup> Peer activities are highly regarded in the assessment procedures of the Royal College of Psychiatrists, for example: see later in this chapter.

style that was employed by other CPD Lead respondents (see the email letter to CPD Leads in Appendix C).

Interestingly, one CPD Lead commented that self-reflection does not qualify on its own as some clinicians will simply choose to partake of CPD activities that are confined to their own particular comfort zones. A self-critical attitude, however, in conjunction with self-reflection will provide the self-realisation, the motivation and the ability to act differently and try a CPD activity outside of the comfort zone. This comment may account for the 18% of questionnaire respondents who were mandated to attend CPD or the 5% who attended as a requirement of a performance review.

In this context, one interviewee, talking about CPD and work-based learning explained, "I guess CPD has become a label and something that you get boxes ticked and certificates for, so, under that formal title of CPD session, [then], it's that", but as continuous professional development with small letters rather than capitals, then, of course it's essentially "on the job training". In other words, when used "with its capital letters, it's become known as the stuff that goes in your portfolio but, with small letters, any learning is CPD". It could even be said that he could have been articulating the contrast between the quality assurance discourse used by the institutions and that of the clinicians arguing the case for more personalised settings in relation to CPD assessment procedures.

#### How workplace learning outcomes may be seen as more effective

Learning in the workplace is complex and doesn't lend itself to an accountability system of overt markers such as attendance at conferences, or reading a minimum number of books. It is hard to describe and thus does not sit well with quantitative approaches. Many interviewees and questionnaire respondents expressed a desire to get away from the "tick-box" approach, to go beyond the notion of "scoring *points*" and escape gross generalisations; they wanted to get away from a "reductionist" approach towards something that can reflect "the complexity of practice". There was a perceived danger that the tick-box method evoked a feeling of "being regulated" and that this in turn fostered an autopilot response to attain the "credit rating" rather than a reflective learning experience that led to a deeper and more enriched understanding of practice. The willingness to change from an exercise that involved "doing lots of paperwork and ticking boxes for the process of auditing, rather than getting the advantage of the education" certainly existed. But, as one consultant said, "If you were to ask patients what they wanted from their doctor, they would answer, 'I want them to talk to me, to listen to me and to be caring'". The difficulty arises with the question of how these attitudes, values and qualities can be assessed and recorded: CPD points being related to "quality" and not to "time" and/or "duration".

It is clear from what people say they do and how they say they do it, and from shadowing them doing it, that learning takes place in clinical settings and often leads to professional development. That it happens therefore is not the issue. The point is the way in which this occurrence is recorded and assessed by an externally applied robust set of procedures. If a group of consultants are "*chatting*" about cases, can the quality of this be judged "*a good quality chat*" or an act of "*just perpetuating some bad practice*"? One way of finding out is through shadowing,

where the parties typically engage in an intimate dialogue, born of enquiring into the minutiae of daily practice. The following example taken from an email correspondence that ensued after the researcher had shadowed a post-take ward round in a busy urban DGH provides an illustration of this:

*Context*: the consultant has designed a Post-take ward round assessment form which he and all his team use. The researcher (R) and the consultant (C) engage in an email conversation about what the phrase "*working up*" means:

*R:* For the purposes of my analysis there are two levels of process to consider here: a) the general over-arching structural and b) the particulars/in-depth. The structural one ensures coverage, giving coherence and integrity to the post-take ward round event while the particulars/in-depth one provides illuminating insights into ways of seeing, doing and thinking that, when combined, contribute to render the paper assessment exercise realistic – the paper record comes alive, in other words.

*C:* Yes this is a good insight. Perhaps I need to make it more overt to the Juniors what is going on in my head as I listen. This is not a ritual rosary process. The Junior tells me the "Headlines" and then should tell me a synthesised story. I listen out for patterns and in particular things that don't fit. Thus I suppose in a way I sit as the "Judge" hearing the accusation and the evidence.

Excerpt from email correspondence: 2008

As can be seen from the above illustration, shadowing led to feedback that developed into a process of taking an in-depth look at the complexities of clinical practices in terms of its micro- and macro-politics, its nuances of how people relate to each other, whoever they may be and whatever role they have in the particular clinical scenario under observation at any one time, and in setting that alongside an individual's understanding and experiences of CPD opportunities and assessment. As one interviewee explained, "doctors are quite prepared to talk to a researcher". As with many professionals, they like to explore their thinking and actions with another person in the resulting emergent conversations. As Jerome Groopman writes, citing Judith Hall who researches medical communication, "most of what doctors do is talk," and "the communication piece is not separable from doing quality medicine" (Groopman; 2007: 20).

This notion of an intimate dialogue that engenders modalities of critical and reflective thinking raises an interesting issue about the extent to which work-based learning is supported and its outcome validated other than by internal mechanisms, such as the statement, "*I now understand this*". Boud & Hawke (2005:3) write that "*we must focus on assessment practices, not just those that involve formal assessment activities, but all those elements of a program that require learners to form judgements about their own learning*" when discussing the infrastructures (both in terms of macro- or micro-level) for the provision and support of lifelong learning. In other words, this "*takes us far beyond the normal assessment agenda*" (Boud & Hawke: 3) that demands a more sophisticated, sensitive and complex set of instruments than are currently available.

Noticing educational opportunities involves communication. Groopman, again citing Judith Hall, writes: "Competency is not separable from communication skills" (Groopman; 2007: 20). This was graphically illustrated by one consultant whose clinical work frequently involves lung cancer. "Medicine", she says, "is not just all about physiological changes and pharmacological management". The interviewee continued to explain further, saving, with regard to lung cancer, for example, she necessarily engages in a sort of "mental chess" that is both awful and yet most rewarding. Usually, she explained, she has only known the patient for two weeks and yet she must inform the patient that a) there is little if anything that can be done; b) life expectancy is a year; and c) most die within months. How may CPD address such difficult and sensitive issues given that "in addition to words spoken and heard, there is nonverbal communication, his attention to the body language of his patient as well as his own body language – his expressions, his posture, his gestures" (Groopman; 2007: 17). Indeed, how a doctor thinks can be "first discerned by how he speaks and how he listens" (Groopman; 2007: 17). Aware of these complexities of medical communication and of clinical practice, the consultant interviewee explained that on ward rounds, in acute duties, she "hopes I teach through instruction and partly by example".

There are other contexts too where communication skills, and a use of language and an ability to relate to another person are just as crucial. Thus, as one interviewee explained, there are "easy bits" to monitoring CPD achieved - can "they stick a plastic tube down somebody's windpipe? That is easy to describe and easy to measure. But can they communicate with small children and know when it's appropriate to speak to the child rather than the parent, that is much less easy to put on paper". In yet another context, several interviewees made a point that having experienced being seriously ill themselves, they had become very aware of how important language, communication skills and relating to the patient and to family members all were . Having experienced first-hand "how vulnerable you feel in a hospital bed, and somebody is going to do something to you and you're not in control of it, that's all very frightening" but "you can have positive spins offs from it" and so "you can say to patients, 'I know how you feel' and things". Moreover, these particular interviewees emphasised that not only does this learning experience apply to relating to patients, but, such was the impact of learning from their potentially life-threatening illnesses, that they have made an effort to incorporate this into their own practices in such a way that not only does the patient and the patient's family benefit but also their trainees see and understand this aspect is a vital part of their clinical professionalism "because you've no idea what it means to know that the person looking after you understands". Again, generating personal CPD learning after a personal life threatening experience is hardly a realistic strategy for everyday purposes. How such empathetic learning can realistically take place is a key question for CPD.

In general terms, then, the kind of knowledge being sought is multifaceted and as one consultant summarised it, it is "very much the art of history-taking, the art of coming to a diagnosis, the art of looking at other diagnoses, the art of being able to investigate patients, whether it's social investigations, or clinical investigation, such as ECG, brain scan, and that sort of thing". Another interviewee talked about "how knowledge and skill does not come from just books and lectures, even interactive sort of teaching [but] "it comes from making them well-rounded, and I would want to be well-rounded myself. It is the clinical acumen and the clinical judgement [which] involves their leadership and managerial skills as well."

#### What counts as effective CPD?

"To be effective we should know the why as well as the how", said one consultant during the course of the recorded interview. Another interviewee commented, "I think the best CPD is when it happens on, you can actually put it in the workplace and you can say 'yes this is what I'm doing and this is what I'm going to do and I know this experience will be easily transferable from now to tomorrow'." In general terms, effectiveness involves knowing how to bring about some intended outcomes. Perhaps more specifically it can be said that effective CPD entails both learning and being fit to practice. However this is a learning process that goes beyond "gaining new knowledge, gaining new experience" because in the words of one consultant "the heart of it is to do with the broadening of the ability to think and to gain from expertise in other areas and to learn new concepts and ideas".

The question then is whether current CPD strategies and practices are appropriate to meet learning needs effectively. CPD has to be more than "a set of lists of activities" for each specialty and there has to be "guidance on how to get the best out of it", something lacking in the view of one interviewee. What would improve effectiveness, in this consultant's view, would be activities/events that inform and educate one into "critical appraisal of the literature" and that provide an overview of adult learning, for example, in order that one can then select the pedagogical approach that best suits learning needs and abilities.

To be able to determine learning needs requires that "one has insight" into individual shortcomings and also the ability to reflect in order to come up with personalised professional strategies with which to fulfil them. Although some interviewees distinguished between insight and reflection, some did not. However, all linked insight with reflection. Insight and reflection are both competences in their own right. Is this recognised by "people, that are inside CPD", asked one interviewee. After all, "it's a question of knowing that you're actually weak in something, accepting that and going and doing something about it". But in the context of CPD, the interviewee continued, "I think it's all about measurement and what you're trying to measure with CPD and where does CPD fit in". Earlier in the interview, the interviewee had called a distinction between what he called "quantitative and qualitative" materialities, such as actions, events and so on. In his opinion, assessment procedures tended to concentrate on materialities that he called "quantitative" simply because they lent themselves to being counted, to being measured, to being assessed through virtue of being discrete, defined, black and white material entities. But so much of medicine and clinical practice goes beyond what is quantifiable because "it's all about qualitative things, it's not about time spent per se, rather it is about the gestalt of the entire learning experience." In that sense, "it's not about quantitative because [...] you can tick a box" and what is more, "I think that's one of the challenges to go back to [since] by making it a time based activity it's very much more difficult to deal with the qualitative".

Attending a course to learn new skills for a new technique is just one part of effectiveness. "You want to feel you've got the skills to do it, so that's your opportunity to find out whether the skills that you have as a manager and specialist

doing lots of injections is good enough for you to be able to do the new procedure. But that's only half the story," inasmuch as the attendee also learns what equipment is needed, the sort of environment in which the technique can be performed, and what sort of staff would be needed as part of the team. In other words, you then have "to try and establish a service in the NHS" and "that is more difficult. It's all well and good doing training courses in something new, but there are often a lot of barriers that you have to get through in order to be able to introduce a new therapy even within the NHS. Often, [in reality these are so insurmountable that] you carry on doing what you have always done". Existing practice, therefore, becomes a confounding variable in implementing new approaches when CPD is an individual, rather than a shared experience.

The complexity that effective CPD has to address was made clear in a discussion between consultants debating professionalism. It began by claiming that professionalism requires appropriate knowledge and involves making a professional judgement, inasmuch as it assumes an ability to carry out "that integration of lots of information to deal with uncertainty". It was considered that the "ability to manage uncertainty is definitely different as somebody progresses up the career ladder" and *"that management of uncertainty then gives flexibility to how they behave with* patients" and they "don't get obsessed with the right answer for the patient, the right answer for an exam". However, clinicians are individuals, and this generalisation was precisely that – a generalisation. Thus there will be individuals who have progressed to consultant level but "still believe that being told what to do is the way forward" and therefore they will go on "a refresher course where they go to be told". Others have "gone past that level of idea around education and dismissed being told and actually are more interested in the 'just-in-time' approach" and they will look to the internet or discussion with their peers. One attitude is "I don't know what I don't know" and therefore "I need a place to mop up some stuff" and the other attitude is "I need to know this". The extent to which one of these approaches is better than the other "... depends upon the nature of the individual. If you are going to transfer it into action, the latter is obviously better because it's actually personalised and appropriate and within the context of their working". However, "if you are going to feel good about them learning, the former is better, because those people feel like they've been on a good course, and they've had a good talking to".

If "everyone has different ways of learning", as another consultant interviewee said, then the way in which Colleges and Faculties set standards for the most effective CPD is a delicate balancing act between supporting their members and producing "a stick with which to beat" them. The fact that there are multiple ways of learning, continued the interviewee, is recognised and taken into consideration inasmuch as "minimum standards" have been set. Colleges try to provide "different formats for people to achieve CPD" thus realising "that some people will find answering questions or some people will find doing it in the workplace, being observed" may be the different ways of approaching such a balance and indicating that the Colleges and Faculties "recognise these".

It is clear from such discussions and interviews that there is a considerable range of variability in terms of people's needs and circumstances. Thus the role adopted by the Colleges and Faculties to inform people formally of the programme of CPD

events in advance, along with "the potential quality of it ... so that they can get a feel for whether the event is likely to suit their learning style", and whether it will suit "their learning objectives" was a good strategy, according to one interviewee. Another strategy involves online CPD provision. However, the challenge for e-learning, is that while it is very "individual" and "it's interactive with the programme" it is "not interactive with anybody else" and, "a lot of the benefits of CPD are interaction with people and the networking opportunities" and this has limited availability in online learning. As an illustration of how online learning might address the needs of learners, one interviewee described in detail an online learning course, using PBL, for Specialist Registrars and middle grades operating between a number of Trusts within a particular large urban region. Although most learning occurred online, members of this group also met every other week barring commitments. In the event of absence, that member of the course would post the group tasks online in more detail than if attending in person.

Whatever strategy is adopted, of vital importance is the fact that clinical decisions might need to be supported by relevant CPD because these decisions are "*not simply theoretical discussions*". They are decisions taken that have implications, and that is "*why effective CPD is all about doing something relevant*", something that will be used in one's day-to-day practice.

# Culturally embedded learning challenges: scientific and medical knowledge shaping conceptions and conduct of interactions

The methods of expression, modes of articulation and the metaphors used by professionals indicate ways of seeing, doing and speaking which, in turn, impact upon the conceptions and the conduct of professional interactions. It is possible that by changing conceptions of how learning takes place it may be possible to design productive new avenues for advancing doctors' learning. We conclude that the language presently used to capture processes of learning restricts strategic possibilities.

#### Metaphors of learning

The interviews sought to explore how learning is currently understood and how possible improvements to these understandings are presently conceptualised. One way of doing this is to examine the types of pictures painted by the words interviewees used. A typical term employed was that of the gap, with the "things you need to do" to fill it requiring "an honest perusal of those areas where you've got gaps". The word "gap" is either explicit or implicit in such accounts.

Another popular variant of the gap metaphor is "closing the loop on the cycle of identifying your learning needs, looking at what it is you are currently doing, and then going out and doing something about it". While being similar in many ways to the metaphorical use of gap, its major difference is that it brings in a notion of a cycle: a circling movement that never ceases. However in this case, the interviewee talked about "closing the loop" which implied that that the circle referred to circles once only and is not an ongoing process. More accurately, the reference is about closing the loop. This interviewee talked about there being a variety of approaches to address learning needs, and "then checking that you really have learned" and that "you're more effective, and you can do whatever it is you need to do, either in clinical practice or teaching and learning, or academic practice and so on". In

other words, this cycle completes its one revolution. And while this is in keeping with situations where specific knowledge content or a skill is lacking, a considerable proportion of CPD activities involve taking knowledge or skills further so the notion of a gap to be plugged is not necessarily the best representation of how learning occurs through CPD activities.

Development may better be represented through the kinds of cycles to be found in a spiral, as for example in Kolb's learning cycle (1984) or Schön's reflective cycle (1983). Here it immediately becomes clear that these cycles never cease but are continuously circling spiral-like rather than looping inasmuch as the change brought about by learning or by reflection leads into another cycle and so on.

Other metaphors employed signal the need to strengthen knowledge as in the necessity to bone up or flesh out. These are frequently mixed with business and managerial discourses where interviewees talked of becoming team players and of the need to have assertion skills in the sense of building up the structures and processes necessary for the use of knowledge in the contexts of practice. Thus, it is not a simple matter of algorithmically applying knowledge. Although doctors are scientists, they are unlike chemists who deal with interactions between substances in test tubes in a controlled laboratory environment; rather they deal with patients who are not standard issue, do not experience illness in a controlled environment but have free will, and may exercise it in unexpected ways. One way of conceptualising the process of applying theory and knowledge to practice is to employ the metaphor of "a reality filter". In other words, as theory meets practice, the pure scientific gaze encounters what may be called "*interruptions*"<sup>7</sup> when faced with making a clinical diagnosis and plans (both therapeutic and clinical) for the patient with the presenting illness in the day-to-day reality of the clinical consultation. There is a need to "steer a fairly cautious middle course" and be able to balance "knowing the evidence" and one's "own personal experience" while recognising that this delicate balance is difficult to achieve. This is an issue for both CPD and appraisal and the relationship between them.

As seen in this chapter, interviewees often associated CPD with the appraisal system. One interviewee in particular articulated this with the following recipe metaphor.

Take making "a beef stew" for example. There is not just one recipe, there are a lot. Some recipes will be easier than others to follow, depending upon one's level of expertise and experience in making beef stew. You are undergoing your appraisal when your appraiser tells you that "you make rubbish beef stew" and, furthermore, that at the end of the year, you will return and together we will have "a conversation" about "whether you've improved your beef stew". In addition there will be some form of "assessment", a tasting session, for example. You express your surprise since you were unaware that you had this problem, but you agree to address it. You ask your appraiser for advice on how you might go about learning how to improve your beef stew. If the appraiser is "up to the job", he

<sup>&</sup>lt;sup>7</sup> The word 'interruption' has been chosen as a metaphor to signify a break in the flow and continuum of the theory of science due to reality impinging upon and unsettling theory.

suggests reading "Delia", going to see somebody do it, tasting some to get a sense of what is best. A picture is beginning to build as to how to go about addressing this poor performance in making beef stew. There are other places to go to for assistance too. You can consult various websites, your own specialty's, the Academy of Medical Royal Colleges, for example, and you choose one of these schemes to best fit with your own preferred learning style. You might simply want to go and watch somebody do it, while somebody else "who's up at the Asperger's end, would want to go and read 28 recipes" and "they would make a really good beef stew, but they wouldn't have ever spoken to anybody in the making of it, including probably the butcher, because they would have ordered it off the internet".

The metaphorical story graphically illustrates the situation of a professional taken aback by one specific performance being flagged up as something less than it should be. The choice of a recipe to illustrate this was an interesting one. A recipe is a guideline that most people will follow quite religiously without thinking. Very few would feel expert enough to experiment with parts of the recipe. The outcome of a culinary recipe is a specific dish or a piece of food, and this dish or food is a material thing that can be experienced with almost all senses. It is a very different phenomenon from knowledge content or a discrete skill. The exploration of metaphors such as this recipe can thus enhance and open up thinking, dialogue and action about CPD activities and its assessment.

There are some common and the contrasting elements of the different metaphors: each has a sense of there being a whole, whether that needs to be completed or is impossible to complete because there is always new knowledge and new circumstances; each has a focus upon experience and practice. One has a clear emphasis upon procedures - the recipe - as well as the elements that need to be brought together in a subtle and experience led manner. The difficulty that each is trying to address is the fulfilment of the whole, a whole that seems to resist easy closure and reduction to measurable features. This is particularly the case in the context of rapid changes and the knowledge explosion.

Rather than a sense of 'building up', other responses to the impossibility of grasping the whole deliberately turn to metaphors that fragment, or break into manageable bits. For example, one interviewee explained how he "regularly skim reads" the pertinent journals (BMJ and BJGP) and how he "just bombs the bits [he] needs", feeling "very empowered, if you like, to smash and grab in what, to my mind, is an effective way, because I can always go back later, by research, or whatever, if I find I need an article to refer to more seriously". The language used here is vividly active, violent even. The learner homes in on the target of a learning 'byte', be it online or in a journal, and once it is in his sights then it is captured and held securely. The overall tone is one of incredible speed, precision, and power. He completed his story by saying his method of skim-reading was "effective" because he was able to go back to an article later, if he needed to read it in more depth. However, he provided no indication of how frequently he would find himself returning to read an article in more depth. This raises the question of whether CPD is a fragmentary style phenomenon, where there are things that one needs "to brush up on" as one consultant put it, or invest in "just-in-time learning" as another said. Broadly, according to one interviewee, CPD activities fell into "two camps". There

was the gap-filling camp and there was the keeping up-to-date or "*keeping me sharp*" camp. However, a sense of the necessity of the whole returns when people try to find their bearings within an organisation, a department, a team. For example, new to the post, but familiar with the roles, one individual described her approach as knowing "*whose levers to tweak, and at what rates*". Although there is a sense of there being a whole structure, it is a rather mechanical structure. Hence there was the implication that learning is a mechanical process, to be achieved through tweaking levers.

Finally, as one interviewee summarised it, the professional part and the development part of CPD are best represented in the CPD activities that are available and in the assessment process whereby CPD is signed off as having been completed. Even though a number of interviewees perceived that "the systems in place to audit performance are getting pretty good and getting quite robust", ways of adapting this to on-the-job learning was thought to be impossible. Implicit in the concept of continuing, there was also the possibility of "moving ahead" that was referred to by so many interviewees a view that captured the continuous-ness explicitly designated in 'Continuing Professional Development'. However, the continuing part of CPD was the poor relation.

#### Organisational perspective shaping conceptions of CPD needs

Providing external CPD activities and events is one way for the organisational perspective to shape CPD needs. However, if these external events are not well attended then that power to shape is diminished. It is therefore essential that CPD providers, whoever they may be, attract an audience and offer quality, wide ranging but pertinent CPD materials that will satisfy that audience and keep it returning for more. The attendance of formal CPD activities and events provides a way for organisational factors to shape conceptions of CPD needs. This is not a simple task for any provider.

As previously noted, it is not necessarily easy for consultants to attend such events. An interviewee explained, it is *"less difficult for the big common specialities, like mine, than it is for the smaller-number specialities, like plastic surgeons"* to attend formal external CPD activities. Given that *"there aren't enough numbers of them ...they have actually got to go for super-regional meetings, and national meetings, and even international meetings, to get a sufficient volume of people to do a large part of their CPD".* General surgeons, like the interviewee, seemed to be able to attend a far greater variety of CPD activities provided by organisations than can plastic surgeons who were said to contend with far fewer CPD events simply because they constituted a very small population. Putting on CPD events will be a costly venture in terms of time, finances and manpower. Recouping these expenses is necessary. The larger the range of activities offered and the greater the potential audience will provide ways of recuperation. This greater variety of content material can affect the shaping capacity.

Providers of CPD are not the only organisations to take into consideration. The Trusts expect delivery of the NHS health service. According to those interviewed, some Trusts were "generous" in allowing consultants time to pursue CPD activities. At the other end of the spectrum, a very small number of interviewees stated that their Trusts were not interested as this detracted from time spent delivering healthcare. A balance has to be struck "... between spending the entire time learning how to do things, and not actually doing anything, and always being too busy to go to go and learn anything, and weighing that balance is difficult", said a clinician. For most interviewees, however, the CPD allowance was always too small and therefore this was a limiting factor in the selection of external CPD events. The questionnaire response followed a similar pattern suggesting that availability of study leave (54%) and work-life balance (62%) were significant barriers to participation. More mundanely, cost was seen as a significant barrier to 69% of respondents.

One consultant declared that CPD needs to be organisationally embedded – i.e., supported and resourced in terms of time, money, values, attitudes, and so on. One interviewee commented "*I think your Trust should pay you to go to your major annual craft meeting at least alternate years and, perhaps rather more when you become a senior and end up running these things*".

CPD assessment relies upon CPD being recordable and this factor accordingly shapes CPD needs. This may lead to the organisational perspective privileging those CPD activities that are measurable and quantifiable in order to facilitate an assessment procedure that will stand up as being transparent and rigorous. All the colleges and faculties have accepted that annually each professional must attain fifty CPD credits to be designated CPD-worthy. Yet "what is the currency of the hour?" asked one interviewee. Moreover, "what is the educational currency of that hour? If I go and study for that hour, what will I be doing better as a result of that?" continued the interviewee. But "that isn't the question they are asking at all." One interviewee speaking about the objectives behind work-based assessments commented that many colleges "haven't necessarily got a thinking structures' framework" but, instead, would rather continue with the examination systems as they currently stand, since these "are money spinners for them". Examinations are certainly expensive, but also implicit in this statement is the notion that the qualitative, i.e., a thinking structures framework, is not in place; rather the examination system that lends itself relatively easily to the quantifiable, is the preferred mode of assessment.

Another consultant said that the development part of Continuing Professional *Development* isn't fully addressed when compared to activities and events targeted towards continuing-ness and the professional part of the CPD term itself. The perception of this individual stemmed from the fact that a busy NHS clinician spends so much time on the job and therefore might be undergoing what could be called *"on-the-job learning"*. As discussed previously, currently, this is difficult to robustly assess. An academic clinician, on the other hand, spends less time in clinical settings and more time in academic settings carrying out activities that count more straight-forwardly towards CPD points. Even though, as seen previously, a number of interviewees perceived that *"the systems in place to audit performance are getting pretty good and getting quite robust"*, ways of adapting this to on-the-job learning was still thought to be impossible.

Interestingly a number of interviewees neither questioned the importance of CPD nor its value in their professional day-to-day activities; indeed, one interviewee even remarked that it was "*a worthy activity*". But what they did question was

whether or not it could be recorded "accurately" and "usefully". Hard copies of recorded CPD activities to be assessed are no longer necessary and doctors record their activities online. However, this online submission is not trouble-free. A number of interviewees expressed their difficulties in logging in to their College or Faculty website for various reasons, the main one cited was the perceived incompatibility between Trust computers and the College or Faculty website. Other reasons given by a range of interviewees included the frequency with which the IT system in certain Trusts was changed, thus precluding familiarity with computers; the lack of user-friendliness; and for a few there were reasons of a physical nature, such as neck problems. Many more interviewees expressed their dissatisfaction with the time that had to be spent on recording CPD activity. They questioned whether it was "useful" and "justifiable". A number found the process of recording itself "frustrating" for several reasons. These included the restrictions of named categories designated in the online CPD record; others decried the repetition involved; and several commented on the "arbitrariness" with which points were scored by the individual (i.e., by themselves) for CPD activities done. It is important to stress at this point that during the course of the interviews, these individuals showed commitment to CPD and were fully cognisant of the need to be held accountable, but nevertheless they were still dissatisfied with the methods of recording their CPD activities. Some had decided to keep "a simple log of what [they had] read today" since it's "quick and efficient", they explained, but, of course, "even that's not accurate. When you are really busy, it's not a full reflection of what you are continuously doing".

There seemed to be a desire for alternative ways of recording CPD. Although many interviewees expressed a wish for something different they were unable to come up with any workable solutions. With regard to on-the-job learning, "you accept that any doctor who's in practice, any teacher, anyone else really, if you are doing the job, you are learning and progressing so, literally, you can just say – you don't imagine many doctors would go downhill, many teachers would go down hill, obviously, because, as you gain more experience, you are going uphill, so I think that is par for the course. It doesn't need to be, I think, wasted time on". Such a viewpoint is definitely commonsense and pertains to being a professional, but it is politically naïve. If this fails to meet the stringent demands for accountability and transparency, then "a one-to-one with a senior colleague" and a focus upon how a consultant has kept up-to-date may be a viable alternative but this needs to be assessed robustly. Computer models are a way forward. However, "While you might be tempted to think its accuracy would be superior," explained one interviewee, "if you put rubbish in, it's rubbish out and it disguises things".

Online learning and CPD opportunities rated favourably with interviewees: there was a consensus amongst those interviewed that "things like BMJ learning and Doctors.net learning modules ... have become very popular" with "a lot of people using them". A certificate awarded at the end indicated that "the equivalent of X hours" have been completed along with an assessment that "shows that you have, here and now, understood and passed a threshold mark". Once again material proof in the shape of a certificate is the prize as it renders this set of CPD activities visible and validates them. Attendance at conferences and workshops also provide certificates for the same reasons.

The process of curriculum mapping of conferences and workshops as organised by Colleges and Faculties over several years was an eye-opening experience, revealing "gaps in the clinical areas that are covered" at such external CPD events. It was discovered that core competencies needed to be identified in order to ensure that these were always included as part of the programme at conferences and workshops. Thus there should be a mix of presentations on offer, from the core competencies, through those of the not so common, to those of the rather rare clinical areas.

Already we have seen already above that the word "knowledge", as used by interviewees, represented a raft of meanings that ranged across different contexts. Consider communication as an example in the context of an emergency department, "it's not just communication, ... it includes situation awareness, leadership skills, knowing the capabilities of everybody on the team and it's all that sort of interplay that goes on when you are actually running, for example a Resus", explained one consultant in Emergency Medicine. And it is this complexity that has to be addressed by CPD, both in terms of opportunities for development and in terms of assessment. In other words, the College or Faculty has to ensure that their proffered programmes of CPD activities do address these issues and they would be well advised to ensure that the assessment procedures are sufficiently flexible to accommodate such nuanced intricacies. In the example of communication given, above, the consultant commented that these "sorts of communication skills are often ... best looked at [either by] somebody observing you in a resuscitation itself or in a simulated environment". This type of assessment is potentially useful in that it guarantees a quality assurance procedure that is universally accepted and should be considered by individual colleges. However, it does have resource implications.

### A conception of CPD: a single scale or ideologically shaped alternative option "Learner-led CPD is the most successful because that encourages engagement and acknowledges professionalism", declared one consultant interviewee. In pedagogical terms this follows adult learning models, self as agent models, active learner models<sup>8</sup> and so on. The reality of CPD provision, real CPD opportunities and CPD assessment may not meet this aspiration.

CPD was understood differently by those with organisational responsibilities to those who see it through the filter of their own personal professional development. The former were more centred on how organisations might make structural adjustments with respect to educational objectives (e.g., in response to recertification). The latter were more concerned with personal investment of time towards their own enhanced professional functioning for improved patient care. However, for CPD to be effective it must address the needs of individual clinicians, of the populations they serve, the organisations within which they work as well as broader system-wide, national policies. This is a complex set of aims.

An overarching CPD delivery strategy therefore needs to be capable of addressing each level of complexity rather than privileging one at the expense of another. Broad national policies have to be localisable (for regions and their specific sublocations) and ultimately individualised in order to meet the real demands of

<sup>&</sup>lt;sup>8</sup> See Literature Review: Rogers, MacMurray (1991), Kolb (1984), Lewin, Guly HR *EMJ* 2000; **17**; Daley BJ 1998: <u>http://www.edst.educ.ubc.ca/aerc/1998/98daley.htm</u> etc.

individual clinicians engaging with the particular circumstances of a specific patient. Any generalisation of the effectiveness of a particular CPD initiative in such a multi-layered context therefore is itself complex. Complex generalisation thus refers to the multiple effects of an initiative or acts as it is translated in different ways at different levels or in different contexts of action.

As in the discussion on the nature of CPD in the preceding section, it can be interpreted in multiple ways by clinicians and can be reduced to box ticking activities. As one questionnaire respondent, an ex-associate medical director who had been in post for more than five years, responded: "I can safely say that most colleagues see many aspects of CPD as a chore to be endured. I suspect this is largely because of the excessive "nanny" approach we have indulged in. If CPD is to be meaningful, then we will have to listen to our colleagues and not just adhere to government targets and 'PC' concepts".

This is a danger where general educational objectives are primarily understood in terms of narrowly defined delivery mechanisms centred on the acquisition by doctors of new or updated medical content knowledge, particularly when such knowledge is seen as the core element of CPD need and practice. This results in CPD primarily being understood by both providers and users as a formal activity in which individuals acquire knowledge through agreed media, and that it takes place away from everyday professional settings. Although there are many skills-based courses, it is typically knowledge rather than skills or indeed, attitudes and behaviours that is acquired. However, the balance between knowledge and skills will vary according to the specialty since those with a high level of psycho-motor activity (e.g., gastro-intestinal surgery) will have a significant skill CPD requirement whereas, for example, psychiatry may require a higher level need for affect.

The delivery of skills, knowledge, or indeed attitudes through the mechanism of courses, conferences, workshops addresses the need for coverage across a system, but it does not necessarily address the necessity for in-depth learning in the context of the workplace itself where individuals typically have to come to judgements based upon incomplete information and knowledge. Evidence based practice is thus not reducible to the manipulation of information or knowledge employing clear cut, systematic formulae as say, in the decision-trees employed in the construction of computer programmes.

The Royal Colleges of Surgeons has "very prescriptive terms" to cover ways in which surgeons learn practical procedures requiring high levels of psycho-motor skills. "So you learn [1] by watching with the consultant or the trainer talking you through each step, and then [2] you learn by watching while you talk through each step before it happens, and then [3] you learn by doing with the trainer talking you through each step before it happens, and then [4] you do the procedure with the trainer stepping in if there are any specific problems". Thus "there is quite a well-documented style or procedure that we follow in terms of how you learn a set technique" (see, for example, Davis & Forrest, 2008). This account clearly indicates the universalism of the behavioural pattern that is followed. Systematic generalisation has evidently been instigated and accepted by the surgical profession.

Other interviewees articulated the learning of psycho-motor skills in slightly different ways, although never deviating from the behavioural pattern described so clearly above. Step [1], according to some of these other consultant surgeons consisted of two parts, namely, watch the consultant/trainer do it, and then tell the consultant/ trainer what to do. In this way you come to "know all the background and you know all the basic things and you start to do it, but then you learn more about, maybe, the complexities of it, or the nuances of it, once you've actually done it. So it's an ongoing thing and you start to, maybe, go up a level of knowledge and experience and then you get more out of a meeting, or a master class". With this particular account we begin to recognise that much more than that very visible set of behaviours is going on and that what is underpinning the essential learning that occurs in this sort of apprenticeship model is actually invisible and involves an array of diverse activities, such as thinking and decision making (Croskerry, 2006) making "flesh and blood decisions" (Croskerry in Groopman, 2007), "recognitionprimed decision making" (Klein, et al. 1993), use of heuristics to handle uncertainty (Farmer & Higginson, 2006), metacognition and cognitive forcing strategies (Croskerry, 2003) to name but a few. It can be argued that the simple act of mimicking someone else, either by doing (robotic-like) or speaking (actor-like), does not lead to the development of surgical skills. The process is far more complicated than that.

This crucial, yet invisible, learning enables you to "start to think about the more difficult cases, or more the unusual cases, rather than the straightforward, standard ones. The basic training was useful for the bog-standard, very classic cases, but then there are all these complex cases that you have a different level of understanding and questioning about as you're training on those", continued the consultant surgeon. Furthermore, "there is no doubt that people learn in different ways, and have different favourite instruments, depending upon their own experience and their own degree of manual dexterity, to some extent", explained another surgeon during his interview. "I don't like dissecting with scissors", he continued, "I find them cumbersome and clumsy, so I tend to use scalpels". Other surgeons would use scissors, he said. "There is a lot of individual variation, I think, but there is no doubt that, as you practice a technique, you get better at it and, what you have to do is practise all the different techniques that are available and then choose the one that suits you best".

This model, explained another interviewee, is used on ATLS instructor courses. Watching involves looking and this contributes to "*I think about 60-65 per cent, or* so, 60 per cent, just by looking ... and then you do the same technique again, but with a commentary, and the ears take in about 15 per cent of what's heard. So if you're blind you take in 15 per cent but if you're deaf you take in 60 per cent but, if you're all-seeing, that's 75 per cent, and then it's reinforced again" through engaging in "the pyramids of how people learn, and conscious learning and unconscious learning, conscious appreciation, unconscious appreciation", and so on.

The formation of judgement, the making of a decision and its skilful execution is essential to the definition of the professional at whatever level and in whatever context, whatever the particular circumstances. In short, expertise requires judgement under conditions of incomplete knowledge and information in the context of given resources and multiple demands for decision making and action.

Now consider the case for clinical academics who have to fulfil different roles compared to the full-time practising NHS consultant. Inevitably this translates into different understandings of and needs for CPD. It also translates into differences in terms of gaining access to the provision of CPD. For example, an academic role typically involves a significant part of the working week being devoted to research, educational and administrative activities. The role obligations of practising NHS consultants, on the other hand, will bind them to a greater proportion of clinical duties and thus limit their time spent on research. Accordingly, the current assessment procedure needs to be sufficiently flexible to accommodate full time clinicians and those who engage in management or academic activity.

Indeed, "the volume of work" was often cited by a majority of interviewees as a real impediment to collecting CPD points. There is "a professional and a personal development" element/aspect to CPD and CPD is defined/described/articulated "clinically" and also in terms of professional practice. The professional aspect is "a continuum" that can have "spikes" at times but is ongoing, "shaped by everything that's happening all the time", explained one consultant whose post included both clinical and managerial roles in equal proportions. For example, she often booked attendance to update meetings for professional CPD, but these were "often cancelled due to pressure of work". CPD involves not just the clinical but also includes managerial and leadership elements too. She herself, she explained, likes to be engaged in new things that are happening, so at times this engagement might lead to other things being left out. This consultant's articulation of CPD as having both a professional and personal aspect to it was an interesting one. She continued to explain that there is a sense in which some of what she does creates a comfort zone, and within it everything is so routine. For example, she can do the bronchoscopy procedure "in her sleep", and she is nervous about getting out of that. New techniques are coming out for bronchoscopy and it would require "mental effort and time which I don't have" to go and learn that. Being able to perform this procedure in her sleep, this consultant saw no point in updating her professional skills to incorporate new techniques, but from the personal perspective, she has decided this aspect of CPD was not something she wished to take up for several reasons, two of which she gave, namely, "mental effort" and "time". Coincidentally, this particular consultant also articulated the position where the divide between what is and what is not CPD, (for assessment purposes, that is), that many interviewees perceived as existing. It seems to be the case that existing assessment procedures target only the professional elements and aspects of CPD and downplay the personal elements and aspects. The personal aspects and elements of CPD were more likely to relate to learning within the workplace and this was the area that many interviewees perceived to be under-represented in the CPD assessment procedure.

A key question is: can CPD that occurs in the workplace be assessed? Work based elements of staff development are not widely conceptualised within the remit of such formalised CPD with its proclivity to privilege quantifiable professional developmental opportunities. From the discussion in this chapter so far, it is evident that educational work-based experiences vary substantially from department to department, hospital to hospital, according to staff composition, structural definition of professional role, institutional ethos/support of CPD practices. As a result, formalised external CPD was seen to provide a levelling mechanism but not necessarily the location where most learning took place. Personal study and inhouse educational activity were favoured in some instances, but basic on the job experience seemed to be very prominent in accounts of personal learning. In other words, it was perceived by professionals as CPD from a variety of perspectives including confidence and clinical competence, but nevertheless, it was perceived by these very same professionals to be barred from being assessed as CPD.

When asked to comment on how formal CPD provision addresses learning needs, one interviewee said, "I think one of the things that probably worries a lot of people is that we will fail to adequately identify learning needs as CPD becomes more and more industrialised. What I mean by that is that as all the Colleges try and line up with re-validation the process aspects of CPD are becoming more uniform, which has some advantages but it has disadvantages too, inasmuch as it may not adequately account for the needs of individuals pursuing CPD, so the industrialisation of CPD stands the risk of failing to capture many individual's *learning needs*". Talking in a similar frame, another interviewee commented, "I think the health service is very good at cascading – 'oh this is a new way of doing such and such' – but I think they then only send it down in one particular format, whereas, if they looked at members of staff and said, 'well, this person learns in this way, and this person learns in another way, and we'll sort of get them on the right day of the course', as it were, but, also, sitting down and identifying those needs. If they want to take CPD seriously, then it has to be tailored, not only to the needs of the service, but also to the needs of the individual to actually be able to fulfil a better part in that service".

That is not to say that there is no room to improve CPD opportunities. Given that CPD is continuous but attendance of conferences, courses and workshops is intermittent by its very nature, and, given that *"the time for CPD"* in a job plan as a busy NHS consultant is always limited, one clinician knows precisely what would help his CPD opportunities. If it could be arranged *"to beam out post-grad teaching sessions to all DGHs"* in the region, *"that would be great"*, he said. This would avoid precious time and energy being wasted on journeys to get to external events, and ensure that it was better spent focused on effective CPD activity. However, the sheer complexity and the multiplicity of contexts and situations to be addressed means that a single size approach will not be adequate. The discussion in this and the previous sections suggests that several options with ideological, professional and contextual factors shaping the options will be required.

#### **Reflection and its impact**

Reflection was sometimes described by interviewees as an "analysis of your experience", and "about thinking things through to do better, but also being there, experiencing it, doing it". Another interviewee was a little hesitant, saying, "on the reflection, again I'm assuming, correct me if I'm wrong, that reflection means thinking about what I've learned, what I've done with it, and auditing, completing the auditing process, so I'm watching what I'm doing, seeing if it makes a difference, if it does, how can I improve it? If it doesn't should I abandon it or should I try a different strategy? Is that what you mean by reflection?" Here

reflection was linked not to being able to critique one's practice but rather to an auditing process. When an interviewee was asked to explain what he meant by an audit he described the process as comparing some facet (that chosen to be audited) of their own practice with some standard set by a recognized august body or institution and ensuring that his practice in the context of this particular facet corresponded closely with that standard. Such a comparative practice is not the "analysis" as described above which requires "thinking", "being there", as well as "experiencing" and "doing"; it is not the "analysis" that signifies "reflection". And that becomes even more evident as this hesitant interviewee talks further, saying, "so, my reflection is why don't I sometimes make the changes? I sometimes come to the answer that the effort isn't worth the outcome. We're too set in our ways and we just don't have time. Some of the changes we'd have to make would take many hours of work, many hours of audit, and bringing patients back again and again to measure things, blood tests. We don't have the time. It would be wonderful if we had the time. We could all do a lot better for our patients if we had the time." A notion of audit continues to remain the main subject of the interview conversation. Reflection seems a difficult concept and practice. Indeed, exploring the theme of reflection, one interviewee expressed a belief that medicine as a profession was "poor at recognising it and recording it and giving credit for it". There were "pockets around the place where reflection is built into the system", he continued, particularly in larger departments where there were more than two consultants on "the shop floor" and where concerted efforts were put into facilitating an environment in which people were encouraged to reflect on their practice and strategies such as "lots of case-based discussion" were implemented.

Turning from the interview data to the questionnaire data, sixty-eight per cent of respondents considered reflection to be an important motivator for engagement in CPD and seventeen consultants mentioned it in response to open questions. One wrote that "the introduction of the RCP on-line diary and the requirement to reflect on any educational experience [combined with trying] to summarise the learning points [was] not always easy [although it was] valuable when looking back". However, in practical terms, as found previously with regard to learning and CPD, a consultant surgeon explained that when he was on the general surgical take, "the biggest single problem is time. We are running in complete overdrive with the multiplicity of targets. I mean, when I'm on take we admit between 20 and 30 a day so, by the time we've been there for four days, you've got over 100 people have been through your hands. It's a big whirl; there is no time to reflect on anything." He was not alone in his views. Another consultant thought reflective learning was the most threatened of all the three. There is time to "do experiential learning, but to do proper reflection, proper blue skies stuff" there is no time for that, she said. That required a "*different mind-set*" to the one she (and most other senior doctors have) had of "running all the time".

Generally speaking, reflection appears to be difficult as a concept and in practice: it competed with the busy-ness of service delivery; "*reflection has got a bad name in medicine, it's some sort of thing nurses do to inflate their profession um and the Schön thing, everyone's on that band-wagon*", as one interviewee commented during an interview. However, it was found to be more useful by some clinicians compared to others. The following two examples provide an illustration of the

different attitudes with which two consultants viewed reflection. Each consultant was interviewed and then shadowed by the researcher.

*Context one*: during the course of the interview with Consultant A, when asked the question: What, if anything, hindered reflection in his experience? He talked firstly about how time-consuming it was and maybe if he could speak directly into a mobile phone and record his reflection, then his secretary would simply type it up for him, having accessed it from a server, and the conversation continued as follows:

*R*: *Except, of course, if somebody else transcribes it for you. I don't know about you but when I write something I write it first and then I go back over and think about it and modify it a bit.* 

C: You launder it. Yes. Yes. I know I do.

R: No. You reflect upon it!

C: In my time, I've had to make lot of speeches. I've written articles outside medicine for other things and it's the same with email. Email is a terrible medium because lots of problems are caused by email, whereas, in a previous life, say, 15 years ago, before we all had email, if you had a nasty letter from someone, you'd do the nasty reply, stick it in the drawer, pull it out the following morning and think, well, do I really still feel that way? If you still feel that way, say, yes, I don't like this guy. He deserves all he's getting and send the letter. With email, people press the send button before they've had chance to reflect on it. That's a different sort of reflection. That's why I'm talking about laundering, maybe reflection, but it is laundering. You are sanitising your inmost thoughts in a way that creates the impression that you want to give at that time, whereas the impression that you actually have at that time might be something different but you might not want to share it with the world.

Excerpt from interview transcript: 2008

Context two: the researcher provided email reflective feedback after shadowing a post-take ward round. This email feedback from the researcher led to further email reflective feedback from Consultant B as follows:

*R:* The final two comments are about your ward round in particular. Firstly it is time-consuming to follow this model you have set up, and you note this. Secondly, while it is obvious you are still trying to improve the model: I do not know when you provide these comments and to whom you provide them. Is it at the end of the ward round? And to everyone who is on the day shift? When do the doctors fill in their Assessment forms? To whom do they give them?

C: I try to give feedback on the hoof – this is easier if I remember to say "I will be assessing you on this case". I then sit down at the end of the round, type it all up and email it to all team members (if any "D" score, I would omit that doctor's data from the whole group). Yes this takes time, but it is worth it to see the performance improve and to see quality and safety improve. Looking back on my career some of the biggest changes in my practices have come from a single sentence. I have to hope that this happens occasionally!

I try to get one feedback form on me a month -I should perhaps do it more often so that I can train the Juniors in how to give feedback.

Excerpt from an email correspondence after shadowing: 2008

Thus it can be seen from these two extracts that one consultant believed that, for the most part, reflection was "*laundering*" and "*sanitising*" decision making because it allows the doctor to think calmly and objectively without emotion. The second consultant, however, saw it as means for both self-learning, (his team of junior doctors use this form to provide feedback on the consultant himself), and creating a learning environment for others.

#### **Differences between specialties**

Much of this topic has been mentioned already. However, a few issues remain that can be dealt with in this small sub-section.

#### Core knowledge and skills

Medicine is one profession even though it is composed of a large number of specialties, each of which has a number of sub-specialties and so on. There may be a case for core knowledge and skills across the entire medical profession: as seen previously, doctors do talk to one another so communication is common throughout medicine. We have also seen how complex communication actually is in relation to medical practice. Similarly, we have also seen that the art of history-taking (see page 23) is a vital part of being a clinician and this too would span all the medical specialties.

Differences between specialties and the implications for CPD assessment Anaesthetists and "a lot of surgeons [have] very clear behaviour objectives [i.e.] before you move to this phase of your training, you must be able to do this. The same could be said "to a certain extent [for the emergency medicine people", particularly in the context of ATLS and other life support courses. For example, "in order to be able to do this, you must be able to demonstrate either on a mannekin or a patient, you can put a tube down, you can put a line in – very strict and clear *things to do*". But these objectives are not appropriate for Psychiatry, for example. What is important in Psychiatry is "a vast array of intellectual tying-together and complexity and understanding people's emotions and physical circumstances and normal thought patterns, and so forth, and bringing that together". That is "much more difficult to mark off, or be able to demonstrate that that was something they were doing". This is what has previously, in this Report, been termed the qualitative end of the spectrum, where much of the clinician's actual practice is non-visible, and thus quite different to the clearly visible practical skills of the anaesthetists, life support practitioners and surgeons, as described at the beginning of this paragraph. This is not to say that anaesthetists, emergency medicine clinicians and surgeons do not engage in qualitative actions, but, rather assessing the non-visible domains of clinical practice requires a different conceptualization, philosophy and approach to the method of assessing visible practical clinical skills.

Surgery was considered different to medicine. Many of the surgical consultants who were interviewed thought that it was, because "as surgeons, we have a fair amount of outcome measures already imposed on us, in practice. You know, death rates, survival rates, aspects of our surgery are measured so I suppose we have a fair

*number of, I guess, work-based type measures already, already, in place*". Once again this is the realm of what was previously termed the quantitative.

There were perceptions of difference based on issues other than common skills and knowledge. For some it was competitive. Indeed, for example, all pathology interviewees declared their College was "quite ahead of the game really" in terms of assessing CPD. Furthermore, one histopathologist explained "we have regular, what we call, quality assurance tests on us as consultants, in other words slide sets are sent round, you look at them, you make your diagnosis, you send them in to the central organising body and are marked on that, and we do those in all disciplines within pathology as well. That's quite an onerous thing to be doing. I mean they come round, there's probably about seven or eight of those tests about twice a year so". This difference in assessment procedure can be attributed to the practice of looking at slides of anatomical material rather than interacting with patients since the physical material lends itself to such test procedures in a way in which interacting with patients does not. In contrast, consultant surgeons talk of mortality rate meetings and see those as quality assurance tests and therefore applicable to CPD assessment.

And yet there was a perception of differences in terms of gaining credit points within the sub-specialties that come under the umbrella of one particular College itself. One interviewee, for example, a busy NHS clinician and a member of the College in question in one sub-specialty commented about his perception of another sub-specialty within his College, saying that *"there is a split from specialty to specialty that is not equitable [since one of the sub-specialties of pathology] can add up their points so easily ... it's just a joke"*. Interviewees from this particular sub-specialty that was criticised, however, talked about their CPD accrediting system in very similar ways to every other interviewee whatever their specialty or sub-specialty. Thus they explained that they can claim CPD credit points from reading articles but they only do so if the article has led to a learning outcome and contributed to a change in their practice, they can claim their total number of points from attending one or two specific two-week courses but they preferred to record a range of CPD activities over the year.

Turning now to the responses from the CPD Lead letters, the different Colleges and Faculties offer CPD opportunities for a generic core as well as specialty differences opportunities. Thus the RCGP runs courses in relation to the Substance Misuse Unit, and CEM lists courses in ultrasound and difficult airway management. RCPath do not specify CPD topics, rather they take the view that

an individual's credit profile should reflect the nature of the role, e.g., those in a predominantly clinical role are expected to obtain the majority of credits in the clinical category, whereas those in a management position would have a different profile as they pursue professional activities during, and in preparation for, the management role.

Extract from CPD Lead response to emailed letter: Nov 2007

Meanwhile the RCP suggested a notion of CPD pathways and aim to keep their guidelines/advice flexible.

#### The impact of recertification on CPD needs

Without exception, interviewees would qualify their responses to this question by first explaining the form that recertification will take is still unknown and that their answers must be understood in that context. Therefore with that precondition in place, overall the interviewees generally acknowledged that the process of recertification would lead to shifting conceptions of CPD where quantifiable dimensions might come into ascendance. There was no clear consensus on whether this was a good thing or not. While some saw the greater accountability as positive, others felt this shift would result in a less satisfactory composition of CPD that would most likely become centred on accountability rather than medical and/ or professional need. In other words, the welcomed flexibility that currently exists by careful and intentional design in the system will probably be reduced. Moreover, many expressed concern that perhaps on the job elements will be acknowledged even less.

# **Chapter 6: Conclusion**

We might ask also how the doctor's capabilities might be understood through the filter of revalidation where perhaps government and other stakeholders' agendas may become more prominent in defining doctors' duties. Issues of professional representation are seen as being likely to emerge as the government implements scrutiny through professional organisations, such as the GMC, Colleges and Health Authorities. For example the role of colleges may shift from professional support more to that of regulation: a result to be avoided since it contradicts the strengthening of professional judgement, decision making and action through CPD. More generally, the political independence of colleges is required to ensure that they address the medical rather than political needs of today and those of the future.

So how do doctors get better? It would be wrong to suppose that there could be a singular scale, where some models of CPD are better than others. How for example would psychiatrists finally choose between medication and discursive therapies (chemical/ physical adjustment to the body, cost effectiveness, long term improvement)? That is patients do not get better on singular scales. Other stakeholders in medical practice are governed by diverse concerns. And as medical treatment becomes more ideological with government targets driving assessments and departmental staffing compositions, criteria based on wholly medical concerns may recede or need defence. An alternative question might be, how will professional collectivities, such as Colleges and Health Authorities function towards maintaining and enhancing an appropriate profile within broader structural changes for the various components of effective medical practice, so that the diversity of CPD is maintained while formal CPD is conceptualised to include and assess more dimensions?

Recapping, the sheer variety of ways in which interviewees responded to the question: "How do you define effective CPD for you yourself?" covered a broad spectrum. This can be seen from the following selection of the very diverse range of responses:

- moving people on through a mixture of employing the tools of learning needs analysis and personal development plans
- of experiencing a dissemination of new concepts because text books are typically five years out of date
- "getting to know of developments within the NHS, particularly from a managerial point of view"
- it involves clinical management; learning about people management skills; about knowing oneself and one's limitations and attempting to address that
- attendance at conferences, workshops;
- accumulation of credits
- the giving of presentations
- reading
- private study
- on-the-job learning
- editing a journal
- group-work
- talking with colleagues and "corridor conversations"
- meetings

- ticking boxes
- networking
- "putting yourself next to people [so that] having recognised a weakness [...] you've put into place some ways of improving that"
- "signing off"
- promoting evidence-based medicine
- learning to listen to the patient
- knowing when to talk to the patient (child) or to the parents.

Such diversity must be read as a strong indication, supported by the literature review (Schostak, 2009: 72), that CPD is personal and owned by the individual. The array of CPD opportunities listed suggests that CPD provision is flexible and meets people's needs for the most part. The assessment of CPD activities, however, is another matter and deemed to be more inflexible than it could otherwise be.

Is it possible to notice or develop a way of talking about workplace learning that might make it more visible, more learnable and hence easier to develop practices? This motivation results from professionally oriented higher degrees where there is a focus on analysing practice with view to developing it, rather than on supposing that bits of general knowledge can be learnt and implemented. Take the example of the complexity of communication and the consultant's comment that such skills are better assessed either by being observed in the clinical area or in a simulation. Instances of assessment might be built upon and extended to include these more difficult to record dimensions of learning.

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**Appendix A1: Literature review** 

# Effectiveness of Continuing Professional Development: a Literature Review

by

Jill Schostak

*"Learning what you even didn't know you didn't know"* (Royal College of Paediatrics and Child Health)

#### Introduction

According to a Department of Health website "*Practice of a health profession carries an 'obligation' to lifelong learning*"<sup>9</sup>. Lifelong learning is deemed essential in order to keep knowledge and skills up to date<sup>10</sup>. Together lifelong learning and keeping up to date (clinically, managerially and professionally) constitute CPD. This emphasis upon "*the continuous acquisition of knowledge, skills, and attitudes to enable competent practice*"<sup>11</sup> is of paramount importance.

But how does Continuing Medical Education (CME) differ from CPD? CME involves "updating only clinical knowledge", whereas CPD "embraces developing and improving a broad range of skills necessary for medical practice"<sup>12</sup>. CPD, according to SCOPME<sup>13</sup>, is unlike CME, which concerns itself largely with "clinical specialty-based issues," CPD extends to assisting clinicians to:

- achieve personal and professional growth
- keep abreast of and manage clinical organisational and social changes which affect professional roles in general
- widen, develop and change their own roles and responsibilities
- acquire and refine the skills needed for new roles and responsibilities and career development
- put individual development and learning needs into a team and multiprofessional context

(SCOPME [see footnote 18])

<sup>9</sup> Department of Health. Investigating educational strategies for continuing professional development to promote the implementation of research findings website (last modified date: 8 Feb 2007): <u>http://www.dh.gov.uk/en/Policyandguidance/Researchanddevelopmen</u>... [accessed 02/06/07]

<sup>&</sup>lt;sup>10</sup> Turner S, Hobson J, D'Auria D & Beach J. "Continuing professional development of occupational medicine practitioners: a needs assessment" in *Occupational Medicine* 2004; **54**: 14-20

<sup>&</sup>lt;sup>11</sup> Peck C, McCall M, McLaren B & Rotem T. "Continuing medical education and continuous professional development: international comparisons" in *BMJ* 2000; **320**: 432-435

<sup>&</sup>lt;sup>12</sup> NIMDTA – Northern Ireland Medical and Dental Training Agency website: <u>http://www.nimdta.gov.uk/general-practice/professional-development/</u> [accessed 02/06/07] [see also footnote: 17]

<sup>&</sup>lt;sup>13</sup> Standing Committee on Postgraduate Medical and Dental Education (SCOPME). Feb 1998. Continuing Professional Development for Doctors and Dentists: recommendations for hospital consultants and draft principles for all doctors and dentists. Preface and Executive Summary. ISBN 1 873436 32 7

In other words, it thus encompasses clinical, professional and managerial aspects<sup>14</sup>.

Often things are defined by what they are not. If one takes this approach for CPD then it must be noted that CPD is not something extra that one does to become a member of a professional body; it involves more than partaking in mere formal training courses; it is not something that you have to take time out of work to complete; and, finally, it is not an activity that results in learning with no bearing on work or career development. Furthermore, while CPD may broaden the range of skills, knowledge and/or competence at a current level or even below the current level (see footnote 14), it does not necessarily always lead to a move upwards along the career path.

A number of possible definitions of CPD exist. The Academy of Medical Royal Colleges in the UK defines CPD as "A continuing process, outside formal undergraduate and postgraduate training, that allows individual doctors to maintain and improve standards of medical practice through the development of knowledge, skills, attitudes and behaviour. CPD should also support specific changes in practice"<sup>15</sup>. The General Medical Council (GMC) defines CPD as "a continuing learning process that complements formal undergraduate and postgraduate education and training. CPD requires doctors to maintain and improve their standards across all areas of their practice ... CPD should also encourage and support specific changes in practice and career development"<sup>16</sup>. The Royal College of Physicians uses the following definition: "CPD is the educative means of updating, developing and enhancing how physicians apply the knowledge, skills and attitudes required in their working lives"<sup>17</sup>. Irrespective of the definition adopted, SCOPME (see footnote 18) believes there are three main reasons for the importance of CPD. One is delivering high-quality care, another is effectively coping with the continual changes in clinical, technological and structural contexts, while the third is that if CPD is of "an appropriate type" then it has "considerable potential for changing clinical practice."

The key words in each of these definitions are themselves in need of defining and exploring in relation to what it means to be a professional: 'knowledge,' 'skills', 'attitudes', 'educative'. Furthermore, what counts as 'appropriate' CPD in relation to bringing about changes? And, indeed, what kinds of changes are being suggested, and in whose interests? These interests may become muddied when placed alongside such issues as appraisal and the revalidation of professionals. Thus the nature and function of CPD in relation to appraisal and revalidation also needs to be taken into consideration.

<sup>&</sup>lt;sup>14</sup> Senate of Surgery of Great Britain and Ireland. Maintaining Your Performance. Dossier of Guidance on Continuing Professional Development for Surgeons. Nov 2004. http://www.rcseng.ac.uk/standards/docsandpdfs/cpd.pdf [accessed 02/06/07]

<sup>&</sup>lt;sup>15</sup> Academy of Royal Medical Colleges. 1999. Ten Principles for CPD. <u>http://www.aomrc.org.uk/</u> [accessed 02/06/07] or CPD10PrinciplesDocument-Dec05\_000.pdf [accessed 16/06/07]

<sup>&</sup>lt;sup>16</sup> General Medical Council (GMC) April 2004. Guidance on Continuing Professional Development. <u>http://www.gmc-ukorg/education/pro\_development/pro\_development\_guidance.asp#principles</u> [accessed 16.06.07]

<sup>&</sup>lt;sup>17</sup> Starke I, Wade W. "Continuing Professional Development: Supporting the Delivery of Quality Healthcare" in *Ann Acad Med Singapore* 2005; **34**: 715.

In April 2004 the GMC in the UK published a set of guidelines with reference to the role of CPD vis-à-vis appraisal and revalidation. The recommendations were:

- CPD should cover all areas of professional practice undertaken by the individual doctor;
- CPD should cover all 7 domains (see immediately below) of *Good Medical Practice* (GMC Sept 2001);
- Organisations, e.g., the Royal Colleges, should advise on content of CPD and evidence of participation;
- Organisations should be able to confirm participation;
- The appraisal process should ensure the relevance of CPD through the Personal Development Plans (PDP);
- Doctors must record enough CPD to meet appraisal and revalidation requirements; and
- There should be public and patient involvement in planning, standard setting and monitoring of CPD.

(Starke & Wade: 715; see footnote 22)

The GMC's 'Good Medical Practice<sup>18</sup> categorises the seven domains as: i) good professional practice; ii) maintaining good medical practice; iii) relationships with patients; iv) working with colleagues; v) teaching and training; vi) probity; and, vii) health. These domains form the framework around which to structure and evaluate learning (Starke & Wade: see footnote 22). However, any evaluation of learning should be differentiated from the process of assessment. To distinguish between the two, it should be noted that evaluation has a wider scope than assessment and can include the policy, social, organisational and workplace contexts, within which particular forms and processes of assessment takes place. The political implications of evaluation methodologies was drawn out by MacDonald  $(1987)^{19}$  who made a distinction between bureaucratic evaluation (carried out according to the demands of policy makers); autocratic evaluation (carried out by evaluation teams who pronounce an independent judgement regardless of the views of others); and, thirdly, democratic evaluation which takes equal account of the range of views regardless of the status, power or authority held by particular organisations, interested groups and individuals. The evaluation stance adopted is vital in terms of generating the processes, approaches and the subject matters of CPD that are considered appropriate by all interested parties for purposes of professional development, such as keeping up to date with knowledge, undertaking a professional role and being re-validated for professional practice.

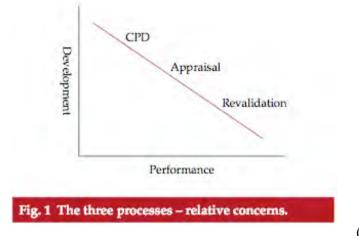
Broadly, from the point of view of professional bodies, the areas that need to be covered in the context of CPD range across management, include education and training, involve information technology, tackle audit, consider issues of communication and are concerned with team building, leadership and so on. This broad scope was officially recognised and endorsed by the Academy of Medical

 <sup>&</sup>lt;sup>18</sup> General Medical Council. *Good Medical Practice*. London: 2001. <u>http://www.gmc-uk.org.standards/goodhtm</u>
 <sup>19</sup> MacDonald, B. (1987) "Evaluation and the Control of Education", in: Murphy, R. & Torrance, H.

<sup>&</sup>lt;sup>19</sup> MacDonald, B. (1987) "Evaluation and the Control of Education", in: Murphy, R. & Torrance, H. (eds) **Evaluating Education: Issues and Methods,** London: Harper and Row/Open University

Royal Colleges in 1999, and followed by the Royal Colleges accepting responsibility for developing and providing a framework for CPD<sup>20</sup> through setting clinical and educational standards and providing quality assurance through approval/ accreditation of CPD events and materials.

Concerned, as CPD is, with performance and the need to provide evidence that this performance meets at least a basic standard, it necessarily shares territory with appraisal and with validation. Bouch<sup>21</sup> points out that it is important to regard CPD, appraisal and revalidation as processes that are concerned with both development and performance, but to different degrees. Imagine a triangle with CPD at the top left-hand corner scoring highly for both development and for performance (represented by the two sides of a right-angled triangle), appraisal scores midway along the hypotenuse of the triangle, and revalidation scores the lowest for development, but highest for performance since it is primarily concerned with fitness-to-practice.



(Bouch: see footnote 26)

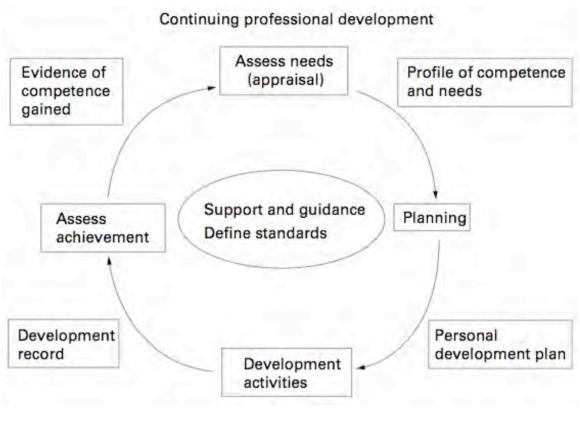
CPD and high-quality care of and for patients, then, quite clearly go hand in hand. But the question of what is involved in CPD and how that differs from and/or relates to appraisal; performance criteria; quality assurance; revalidation is much less clear and will now be addressed.

#### What does CPD involve?

The Continuing Professional Development cycle according to Guly can be configured as follows:

 <sup>&</sup>lt;sup>20</sup> du Boulay C. Editorials. "From CME to CPD: getting better at getting better. Individual learning portfolios may bridge the gap between learning and accountability" in *BMJ* 2000; **320**: 393-394
 <sup>21</sup> Bouch J. "Continuing professional development for psychiatrists: CPD and training" in *Advances*

in Psychiatric Treatment 2006; 12: 159-161



(Guly. 2000: 12-14)<sup>22</sup>

The diagram quite clearly indicates that CPD and high-quality care of patients are irretrievably intertwined. CPD keeps the clinician up to date in knowledge and in practice and thus – theoretically at least – keeps him safe to practice and also improves the quality of care delivered. It is the case, however, that new knowledge does not necessarily translate into a change in behaviour<sup>23</sup>. Nevertheless, CPD most definitely relates to an individual's professional development and to the professional body/bodies concerned and therefore, in that context, is independent of the job itself, although inevitably tied to it. Bouch describes CPD as "personal", as being "owned" by the individual professional him/herself, and as "aspirational" [see Bouch: footnote 26], and, similarly, the Academy of Medical Royal Colleges [see footnote 7] acknowledges that CPD belongs to the individual, and is not run by any agency. In other words, CPD is individually tailored inasmuch as it relates to the professional's learning needs which must in the very nature of things be particularly individualistic, and yet this individualism is sufficiently generic as to come under the umbrella of guidelines/advisory statements from the GMC, Academy of Medical Royal Colleges and the Royal Colleges themselves.

<sup>&</sup>lt;sup>22</sup> Guly HR. "Continuing professional development for doctors in accident and emergency" in *Emerg Med J* 2000; **17**: 12-14

<sup>&</sup>lt;sup>23</sup> Lang ES, Wyer PC & Haynes RB. "Knowledge translation: closing the evidence to practice gap" in *Ann Emerg Med* 2007; **49** (3): 353-366.

#### **Developing principles for CPD**

The most important criteria for developing CPD programmes include: 1) flexibility [see SCOPME: footnote 18] in order that all doctors can participate and for that participation to be recognised for what they do in the context of their professional practice $^{24}$ ; and, 2) justification and transparency so that their activities stand up to external scrutiny, in accordance with clinical governance<sup>25</sup>, revalidation and poor performance procedures<sup>26</sup>. Whatever the precise working definition of CPD that is used - and we have seen quite a number of them exist all stress the maintenance of and enhancement of knowledge, expertise and competence of professionals throughout their career and the background strategy of planning CPD with reference to the needs of the professional personally, the employer, the profession and society (c.f., Madden and Mitchell. 1993 - Madden CA, Mitchell VA (1993) Professional Standards and Competence: a survey of continuing education for the professions. Bristol: University of Bristol Department of Continuing Education).

One of the problems of CPD is it's not just what doctors do. Were that so, that would quite simply lend itself to the Royal College developing guidelines of appropriate activities in their relevant field of expertise with a focus on quality assurance through audit rather than demanding a process of data collection and documentation of evidence. It is very clear that CPD goes beyond what doctors do. No single, singular or correct way of doing CPD exists. The contexts, content and processes chosen will depend upon the spheres of practice, learning styles and personal preference. Effective CPD schemes, it can be argued, thus need to be flexible, and based on self-assessment in order that they can be tailored to an individual's personal clinical practice. Ensuring that this self-assessment is robust and transparent is an extremely important issue that must be solved. The Academy of Medical Royal Colleges website [see footnote 20] suggests that linking CPD and appraisal might be a way forward since appraisal concerns itself with meeting agreed educational objectives.

The Academy has agreed upon 10 principles which they believe comply with the aims of a CPD programme outlined in the Basel Declaration of the UEMS<sup>27</sup>, i.e., to i) improve the safety and quality of medical practice; ii) to encourage lifelong learning; iii) to make transparent the outcomes, processes and systems required for successful implementation and iv) audit progress. The 10 principles are as follows:

- An individual's CPD activities should reflect and be relevant to their profile of professional practice and performance. This should include continuing professional development outside narrower specialty interests.
- CPD should include activities both within and outside the employing institution, where there is one, and a balance of learning methods which

<sup>&</sup>lt;sup>24</sup> DoH. A first class service: Quality in the New NHS. London: The Stationary Office: London 1998 www.open.gov.uk/doh/newnhs/quality.htm <sup>25</sup> Parboosingh J. "Revalidation for doctors" in *BMJ* 1998; **317**: 1094-1095

<sup>&</sup>lt;sup>26</sup> du Boulay C. "Continuing professional development: some new perspectives" in *J Clin Path* 1999; **52**: 162-164.

<sup>&</sup>lt;sup>27</sup> European Union of Medical Specialists. Basel Declaration. UEMS Policy of Continuing Professional Development. Brussels 2001. http://www.uems.net/uploadedfiles/35.pdf

includes a component of active learning. Participants will need to collect evidence to record this process, normally using a structured portfolio cataloguing the different activities. The portfolio will be available for appraisal and revalidation.

- College/Faculty CPD schemes should be available to all members and fellows, and, at reasonable cost, to non-members and non-fellows who practise in a relevant specialty.
- Normally, credits given by Colleges/Faculties for CPD should be based on one credit equating to one hour of participation. The minimum required should be an average of 50 per year. Credits for un-timed activities such as writing, reading and e-learning should be justified by the participant or should be agreed by College/Faculty directors of CPD.
- Participation in College/Faculty based CPD schemes should be acknowledged by a regular statement issued to participants based on annually submitted returns.
- In order to quality assure their CPD system, Colleges/Faculties should fully audit participants' activities on a random basis. Such peer-based audit should verify that claimed activities have been undertaken and are appropriate. Participants will need to collect evidence to enable this process.
- The proportion of participants involved in a random audit each year should be of a size to give confidence that it is representative and will vary according to the number of participants in a given scheme.
- Self-accreditation of accredited activities and documented reflective learning should be allowed and encouraged. Formal approval of the quality of educational activities for CPD by Colleges/Faculties should be achieved with the minimum bureaucracy and with complete reciprocity between Colleges/Faculties for all approved events.
- Self-accreditation of events will require evidence. This may be produced as a brief reflective note. Formal CPD certificates of attendance at meetings will not be required. Other evidence of attendance should be provided, as determined by each individual College/Faculty. Signed registers are only necessary where there is no other available evidence of attendance.
- Failure when challenged to produce sufficient evidence to support claimed credits will result in an individual's annual statement being endorsed accordingly for the year involved and the individual subsequently being subject to audit annually for a defined period. Suspected falsification of evidence for claimed CPD activities may result in referral to the GMC/GDC. (Acad Med Royal Colleges website: footnote 20)

Learning is more effective when it is undertaken through activities that are active rather than passive and when it meets an individual's needs [Starke & Wade: footnote 22]. Needs assessment activities and multiple learning activities are thus vital to effectiveness. A pyramidal framework for the effectiveness of CPD can be constructed with participation at its base, doctor satisfaction above it, knowledge improvement above that, change in behaviour on the next level above and patient care improved at the peak of the pyramid. In any professional education, generally speaking, theoretical knowledge is translated into applied knowledge and put into practice. CPD, of course, is at the heart of this translation and putting into action, but it must also recognise and accommodate for the fact that effective learning requires reinforcing through a variety of follow-up developmental activities. Ideally these activities should be interactive in some way, with other colleagues in a real-time or alternatively in virtual discussion with peers, to give just two examples.

Starke & Wade [see footnote 22] propose that effective CPD stems from partnerships between doctors/learners, CPD providers and accrediting bodies. The SCOPME site [see footnote 5] would also support this proposition.

#### Assessing & Accrediting CPD – Issues and/or Questions

Assessment and accreditation requires the organised collection of appropriate evidence plus some sort of audit of the adequacy of an individual's programme.

While the practice of CPD looks familiar across international boundaries, measuring it, tracking it, monitoring it, accounting for it, documenting it, is where the debate about CPD lies. How can robustness and transparency across all cases, in every single instance, for all events, (or however one describes it), be ensured? Does the answer lie in the use of credit points? If so, how and for what should these be awarded? Perhaps one hour of educational activity equated with one credit point is an appropriate formula to use. Of course selecting this course of action implies that the mere accumulation of hours of educational activity translates into better informed and safer practice. Does it? Where and what is the evidence? Behavioural changes and outcome measures might be more reliable parameters. However, how can these be measured objectively?

The Senate of Surgery of Great Britain and Ireland (see footnote 19) and the website of the British Association of Plastic Reconstruction and Aesthetic Surgeons<sup>28</sup> reports on the "shift away from the historical quantitative measures of CPD" and the move towards "self-accounting with quality assurance through the appraisal process". The system of accumulation of credit points has been replaced with "a system of allocating, approving or verifying activities with arbitrary points". Meanwhile plans are being developed by the European Union of Medical Specialties for European accreditation of different systems<sup>29</sup>.

A huge diversity of practice exists across the specialties in medicine. Therefore it seems reasonable to identify those particular generic tasks that all clinicians would undertake on a regular basis and which were felt to require regular updating of knowledge and/or skills. Identifying the topics or themes that CPD needs to focus upon is a positive step to take since a body of evidence exists suggesting that professionals are more likely to change their practice if a needs assessment has been conducted<sup>30</sup>.

Monitoring such a vast array of things is clearly problematic. In order to try to get to grips with and contain such vastness, Starke & Wade (see footnote 22) suggest making use of either "*events or products*", whether clinical and non-clinical.

 <sup>&</sup>lt;sup>28</sup> British Association of Plastic Reconstructive and Aesthetic Surgeons.
 <u>http://www.bapras.org.uk/cms\_cat/76/Continuing-Medical-Research.htm</u> [accessed 02/06/07]
 <sup>29</sup> The European Union of Medical Specialists European Accreditation Council for Continuing

<sup>&</sup>lt;sup>29</sup> The European Union of Medical Specialists European Accreditation Council for Continuing Medical Education. EF 34, 1998-9. <u>www.uems.be/cme.htm</u>

<sup>&</sup>lt;sup>30</sup> Grant J. "Learning needs assessment: assessing the need" in *Br Med J* 2002; **324**: 156-159.

However, while the perspective of making use of events or products provides a helpful way of dealing with and containing the vast array, it also raises other questions that need to be taken into account. Thus it is imperative to take into consideration the need to address i) the quality of an educational event; also, ii) the educational effectiveness of the event and iii) the effectiveness of participation in CPD as a whole.

#### **Resourcing CPD: a few considerations**

CPD requires resources in a number of different ways and from a variety of sources. Were an existing infrastructure, such as easy access to and dialogue between the clinical director, keeper of the financial resources and the doctor, to be already in place, then the process will run more smoothly and efficiently. In addition, time is clearly needed to develop and nurture conversations, dialogue and partnerships with colleagues, and other similar activities.<sup>31</sup> Networks thus need to be established and developed. The provision of CPD is yet another important resource to come under scrutiny.

#### **Providers of CPD**

A list of organisations offering good quality CPD, according to the November 2004 dossier produced by the Senate of Surgeons of England and Ireland [see footnote 19] are as follows:

- Surgical royal colleges
- Specialist associations
- Generic medical organisations e.g., the Royal Society of Medicine
- NHS Trust training programmes
- Management training organisations e.g., BAMM, the NHS Management Training programme, business schools
- Multi-professional trainers e.g., the Kings Fund
- Commerce and industry
- Universities

(Senate of Surgeons of England & Ireland. Nov 2004: footnote 19)

Online and distance learning opportunities for CPD training also exist. Opportunities vary widely in both the form they take and the level of learning that can be attained. Thus there are the familiar MCQs, the not-so-familiar podcasts that may take the form of case review (c.f., Royal College of Psychiatrists: CPD), as well as specific courses offered for specific qualifications, to name just three examples.

Where do the pharmaceutical companies fit into this scenario of being a CPD provider? Given the complexities of medicine and of pharmaceutical products, the doctor is equivalent to a consumer within that industry. While the doctor needs to be kept up to date, s/he must exercise sensitivity, integrity and courage in order to decline gifts or invitations to social events that might affect the

<sup>&</sup>lt;sup>31</sup> NHS Education for Scotland. Making Continual Professional Development Work. A Resource for Service and Education Managers to Support CPD for Nurses and Midwives. http://www.nes.scot.nhs.uk/documents/publications/classa/cpd\_03.pdf [accessed 02/06/07]

doctor's impartiality. Equally one should expect the pharmaceutical company to follow ethical rules with regard to informing and marketing its products.

Starke & Wade [see footnote 22] point out that the criteria used to approve an external event for CPD should include:

- Any commercial sponsorship or interests of the programme planner, presenters, or facilitators must be declared on the application form
- Any support, sponsorship or funding by commercial healthcare organisations must not influence the structure or content of the educational programme
- The target audience falls within the remit of the Federation (recognised medical specialties or generally applicable non-clinical aspects)
- The learning objectives are specifically defined, and are appropriate for the target audience
- The teaching methods used will achieve the stated learning objectives
- Evidence is provided that the presenters and/or facilitators have the experience to deliver the learning objectives using the methods chosen
- The evaluation record for previous events organised by the same provider is satisfactory, or reasons for previous unsatisfactory ratings have been addressed
- The provider agrees to provide, upon request, confirmation of physician participation any time up to 2 years after the event has taken place (c.f. Starke & Wade: footnote 22)

#### **Recording CPD activities: questions and issues**

Since the GMC defines CPD in terms of improving patient care then it follows that effective CPD cannot but alter the doctor's behaviour in order to impact favourably upon that care. The problem for determining CPD outcomes is that a doctor who gains knowledge does not necessarily change his/her behaviour. CPD must then, by definition, include a gain in knowledge as well as some impact on performance. Thus, whatever recording method is chosen, it needs to address itself to both aspects, i.e., to providing evidence of knowledge gained and of improved patient care whether or not the clinician's behaviour has changed. Previously we have seen that gaining knowledge does not necessarily lead to a change in behaviour [see footnote 28]. One important issue to surface at this point therefore is: can improvement in patient care be effectively gauged even if no change has occurred in the clinician's behaviour?

Moving on now to another question, how is the record to be made? Is there a role for personal portfolios? Portfolios can be generic, or specific to a set of skills, competencies or area of practice. Are competency frameworks the direction to take? Compiling a portfolio requires skills of recording, analysing and reflecting on experience to inform future learning opportunities and thus either benefit from or contribute to CPD activity [see footnote 32]. Personal Development Plans (PDPs) constitute an outcome of appraisal wherein key learning objectives – note: these are not learning needs - are recorded for a defined period ahead in a written document. The PDP helps the doctor with the question of "*Where am I now*?" and "*What do I want to achieve*?"

In this context, another RCP website<sup>32</sup> recommends the use of online diaries for the easy recording of CPD activities while allowing for print-outs for the Specialist Registrars' (SpRs') training records at intervals. The argument here is that this style of recording has thus been established and engrained in the group that are at the near-consultant stage of their careers, therefore it makes sense to use this type of record because it merges seamlessly to meet the various monitoring proceedings consistent with consultant level posts.

Meanwhile there are several methods by which doctors can assess their own practice (Starke & Wade: footnote 22). For example, they can compare their clinical performance with the standards of excellence exhibited by a peer group. Or they can carry out a self-audit of practice against published national guidelines. Case review and reflection can also result in educational outcomes. Multisource feedback (doctors ask for feedback from those that they regularly work with) and patient questionnaires are well-established assessment tools for assessing communication and teamwork skills.

A more in-depth look at CPD, appraisal and revalidation will be of help here. Taking a deconstructing approach, the activities of the doctor can be broken down into actions that identify one's developmental needs, which will then perform a variety of functions. Examples of these functions include, (i) either feeding into information and appraisal activities, that in turn feed into a 5-year review by a revalidation group or, (ii) on the other hand, feeding into a cycle of collecting information from daily activities, upon which the professional reflects. Imagine a cycle that starts with carrying out a needs analysis, whereby gaps are identified in one's knowledge or skills and so on, and so a plan is devised to remedy the gaps, and thus learning occurs such that one keeps up to date or one's professionalism is reaffirmed at that moment in time. But that moment of time passes, one is no longer up-to-date and the cycle restarts and continues. What is clear from this breakdown is that CPD, appraisal and revalidation, while regarded as three distinct entities, are actually all irretrievably and complexly intertwined in this cycle and separating them in practice is exceedingly difficult.

Doctors, alongside other healthcare professionals, are contracted to and employed by Trusts to do a job; and that job is to be part of a team that delivers healthcare to patients within the centres of primary and secondary care that the Trusts run. The appraisal process evaluates that delivery of service to patients. Ideally, within this appraisal system, both the doctor and the Trust are engaged in a two-way partnership to ensure the quality of the healthcare delivered. For example, the doctor needs to keep his/her learning up to date to be safe to practice while the Trust needs to provide the resources, however that manifests itself - e.g., time off with locum cover prearranged and in place, and/or financial support to attend courses, etc. Appraisal is therefore job-related in a way that CPD is not. Or is it?

In defining CPD as necessary to improving patient healthcare in April 2004 [see footnotes: 21, 22], the distinctions between CPD and appraisal are clearly difficult

<sup>&</sup>lt;sup>32</sup> Royal College of Physicians. CPD: SpRs and CPD accessed 02/06/07

to perceive with any high degree of clarity. Doctors undergo an annual appraisal and during this process learning needs are discussed in depth in order to feed into revalidation. CPD and appraisal processes then both benefit from a needs assessment exercise. Yet in terms of CPD, that particular exercise relates to the professional's career while, in the context of appraisal, it relates to the job. Once again, the process of separating CPD from appraisal and revalidation can prove extremely difficult. Leaving the issue of revalidation aside for the moment, both CPD and appraisal have elements of performance attached to them so perhaps a look at performance might provide a distinguishing mark or set of marks.

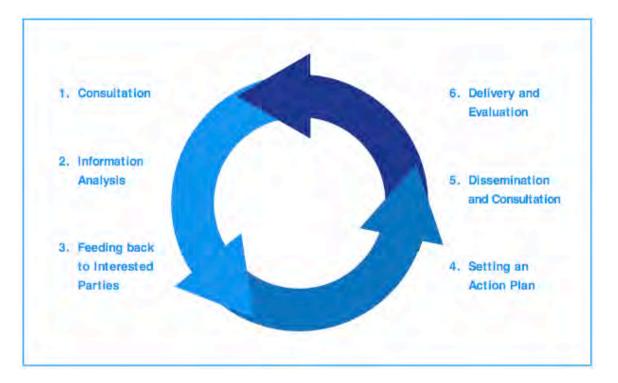
#### Boundary issues: CPD or quality assurance?

One important question to consider is: to what extent should CPD be separated from the particularities of organisational demands, which have more to do with quality assurance? CPD is rightly considered an important factor in assuring the quality of performance and yet, significantly, it differs from quality assurance. How is quality to be defined or assessed? Is it in terms of organisational and managerial criteria or by independent professional or indeed research-based criteria? The complexity of the integration of CPD can be seen in the following itemisation of quality assurance issues drawn from NHS Education for Scotland (see footnote 32).

#### Quality assurance issues

An organisational CPD Strategy should meet the following criteria:

- show how the views and priorities of service users and members of the public influence the CPD activity within the organisation
- describe systems and policies to ensure equal access to CPD
- demonstrate how CPD will contribute to meeting local service needs
- show how CPD activity reflects clinical governance objectives
- define how CPD objectives meet national policy initiatives
- set out a programme for matching education needs to service-user and organisational needs at local level using the model below:



- set on-going specific plans for ongoing CPD activities covering mandatory, generic and specialty-specific subjects. The process of defining and describing
- standards of CPD delivery should be informed by the four principles defined in the Fig below:



- offer guidance to staff on how their CPD needs can be met in partnership with managers, supervisors and others
- demonstrate the benefits of effective working with partnership organisations such as local partnership forums and education providers
- demonstrate how budgets and resources can be used most effectively (NHS Education for Scotland: footnote 32)

Finally, "*monitoring*' [see footnote 23] of the quality of CPD ensures that the methods used to develop, deliver and evaluate CPD activities are i) effective; ii) efficient; iii) evidence-based; and iv) economical. This adherence to the QACPD and Diamond Model monitors strategy, resources, delivery and outcomes of CPD to achieve the best possible educational opportunities.

#### What are the issues/needs that CPD should address?

Turning from the organisational to the individual, the coverage and range of the issues/ needs that CPD should address is extremely wide as can be seen from the following list drawn up:

- 1. Contextual and circumstance
- 2. Knowledge
- 3. Social
- 4. Skills and practice[s]
- 5. Professional values and identities
- 6. Decision-making
- 7. Knowledge and performance
- 8. Identifying one's own personal learning needs, seeking the means (CPD) by which to fill the gap in one's actual practice

Of course, the schemata of categories devised above for the purposes of this literature review is a simplistic one in order to set the stage for dealing with the complexities of CPD. This is not to suggest that the many and varied CPD opportunities are fragmented. In point of fact none of the categories stand alone in isolation from the others; rather they interact and intertwine together in a complex way that I will refer to as pluralism, i.e., as multiple domains of actions.

But for the moment, returning to the simplistic schemata, the provision in this literature review of a very brief introductory overview for each of the various eight categories will give some clues into the underlying tensions, problems, successes, learning points, failures, etc., that a clinician of any specialty constantly faces in his day-to-day working life. Greater insight will only be gained by reading the various journal articles, or books referenced in the footnotes.

#### Contextual and circumstance

#### Differences between medical specialties

The peculiar circumstances of the Emergency Department include lack of patient's medical history, the short time-span in which to see the presenting illness evolve, surges and overcrowding, trolley waits, violence and aggression, effects on teaching

and learning<sup>33 34</sup>, risk and error<sup>35</sup>, culture of blame<sup>36</sup>: system versus individual<sup>37 38</sup> and so on. Of course, other medical specialties face their own particular brand of limiting contexts and circumstances. Whatever the specialty, however, the clinician engages in the following generic core activities of taking a history, carrying out a physical examination, requesting investigatory test, judgement calls, making decisions, arriving at some sort of working diagnosis and coming up with a treatment plan and/or a discharge plan.

#### Knowledge

This involves: i) adding to one's personal knowledge base; ii) affirming one's knowledge and/or practice; iii) framing the medical problem given the rapidly changing face of medicine today: the journal Ann Emerg Med was introduced to filter/doctor the Cochrane Collaboration because medicine has become too specialised, complicated and lengthy for clinicians; iv) the nature of knowledge; given that "we live in the real-world" of changeable and unpredictable situations [see footnote 40], in a fluid and chancy reality<sup>39,40</sup>, with limited time and too much information but not enough of the right kind, and one where waiting for a better decision can be riskier than acting on hunches and inadequate information<sup>41</sup>; (v) models of education. For example, Fish and Coles<sup>42</sup> propose a curriculum which they see as emerging from the complex combination of teaching, learning and assessment modelled in one of three ways (note that Fish & Coles have chosen to confine themselves to three models only) a "product" (i.e., object to be transferred/transmitted/gained by passive learning, etc.), or as a "process"<sup>43</sup> <sup>44</sup>, or as "research"<sup>45</sup>. But these are not the only models of education and there are some whose learning methods are depicted and theorised around self-directed strategies. These self-directed strategies include models of the CPD cycle, those of reflective practice<sup>46 47 48</sup> and/or action research<sup>49 50</sup> and also Kolb's<sup>51</sup> experiential learning

<sup>&</sup>lt;sup>33</sup> Cosby KS. "A Framework for Classifying Factors that contribute to errors in the Emergency Department" in *Ann Emerg Med* Dec 2003 **42** (6): 815-23

<sup>&</sup>lt;sup>34</sup> Atzema C, Bandiera G, Schull MJ, Coon CT, Section Editors and Milling, Turman J. Jr.

<sup>&</sup>quot;Emergency Department Crowding: the Effect on Resident Training" in *Ann Emerg Med* 2005 April; **45**: 276-281 2005 *Ann Emerg Med* **45** (3): 276-281

<sup>&</sup>lt;sup>35</sup> Gawande A. (2002) Complications: A Surgeon's Notes on an Unperfect Science. Profile Books: London, UK

<sup>&</sup>lt;sup>36</sup> Geiderman JM. "Disclosure of Error" in Ann Emerg Med Nov 2006; **48** (5): 631-2

<sup>&</sup>lt;sup>37</sup> Moskop JC, Geiderman JM, Hobgood CD & Larkin GI. "Emergency Physicians and Disclosure of Medical Errors" in *Ann Emerg Med* Nov 2006; **48** (5): 523-31

<sup>&</sup>lt;sup>38</sup> Hevia A & Hobgood C. "Medical error during residency: To tell or not to tell" in *Ann Emerg Med* Oct 2003 **42** (4): 565-570

<sup>&</sup>lt;sup>39</sup> Croskerry P. "Cognitive Forcing Strategies in Clinical Decision Making" in *Ann Emerg Med* Jan 2003; **41** (1): 110-120

<sup>&</sup>lt;sup>40</sup> Groopman J. 2007 How Doctors Think. Houghton and Mifflin Company: New York, USA

<sup>&</sup>lt;sup>41</sup> Wears RL "The limits of techne and episteme" in Ann Emerg Med Jan 2004; 43 (1): 15-6

<sup>&</sup>lt;sup>42</sup> Fish D & Coles C. (2005) **Medical Education: Developing a curriculum for practice**. Open University Press: Maidenhead, UK

<sup>&</sup>lt;sup>43</sup> Harden JM, Grant J, Buckley G, Hart JR. BEME Guide No.1 "Best Evidence Medical Education". *Medical Teacher* 1999; **21**: 6, 553-562 citing: Kirkpatrick DI. (1967) "Evaluation of Training". In:

Craig R, Mittel I [Eds]. **Training and Development Handbook**. New York: McGraw Hill <sup>44</sup> Carr W. "Education and Democracy: confronting the postmodernist challenge" in *J Phil Edu* 1995

<sup>29 (1): 75-92</sup> 

<sup>&</sup>lt;sup>45</sup> Stenhouse L (1975) **An Introduction to Curriculum Research and Development**. London: Heinemann

<sup>&</sup>lt;sup>46</sup> Schön D. 1987 **Educating the Reflective Practitioner**. San Francisco, CA: Jossey-Bass Publishers

cycle. Notions of learning as a progressive continuum from novice to expert<sup>52 53 54</sup> would also constitute strategies related to self-directed learning, as indeed would approaches to a range of adult learning models<sup>55 56 57 58 59</sup>, and to the notion of self as agent<sup>60 61</sup>; and, finally, vi) cognitive theory<sup>62</sup> and here I include some of its adaptations<sup>63 64</sup> and critical thinking so essential for working through clinical problems in conditions of uncertainty and making good decisions<sup>65 66 67 68 69</sup> also fit into this category of self-directed learning.

#### Social

Questions and issues here involve team-work<sup>70</sup> and communication activities<sup>71</sup> to name but two examples that are highly complex and pluralistic and thus offer fertile ground for CPD activities.

<sup>53</sup> Daley BJ. (1998) "Novice to Expert: How Do Professionals Learn?"

http://www.edst.educ.ubc.ca/aerc/1998/98daley.htm [accessed 18/07/07] <sup>54</sup> Dreyfus HL & Dreyfus SE (1986) Mind over Machine: the power of human intuition and

expertise in the era of the computer. Oxford: Basil Blackwell. <sup>55</sup> O'Brien G. "What are the Principles of Adult Learning?"

<sup>58</sup> Knowles MK, (1970) **The Modern Practice of Adult Education: Andragogy versus Pedagogy**. New York: Association Press

<sup>60</sup> "The Scotsman" Saturday 30 September 2006

http://news.scotsman.com/topics.cfm?tid=1018&id=1424652006 [accessed 18/07/07]

<sup>61</sup> McIntosh E. "The Concept of Person and the Future of Virtue Theory: MacMurray and McIntyre" in Quodlibet Journal: Vol 3 Nos 4: Fall 2001. http://www.Quodlibet.net [accessed 18/07/07]

<sup>64</sup> Wears RL: see footnote 32

<sup>66</sup> Wears RL: see footnote 32

<sup>68</sup> Gallagher JE. "Thinking about Thinking" in *Ann Emerg Med* 2003; **41** (1): 121-2

<sup>70</sup> Cosby K: see footnote 25

<sup>&</sup>lt;sup>47</sup> Maughan C. "Problem-solving Through Reflective Practice: The Oxygen of Expertise or Just Swamp Gas?" http://webjcli.ncl.ac.uk/1996/issue2/maughan2.html [accessed: 18/07007]

<sup>&</sup>lt;sup>48</sup> Argyris C & Schön. (1978) **Organizational learning: a theory of action perspective**. New York: McGraw-Hill.

<sup>&</sup>lt;sup>49</sup> McBride R & Schostak JF: http://www.enquirylearning.net/ELU/Issues/Research/Res1Ch4.html

<sup>&</sup>lt;sup>50</sup> Carr W & Kemmis S. (1986) Becoming Critical: Education, Knowledge and Action Research. Basingstoke, UK: Falmer Press

<sup>&</sup>lt;sup>51</sup> Kolb D (1984) **Experiential Learning**. Englewood Cliffs, NJ: Prentice Hall

<sup>&</sup>lt;sup>52</sup> Benner P. "From novice to expert" American J Nurs 1982; 82: 402-7; 'Uncovering the knowledge embedded in practice' Image: the Journal of Nursing Scholarship. 1983; 15 (2): 36-41

http://www.southernhealth.org.au/meu/articles/adult\_learning.htm [accessed 28/07007] <sup>56</sup> Bradley P, Ordheim L, De La Harpe D, Innvaer S & Thompson C. "A systematic review of qualitative literature on educational interventions for evidence-based practice" in Learning in Health and Social Care 2005; **4**: 89-109 <sup>57</sup> Cross K. (1981) **Adults as Learners**. San Francisco: Jossey-Bass

<sup>&</sup>lt;sup>59</sup> Polanyi M. (1958, 1998) **Personal Knowledge. Towards a Post Critical Philosophy**. London: Routledge.

<sup>&</sup>lt;sup>62</sup> Croskerry P. "The cognitive imperative: thinking about how we think" Acad Emerg Med 2000; 7: 1223-1231

<sup>&</sup>lt;sup>63</sup> Wears RL & Nemeth CP. "Replacing Hindsight with Insight: Toward Better Understanding of Diagnostic Failures" in Ann Emerg Med Feb 2007; 49 (2): 206-9

<sup>&</sup>lt;sup>65</sup> Croskerry P. "Critical Thinking and Decision Making: Avoiding the Perils of Thin-Slicing" in Ann Emerg Med Dec 2006; 48 (6): 720-2

<sup>&</sup>lt;sup>67</sup> Tallis RC "Doctors in Society: Medical Professionalism in a Changing World" *Clin Med* 2006; **6**: 7-12: http://www.rcplondon.ac.uk/pubs/clinicalmedicine/0601 janfeb/0601 [accessed 20.08.07]

<sup>&</sup>lt;sup>69</sup> see footnote 31: Croskerry P Ann Emerg Med Jan 2003; **41**(1): 110-120

<sup>&</sup>lt;sup>71</sup> Farmer SA & Higginson IJ. "Chest Pain: Physician Perceptions and Decsion Making in a London Emergency Department" in Ann Emerg MedJuly 2006 48 (1): 77-85

#### Skills and practices

Contexts would involve adding to one's repertoire of clinical know-how<sup>72 73</sup>; affirming one's clinical practice; adherence models such that one's pattern of behaviour is engrained as to be free from decision-making at those points in the clinical procedure when critical thinking is not called for<sup>74</sup> and the use of protocols such as the Ottawa Ankle Rules [see footnote 28]; sequencing models<sup>75</sup>; and developing a notion of "*a standard of care*" that is situation specific and perhaps impossible to define but can be conceptualised in terms of a working definition that would include contexts of expert witnesses, clinical guidelines, journal articles, pharmaceutical package inserts and manufacturing instructions, for example <sup>76</sup>

#### Professional values and identities

While medical specialties hold to a common and universal core that each and every specialty feels at home with regardless of their differences, at the same time each is at pains to celebrate those particular differences within their own individual specialty. The results of a quick scoping exercise comparing and contrasting the various specialties illustrates this point perfectly.

#### Comparisons and contrasts between specialties

*Psychiatry*: in this specialty, the current practice of recording of CPD is often based upon personal plans validated by a peer group in Psychiatry [see Bouch: footnote 26] - is this a model that can be taken up by other specialties? Bouch certainly argues for such a move, advocating that the peer group mechanism elevates CPD above box-ticking and creditgathering exercises. It is not unusual for peer groups to become action learning sets. Furthermore, peer groups emphasise the importance both of being supportive and of receiving support from colleagues. This mechanism thus provides some protection against professional isolation.

*The AAP* (American Association of Pediatricians) has recently launched its *Pedia*Link site to provide i) an Internet learning system and ii) a portal to its major features, namely CME, Resources and Advanced Features. Conceptually the model of *Pedia*Link is based on a theory of clinical problem solving adapted from Donald Schön's cycle of learning [see footnote: 40]. On a daily basis, clinicians face clinical problems, surprises and questions to be answered. Many of these dilemmas will be answered quickly by tacit knowledge. Others can be relatively quickly solved through the action of accessing information sources: a drug dose or side

<sup>&</sup>lt;sup>72</sup> Binstadt ES, Ron M, White BA, Nadel ES, Takayesu JK, Barker TD, Stephen J & Pozner CN. "A Comprehensive Medical Simulation Education Curriculum for Emergency Medicine Residents" in *Ann Emerg Med* 2007; **49** (4): 495

<sup>&</sup>lt;sup>73</sup> Hoekstra J. "Credentialing, competency, and 'see one, do one, teach one" in *Ann Emerg Med* April 2004; **43**: 475-6

<sup>&</sup>lt;sup>74</sup><sup>^</sup>Adams B. "Chest Radiography: the Trauma Team Point of View" in *Ann Emerg Med* Nov 2006; **48** (5): 637-8

<sup>&</sup>lt;sup>75</sup> Field-notes: shadowing the Basic 3-day Surgical Skills Course. Schostak JF & Schostak JR (2002 - 2003). The "Consultants as Educators (CasE)" project funded by the NANIME Charitable Trust; Centre for Applied Research in Education (CARE), University of East Anglia.

<sup>&</sup>lt;sup>76</sup> Empey M, Carpenter C, Jain P & Atzema C. "What constitutes the standard of care?" in *Ann Emerg Med* 2004 November; **44**: 527-531

effect, for example. When a question stimulates thinking about how to answer or how to resolve the issue, the process is referred to as "*reflectionin-action*". It is believed that conclusions drawn from these brief reflective moments offer a broader understanding of the topic, or lay the groundwork for future learning. When physicians record the questions and the clinical "*I don't knows*" and search later for the answers this is referred to as "*reflection-on-action*" and may well be more stimulating and influential in changing practice. As clinicians encounter further questions in their practice the cycle of learning repeats itself and forms an important element of the individual's CPD. "With this learning cycle as its foundation PediaLink has been developed as a system to facilitate and document the process of self-directed learning" (see footnote 27). The three major components of PediaLink are Learner Profile, Learner Plan, and Learner Portfolio. A specific case is presented in the article in order to illustrate how the PediaLink system works.

*Paediatrics*: Sectish et al<sup>77</sup> writes that "*the current structure of CME may be ineffective in altering physician performance with its distant, disconnected, and teacher-centred approach to education*" [see footnote 23]. Several factors play a role here: a lack of individualisation of the learning opportunity; the lecture might not be relevant to the individual's own clinical practice; if the new knowledge is not relevant then it is more difficult to incorporate it into one's own practice, and so on.

*Surgery*: Surgeons are advised to refer to the GMC prospectus: A License to Practise and Revalidation (GMC April 2003) and also to a number of documents that include *Good Medical Practice* (GMC Sept 2001); *Good Surgical Practice* (RCS England Nov 2002)<sup>78</sup>; Continuing Professional Development (GMC April 2004) [see footnote 8]; and *Criteria, Standards and Evidence for Revalidation – Guidance on Surgical Practice* (RCS England Dec 2004) [see footnote19].

The emphasis now is on quality and the appropriateness of CPD to one's own practice and career development rather than accruing a number of credits or points. Its scope has been widened and it now appears relevant to all surgeons, including consultants, training grades, staff grades and associate specialists. This particular dossier states how closely CPD and the seven principles outlined in *Good Medical Practice* (GMC Sept 2001) and *Good Surgical Practice* (RCS England Nov 2002) are interlinked. Although additionally this dossier argues for the inclusion of an additional eighth principle, namely: "*Lead and responsible positions*" within the delivery of surgical care. Since "*the ultimate purpose of CPD is to contribute to high-quality patient care*" [see footnote 21] the dossier draws surgeons' attention to the fact that guidance is being offered on "*how doctors can respond to changes in society, its needs and attitudes and to the complex system through which healthcare is delivered*" [see footnote

 <sup>&</sup>lt;sup>77</sup> Sectish TC, Floriani V, Badat MC, Perelman R & Bernstein HH. "Continuous Professional Development: Raising the Bar for Pediatricians". *Pediatrics* July 2002; **110**: 152-156
 <sup>78</sup> The Royal College of Surgeons of England. *Good Surgical Practice*. London 2002. http://www.rseng.ac.uk/services/publications/publications/pdf/gsp/2002.pdf

19]. Doctors are encouraged "to explore the benefits of learning across professional disciplines and boundaries and to learn from more informal experiences that are not part of the revalidation process" [see footnote 19].

Surgeons are advised to devise their own CPD activities to incorporate both their own generalist and specialist needs, particularly in the context of that individual's own role and future career roles. Personal Development Plans required for the annual appraisal can be made use of in the CPD context, logbooks if they are appropriate, and records of CPD activities undertaken plus the appropriate evidence can all be collected into a portfolio, that must lend itself to independent scrutiny if so required.

New CPD classification	GMC principles of professional practice	Examples of related activities	Examples of CPD activities
Clinical	Good Clinical Care Maintaining Good Surgical Practice	Clinical skills updating Patient management and referral Technical aspects of treatment Clinical practice within and across teams Working within guidelines Record keeping, audit and use of IT	Instructional meetings and lectures Simulators and workshops Generic/specialty courses Clinical audit and research Multi-disciplinary meetings Journal clubs Visiting centres of excellence
Professional	Relationships with patients Working with Colleagues Teaching, Training and Supervising Probity in Professional Practice Health	Communication and interpersonal skills Teaching and mentoring Work as Surgical Tutor, Regional Adviser or Postgraduate Tutor Examining Appraising peers Ethics and research Editing and reviewing Work and Representative duties with Colleges and Specialist Associations Work with government and national agencies Independent practice (PP) Medico-legal work University commitment	Multi-professional meetings Formal training to teach and educate Formal training as an examiner Training in interpersonal skills, committee work etc. IT training Writing research papers and preparing grant applications
Managerial	Lead and responsible positions within the service delivering surgical care	Work as Clinical Lead or Medical/Surgical Director Clinical Governance/Effectiveness Lead Cancer Lead within Trust Director of Medical Education Membership of Specialty Training Committees etc.	Management training Attendance at specialist conferences and meetings College and Specialist Association Administrative meetings Professional visits and exchanges Chairing meetings/enquiries etc.

A table is presented to illustrate further the points within the dossier:

(Senate of Surgeons of England & Ireland: footnote 19)

The November 2004 dossier also stresses "the value and nature of reflective practice" (see footnote 19) pointing out that "reflective learning is rooted in clinical and professional practice". Professional education, it should be emphatically noted, is "learning through practice. Surgeons should constantly review their practice, discussing it with surgical colleagues and members of the multi-professional team" [see footnote 19].

General Practice: website<sup>79</sup>, accessed when listed last updated April 2006, reports that GPs ceased to receive financial support via the Postgraduate Educational Allowance (PGCA) in April 2004. These payments have been "mapped onto the global payments received by all GP practices. PGEA arrangements have been replaced by a more formal system of annual appraisal and Personal Development Plans (PDPs)" [see footnote 23]. The GMC contract for GPs makes participation in appraisal mandatory. The PCOs both recognise and are contractually bound to provide protected development for GPs to focus on their learning needs, even down to funding locum cover if this is necessary. The model for the BMA contract for salaried GPs stipulates at least four hours per week on an annualised basis. Postgraduate Deaneries liaise with PCTs to provide robust educational opportunities. This particular website aimed at GPs defines CPD as, according to the GMC, "an on-going learning process that enables doctors to demonstrate that they are maintaining their skills in their practice, while helping them to develop professionally and to learn from more informal experiences that are not part of licensing processes" [see footnote 23].

The RCGP provides CPD support through courses and conferences at national, regional and local level and also in partnership with other institutions, such as the University of Bath in the form of the RCGP Learning Unit, for example. RCGP Scotland has developed an online learning tool for UK GPs called *PEP Ekit*. There is a RCGP Leadership programme and a RCGP Substance Misuse Unit.

Other provisions included in this particular website are BMJ learning packages for online learning, Patient Safety E-Learning tool, and Risk Assessment Tools.

*Non-members of Colleges*: Lloyd-Williams *et al*<sup>80</sup> report on a survey of all doctors in palliative medicine undertaken to investigate whether doctors had fulfilled their CPD requirements for 2001-2002 and to identify problems or difficulties experienced by doctors in undertaking CPD. A large proportion of the palliative medicine workforce comprises part-time posts, and often these posts are non-training posts. The study found that 64% of the respondents, all of whom were on the specialist register had fulfilled their CPD commitments and those least likely to do so were those holding a contract with a charitable organisation (33%). The study also

<sup>&</sup>lt;sup>79</sup> The Royal College of General Practice.

http://www.rcgp.org.uk/information\_services/information\_service... [accessed 02/06/07] <sup>80</sup> Lloyd-Williams M, Kite S, Hicks F, Todd J, Ward J, Barnett M. "Continuing Professional Development (CPD) in palliative medicine: a survey". *Med Teacher* 2006; **28**: 171-174

found that less than half of the doctors not on the specialist register understood CPD and revalidation requirements.

*Other*: e.g., Nursing and Midwifery – [see: footnote 36]: The activities that constitute CPD range from work-based and self-directed learning activities to academically accredited and professionally validated courses offered by higher education institutions. While there is no problem with CPD being multi-disciplinary, multi-professional and multi-sectoral activities the important question is how is this best addressed? The criteria addressed here include: building on the core skills and competencies set out by professional regulatory bodies; focusing on the skills, knowledge and practices required to deliver a quality service and on research that is evidence and competency based alongside being directly relevant to improving health and health care for service users and for enhancing service delivery.

The above small scale scoping exercise where a few points have been highlighted from a number of various medical and non-medical specialties gives some insight into the range of professional values and identities that CPD needs to cover. My account in this document is not intended to give a detailed in-depth view.

However, were my account were to start to develop such an in-depth view, professional values and identities would be explored further especially from the perspective of presenting a complex set of issues/ needs that CPD must address. For example:

- Teaching professionalism Knopp<sup>81</sup> argues that professionalism is centred upon "the attitudes and behaviors that enhance trust by placing the patient's interests above other interests". But how does one go about teaching such ethical judgements? And how does one assess that teaching? One has to resort to "proxies such as clinical quality indicators, patient surveys and national or specialty standardised measures". Knopp suggests the use of clinical role models.
- How does one teach professionalism in contexts that beg the *question "Is* doing 'everything' enough?" and to which the response is: "even everything wasn't enough for our patient or for us" <sup>82</sup>

Perhaps the following website and the article by Thomas et  $al^{83}$  go some way to providing the answer –

• <u>http://www.gtce.org.uk/research/commissioned\_res/cpd1/</u>: [accessed 30 May 2007] presents an article that includes an introduction to Professional Learning Communities and to Professional Associations Research Networks

<sup>&</sup>lt;sup>81</sup> Knopp R. "The Challenges of Teaching Professionalism" in Ann Emerg Med Nov 2006; 48 (5): 538-9

<sup>&</sup>lt;sup>82</sup> Burg MD. "'Is doing everything enough?" in Ann Emerg Med Aug 2004; 44: 175-6

<sup>&</sup>lt;sup>83</sup> Thomas HA, Binder LS, Chapman DM, Kramer DA, LaMantia J, Perina DG, Shayne PH, Sklar DP, Sorensen CJ. "The 2003 model of the clinical practice of Emergency Medicine: the 2005 update" in *Acad Emerg Med* Oct 2006; **13**: 1070-1073

(PARN) indicating that online CPD learning opportunities and communities for learning are out there should one want to search for them.

A quick second scoping exercise of a number of Royal Colleges provides another perspective on the category of professional values and identities from the point of view of Medical Specialties as follows:

Example of informing practice and knowledge transfer issues:

- Includes adding to one's own knowledge base; affirming one's knowledge and/or practice; framing the medical problem
- Royal College of Psychiatrists has CPD online: 2 podcasts: i) the methodology of case-control studies which gives a) a knowledge of the methodology of case-control studies; b) an understanding of the main sources of bias in case-control studies; c) an understanding of how to minimise selection bias in a psychiatric case-control study; d) some useful information on best practice in recruitment for case-control studies; ii) insight how is it related to mental illness which gives a) an overview of the associations between insight and mental disorders; b) an understanding of the relationship between levels of insight and different factors in schizophrenia; c) knowledge of the latest neuroimaging research findings with regard to insight.
- The Royal College of Paediatrics defines education as "*Learning what you even didn't know you didn't know*". Its website does not have an obvious place to go to in order to get a sense of what they understand as CPD. They have Training; Competency Frameworks; Education; Appraisal and so on, but nothing that is listed under the remit of CPD.
- The Royal College of General Practitioners has the following on its website under the heading Professional Development: Events; Substance Misuse Unit; RCGP Learning Unit; Leadership Programme; RCGP Distance Learning; Other Distance Learning; RCGP accredited courses; and Accreditation for HPD Learning Unit.
- Includes teaching professionalism
- And also an example of socialisation: Royal College of Surgeons of England advises that each surgeon has a responsibility to maintain his/her own records for review as part of mandatory annual appraisal at Trust level and the proposed national arrangements for the 5-yearly revalidation. A proforma has been produced and is highly recommended. Numerical points or credits are no longer being awarded as part of the processes for CPD.
- In March 2006 a Working Party chaired by Chris Chiltern took a new look at CPD policy for the Royal College. The Working Party met with a number of expert witnesses and will produce recommendations to the Council in 2007. The impetus was the July 2006 publication of the report entitled "Good doctors, safer patients" by the Chief Medical Officer and the subsequent White Paper "Trust, Assurance and Safety" released in February 2007. Related documents listed on their website include: "Healthcare professional regulation consultation"; but more specifically: "Guidance on Surgical – Criteria, Standards and Evidence" and "Maintaining Your Performance – Dossier of Guidance on Continuing Professional Develop Practicement for Surgeons".

As can be seen from the details given in this section on professional values and identities, professionality includes ethical and political issues in addition to those around autonomy vis-à-vis engagement with management and organisational structure.

#### Decision-making

In everyday life and in research the most frequent categories of decision-making are of the a) normative which is to say formalised idealised type or b) descriptive approach which is to say practical type. Croskerry<sup>84</sup> argues that emergency department clinicians rarely adopt the normative mode. Instead they use the flesh and blood decision-making (practical mode) that is best suited to addressing the need for accuracy and efficiency. Such strategies are in keeping with Klein *et al's*<sup>85</sup> "*recognition-primed*" decision model in which mental simulation is combined with situation assessment in order to assess courses of action.

Decisions are not made in a vacuum, however. Clinicians need to be aware of how they may wittingly or unwittingly influence the data they gather<sup>86</sup> from history-taking, physical examination findings, investigatory test findings and so on. Influencing factors on decision-making are not restricted to one's knowledge (whether theoretical, practical, experiential, educational, training, etc.) but extend to communication skills and sociocultural knowledge and awareness<sup>87</sup>. The importance of such factors is not easily dismissed since it is well recognised that decision-making practices depend upon models of judgement that include i) pattern recognition; ii) ruling out the worst scenario; iii) the exhaustive method; iv) the hypotheticodeductive method; v) heuristics; vi) cognitive dispositions to respond [Croskerry: footnotes 44 and 75], and vii) the event<sup>88</sup> in which symptoms are treated and then re-evaluated after evaluation of the response to treatment. Clinicians believe themselves to be taking naturalistic, schema-driven decision-making approaches and always compare the relation between the patient's story and the textbook norm [see Farmer and Higginson, footnote: 75].

In other words, what I would call a reality test takes place beside, with and against an appeal to the textbook as norm and thus a judgement response can be made to the presenting cases (acute coronary syndromes in the Farmer and Higginson [see footnote 75]. A shaping of the response to set it in relation to a textbook discourse has therefore occurred. This is no simple process of comparison and contrast, however. Croskerry links this textbook model with the representative heuristic – what he calls "*rule of thumb*" mode of judgement. Clinicians favour this strategy when data is ambiguous and the diagnosis uncertain. Prototypical features of the disease are sought and the likelihood of the disease based upon how well the patient's symptoms correspond with those believed typical of the disease in question is estimated. That is to say that the textbook norm is not a static model, rather it undergoes a degree of revision such that the reference posts are moved,

<sup>&</sup>lt;sup>84</sup> Croskerry P cited in Farmer & Higginson: see footnote 62

<sup>&</sup>lt;sup>85</sup> Klein et al: cited in Farmer & Higginson: see footnote 62

<sup>&</sup>lt;sup>86</sup> Farmer & Higginson: see footnote 62

<sup>&</sup>lt;sup>87</sup> Farmer & Higginson: see footnote 62

<sup>&</sup>lt;sup>88</sup> Sandhu H, Carpenter C, Freeman K, Section Editor, Namors SG, Section Editor & Olson A, Section Editor. "Clinical Decision Making: Opening the Black Box of Cognitive Reasoning" in *Ann Emerg Med* Dec 2006; **48**: 713-9

depending upon professional experience and cultural beliefs. Klein's recognitionprimed decision-making model exhibits some similarities with the Croskerry model of rule of thumb inasmuch as it involves an intuitive judgement process, grounded in knowledge and experience. These models, however, offer only part descriptions for clinical judgement. They do not provide insights into how the clinician gathers data, interprets that data and incorporates data into professional schematic impressions of the presenting illness for a particular patient. Such models are too crude to describe how salient professionals make clinical judgements that inform real-time complex decision-making processes.

Croskerry suggests that it is taken for granted that postgraduate trainees have somehow developed the ability to think clearly and critically and thus be able to distinguish foreground from distracting background stimuli, bias, irrelevance and propaganda. The expectation is that they can identify, analyse and challenge assumptions in arguments as well as being able to recognise deception whether explicit or not, assess the credibility of information, be critically aware of and in control of their own ways of thinking and, finally, be able to imagine and explore alternatives. It is further assumed that all of these faculties are fully developed and also easily put into action even in stressful contexts, such as fatigue and/or actual sleep deprivation. These expectations, for the most part, cannot be substantiated<sup>89</sup>. Croskerry explores further, pointing out that critical thinking is essential to decision-making. Two systems of thinking are identified: system 1 which is much as has been described above; and system 2, which operates within a slower, more rational, more deductive, rule-based and analytical mode. System 1 incorporates impulsivity and speed, and occurs in the time it takes to blink one's eye, engaging, as it does, in a rapid cognitive thin-slicing style that recognises patterns and behaviours "on very narrow slices of experience" in what appears to be intuitive flashes of judgement<sup>90</sup>. Given the fact that the adjective "*intuitive*" was used, it must come as no surprise that there is a proviso attached: namely, the success of such intuitive flashes is heavily dependent upon considerable professional experience that has taken years of dedication to achieve. This is no style for a novice, nor is it foolproof for experienced clinicians.

By now the reader will have noted that while I have constructed a simple schemata of eight apparently distinct points, which I'm addressing one by one in this section of the literature review, in practice once I begin to explore the questions and issues that arise out of them, the distinctness of the boundaries begin to collapse as one merges into another and into another and so on, in keeping with the feature of pluralism, alluded to earlier in this literature review.

#### Knowledge and performance

Is it a function of CPD to contribute to reducing medical errors? Given that the GMC's definition (see footnote: 21) links CPD to improving patient care, the picture is assuredly not black and white. Where does one draw the boundary between CPD and quality assurance (see section above subtitled: *Boundary issues: CPD or quality assurance*). In the context of reducing medical errors<sup>91 92</sup> when are we talking about CPD and not about education, training and/or experiential learning and vice-versa?

<sup>&</sup>lt;sup>89</sup> Croskerry P Dec 2006 Ann Emerg Med 48: 720-2: see footnote: 56

<sup>&</sup>lt;sup>90</sup> Gladwell M (2005) as cited in Croskerry P Dec 2006 Ann Emerg Med 48 (6): 720-2

<sup>&</sup>lt;sup>91</sup> Moskop et al Nov 2006 Ann Emerg Med footnote 29

## Identifying personal learning needs, seeking the "means" (CPD) by which to "fill" the gap in actual practice

Various cycles (Guly's [see footnote: 27]; Kolb's experiential learning cycle, Daley's [see footnote 58]; action research cycle<sup>93</sup>) and models of education in which learning is constituted as a "*product*"<sup>94</sup> to be delivered<sup>95 96</sup>, or as a "*process*" [see footnote: 27] or as "*research*" along with models of learners as reflective practitioners have been discussed previously. Activity theory<sup>97</sup> might also be considered here. The development of critical thinking practices also needs to be considered here<sup>98</sup>. Formulating arguments to back up one's critical thinking practices depends upon one's ability to find evidence when one needs it<sup>99</sup>. Wears & Nemeth [see footnote: 65] propose that viewing the making of a diagnosis as operating through perspectives and sense-making is a more useful model than viewing it through notions of performance, since givens are thereby changed to real-world problems that thus have to be constructed from circumstances that are puzzling, troubling, uncertain and possibly irrelevant and somehow undergo transformation into medical problems.

The simplistic schemata constructed above and the brief introductory overview gleaned from the two scoping exercises can only skim the surface of the complexity of the range and depth of clinical, professional and managerial knowledge, skills and practice of medicine.

#### Conclusion

CPD, then, combines continuous learning and professional development and is associated with career progression and improved patient care. It is often closely linked with appraisal and with revalidation and generally conceptualised in terms of performance. The variety and scale of its provision reflect the wide ranging demands from CPD users and the issues associated with its effectiveness (both for the user and for the assessing body). Defined as an essential part of professionalism, CPD must be recorded by the user and assessed in some manner by some tool, which, given the scope of demands and issues of effectiveness, is no easy proposition for any institution that carries out assessment and quality assurance.

<sup>&</sup>lt;sup>92</sup> Cosby: see footnote 25

<sup>&</sup>lt;sup>93</sup> see footnotes 40 and 41

<sup>&</sup>lt;sup>94</sup> Bleakley A. "Pre-registration house officers and ward-based learning: a 'new apprenticeship' model" in *Medical Education* 2002; **36**: 9-15

 <sup>&</sup>lt;sup>95</sup> Peck C, McCall M, McLaren B & Rotem T. "Continuing medical education and continuous professional development: international comparisons" in *BMJ* 2000; **320**: 432-435
 <sup>96</sup> see Starke & Wade: footnote 9

<sup>&</sup>lt;sup>97</sup> see <u>http://www.edu.helsinki.fi/activity/pages/chatanddwr/activitysystem/</u>

<sup>&</sup>lt;sup>98</sup> Artzema et al March 2005 Ann Emerg Med footnote 26

<sup>&</sup>lt;sup>99</sup> Wyer PC, Allen TY & Corrall CJ. 'How to Find Evidence When You Need It: Part 4: Matching Clinical Questions to Appropriate Databases' in *Ann Emerg Med* 2003; **42**: 136-149

# **Appendix A2: Bibliography of further reading**

### **Bibliography of Further Reading**

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# **Effectiveness of CPD: A Survey**

This questionnaire, part of a project conducted under the auspices of AoMRC and funded by the GMC, is designed to help explore some of the issues associated with the effectiveness of CPD. Your cooperation in completing this would be much appreciated. Responses will be anonymous and comments will not be attributable to individuals. If you have any questions or comments, please contact the Project Director, Dr Mike Davis at <u>mikedavis8702@aol.com</u>

## Section A – some background

1.1 Sex Male 🗆 Female 🗆		
1.2 Age		
1.3 Training		
I attended Medical School in	(country) between	and
·		
1.4 Current post:	_ (position) in	_(place)

## **Section B – CPD experiences**

2.1 What CPD have you done in the past 12 months? Please tick all that apply.

	✓
CD rom/DVD learning	
Conference attendance	
Drug company materials/events	
eLearning modules	
Informal consultations	
Local hospital events	
Non clinical training	
Online conference	
Podcasting	
Reading journals/articles	
Skills training	
Teaching	
Web-based subject content	

2.2 How did you determine you needed this CPD. Please tick all that apply.

Appraisal	
Career progression	
Collecting CPD points	
Department/section policy	
Discussion with colleagues	
Formal needs assessment	
Interest	
Knowledge/skills gap	
Mandated	
MSF	
National policy	
Patient feedback	
Performance review	
Personal development plan	
Reflection on own practice	
Other (please specify)	

### 2.3 In what ways was the CPD successful/worthwhile/inspirational, or otherwise.

	Strongly	Agree	Neutral/don't	Disagree	Strongly
	agree		know		disagree
Change in attitude					
Change in					
departmental/unit practice					
Change in diagnosis					
practice					
Change in treatment					
practice					
Impact on immediate					
colleagues					
Impact on PAMs*					
Improved practical skills					
Knowledge acquisition					
Learner satisfaction					
Patient outcome					
Patient (and family)					
satisfaction					
Other (please specify)					
CPD not worthwhile because	e (please spe	cify)			
	-				

## \* Professions allied to medicine

#### 2.4 I consider CPD to be:

	Strongly	Agree	Neutral/don't	Disagree	Strongly
	agree		know		disagree
A chore					
Bureaucratic					
Enjoyable					
Natural part of professional life					
Necessary for patient safety					
Necessary for career progression					
Rewarding					
Threatening					
Unnecessary					
Other (please specify)					

2.5 Who should be responsible for the quality of CPD provision. Tick all that apply.

Colleges/faculties	
Deaneries	
Local providers	
Specialist societies	
Other (please specify)	

#### 2.6 Who should decide on the CPD curriculum?

Colleges	
Employers	
GMC	
Government	
Patients	
Self-directed	
Other (please specify)	

## Section C – You and Learning

3.1 How do you learn best? (Tick your favourite three methods)

Experience	
Group work	
Lecture	
Online courses	
Problem solving	
Reading	
Simulator	
Talking to colleagues	
Tonto (teaching one to one)	
Work-based learning	
Workshop	
Other (please specify)	

#### 3.2 What are your barriers to CPD learning? Tick all that apply

Availability of study leave	
Cost	
European working time directive	
External demands	
Inadequate preparation	
Motivation	
Past negative experiences	
Work-life balance	
Other (please specify)	

3.3 Who or what best contributes to your CPD? Tick the 3 most significant

College conferences
Drug companies
eLearning (e.g. doctors.net)
Local provision (i.e. in hospital)
Medical charities (ALSG, ATLS,
RC(UK)
Medical society conferences
Medline
Other internet
Speciality associations
Other (please specify)

3.4 Briefly describe the single CPD experience that had the most impact on your learning?

Thank you for completing this survey. If you would like to see provisional results or take part in later phases of the project, please add your email address below:

\_\_\_\_\_@\_\_\_\_\_

Please send me results  $\Box$  I would like to take part further  $\Box$  (please tick)

**Appendix C: Letter to CPD Leads** 

#### CONTINUING PROFESSIONAL DEVELOPMENT

Dear CPD Lead

Re: Effectiveness of CPD project (start date: 12.03.07; end date: 01.05.09)

The White paper, *Trust, Assurance and Safety – the Regulation of Health Professionals in the 21<sup>st</sup> Century*, (Feb 2007), has laid down the foundations for Revalidation and it is also envisaged that national CPD programmes will play a key role in Recertification. In the light of these developments, the GMC in conjunction with the Academy of Royal Medical Colleges have commissioned a study to investigate the Effectiveness of CPD across all medical specialties. The study is being undertaken by the College of Emergency Medicine in association with the Federation of Royal College of Physicians.

This phase of the project involves mapping the current provision of CPD activities in terms of access, relationship to professional practice, topic selection, choices of subjects to be made, documentation of learning, what is effective, and effectiveness.

Providing the information to the following questions would therefore be greatly appreciated:

What guidelines/advice does your organisation give to its members about undertaking CPD activities?

How are the guidelines / advice provided – web-based; letters; leaflets; other?

Do members provide feedback to your organisation on the CPD guidelines / advice offered?

o If so, how?

What is the range of educational CPD opportunities offered by your organisation?

How do you identify the need for specific CPD topics?

How do you guide your fellows to do specific CPD topics?

Is the membership up-take of CPD measured?

• If so, how is CPD audited?

How do your fellows record their CPD?

What are the characteristics of your organization's CPD target audience

o Gender ratio

o Age range

Do members provide feedback to your organisation on the guidelines /advice offered?

o If so, how?

What methods does your organisation use to evaluate the effectiveness of CPD provision?

Do you have any literature on effectiveness of CPD in your specialty?

- If so, please could you list the relevant references.
- Could you please provide the details of your next specialty conference

On behalf of the project team, I look forward to receiving your email response at your earliest convenience. Please *do* fill in your responses under the questions in this letter, if that is most convenient.

With thanks

Jill Schostak

Dr Jill Schostak Researcher: Effectiveness of CPD project; CEM and Federation of the Royal Colleges of Physicians j.r.schostak@uea.ac.uk **Appendix D: Interview questions** 

## **Interview Questions**

Please tell me a little bit about your job. How do you see your role?a. as consultant/medic;b. as educator;c. can you describe an event which shows the relation between each...?

How do you learn?

Can you give me an example of your most significant learning experience? How do you define effective CPD for yourself?

How do you see yourself facilitating the learning of others? How do you see formalised CPD provision addressing learning needs? Which models do you see as most successful, for you, for others? What stops you from being able to engage in CPD/Learning/Reflection?

How do you see learning taking place outside of such provision? How do you see recertification impacting on CPD needs?

## **Appendix E**

#### Action Research and CPD

#### by Nick Jenkins

Learning for doctors is recognised as being distributed across a variety of times and locations: formal lectures, small group teaching, conferences as well as self-directed solo "book work"; at home, at the base hospital, at other hospitals and at conferences in the UK and abroad. Yet multiple learning moments arise in each clinical day within the normal service provision of patient care. Trainees and specialists alike learn from each other, sometimes almost unknowingly. The aim of this study is to identify what makes for good ED teaching, and particularly, how such learning opportunities might be better facilitated. Through a practitioner-researcher perspective the study aims to investigate and reflect on learning opportunities in an ED, before modifying the researcher's own participation in such practices and re-investigating. Thus, by exploring strategy-outcome relationships it is hoped to develop a basis from which it is possible to facilitate learning and create a tool for observing and recording such achievement, with view to evaluating that tool for possible incorporation into higher specialist training for junior doctors and revalidation for their specialist leaders.

The assessment of learning is an increasingly commonplace aspect of a doctor's life. It is no longer acceptable for a doctor to affirm that, as a professional they are continuing to learn and are up-to-date. Much has changed in the training of junior doctors in the last few years, with the widespread introduction of regular workplacebased assessments as an integral part of training. Without successful completion of these assessments, trainees are unable to progress to the next stage (or completion) of their training. Also, in response to primary legislation introduced by the current government, the General Medical Council and the Medical Royal Colleges are developing models for revalidating specialist doctors. Specialists must now maintain a record of their continuing professional development which tends to focus on propositional knowledge acquisition from sources such as lectures, courses and journals. There is some credit given for formal teaching, but no recognition of the value of "informal" learning and teaching which occurs as a by-product of day-today patient care, in a responsive context dependent on the case mix and staff mix within the workplace at any particular time. Hence this study's place within the project investigating effective CPD practices.

The study is centred on an evolving research perspective in which a practitioner observes workplace learning possibilities in his own professional setting. By seeking to understand better how learning opportunities arise and how specific types of learning are produced, he can review his own participation in such learning encounters. Later, through his actions in that setting, the practitioner may begin to understand how such opportunities might be adjusted to achieve different effects. This process will be an hermeneutic enquiry governed by a cyclical action research process (e.g. Elliott, 1991; Schon 1987; Somekh) linked to a narrative based generation of reflective accounts of practice (Brown and Jones, 2001).

*Phase One:* Through observation of professional encounters in the researcher's own everyday clinical setting, accounts of situations in which learning appears to take place will be collected. At the same time, similar accounts will be collected of practices that seem detrimental to the generation of learning

opportunities. Such accounts will be sorted according to the types of situations noted: incidental encounters, responses to specific requests, intentional teaching, structural arrangements detrimental to learning etc. Specific teaching sessions in clinical settings will be facilitated to include discussion of how learning is seen as taking place. Analysis will take place with a view to understanding better how specific social encounters relate to perceived learning opportunities and the types of learning they appear to make possible. A preliminary register of such encounters will be produced. Particular attention will be paid to the researcher's own involvement in such situations through generation of reflections on his own actions and how they might have been motivated by an educational or professional agenda.

*Phase Two:* Drawing on the initial analysis of learning encounters further observations will take place with view to assessing practices against this preliminary register. In the light of these further observations the register will be refined. Further attention will be given to the practitioner's own practices with regard to how they are aligned or non-aligned with the register. Through an analysis governed by Mason's (2002) "discipline of noticing" the practitioner will seek to propose and enact alternative strategies within his own participation with a view to producing alternative effects. The action of the researcher will be seen as an essential part of the situation being described and thus the narrative becomes an integral part of the research itself. Writing thus becomes both a method of recording and a way of developing professional practice. The researcher will be located within the research but will also attempt to move outside the context of the research to become at the same time observer and observed.

*Phase Three:* This phase will focus on the adjustment of the practitioner's own actions within the clinical setting with regard to a combined professional and educational agenda. Specifically as a teacher, learner and manager the practitioner/researcher will evaluate alternative strategies with regard to their impact on learning opportunities, and how resultant learning might be accounted for against the register. This phase will include further facilitation of teaching sessions to include discussion of study results enabling local dissemination of the results and with a view to further refining the analytical framework.

Once results are available it is planned to disseminate them through publication for discussion in both medical and educational media.

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Effectiveness of Continuous Professional Development page 128