AMEE GUIDE

AMEE Medical Education Guide No. 19: Personal learning plans

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SUMMARY *Personal learning plans are being introduced and developed across the breadth of medical education—from the early years of undergraduate training through to continuing professional development for experienced clinicians. This Guide shows how and where they can be used, charting their history across higher education in the UK, indicating how they link with other professional development initiatives such as appraisal and revalidation, and giving an educational rationale for their use in enhancing lifelong learning. It offers a simple, stage-by-stage strategy for developing a personal learning plan, and for supporting others as they undertake the process themselves.*

What is in this guide?

The issue of personal learning plans, while not new in many educational settings, has recently come to the fore in medical education and professional development. This Guide offers a view on what personal learning plans are, why they are important at the current time, and how they may be approached, developed and evaluated in a range of contexts. It also places the development and history of personal learning plans within an educational rationale that recognizes the need for learners to control their own learning, and for the use of reflection on and in professional practice in order to maximize effective learning.

The document is divided into three parts. Part 1 introduces the basics of personal learning plans. Part 2 looks at the background in which personal learning plans have developed, and their relevance to medical education. Part 3 offers a stage-by-stage process which should help you when you come to develop your own plan.

Part One: The basics

What are personal learning plans?

Personal learning plans represent a way in which you can identify:

- what you need to learn;
- why you need to learn it;
- how you are going to learn it;
- how you will know when you have learned it;
- in what time frame you are going to learn it
- how your intentions link to past and future learning.

The same or a very similar process appears under several different names:

- learning contracts;
- learning agreements;
- personal development planning;
- personal audit;
- personal action planning;
- learner profiling.

Essentially, the principles underpinning the practice of identifying and meeting learning needs are the same:

- putting you, the learner, at the centre of the learning process, using your current practice as the basis of learning;
- the development of your autonomy as a learner in seeking ways to meet your own individual learning needs;
- the close integration of theory and practice in how you work and develop as a professional;
- enhancing your motivation to learn and to ask appropriate questions of yourself and others;
- leaving planned learning open to re-negotiation as your personal needs and circumstances change, and your learning progresses.

Another common aspect which links the various approaches to planning for personal learning and development is the use of a mentor (or sometimes a co-learner) to support the development of the plan and put it into operation.

At a team or organizational level, the process also ties into systems of appraisal, quality management and educational evaluation. The model of personal learning planning bears much resemblance to the process of managing strategic change and indeed clinical audit. The key points throughout all of these are:

- What is the current situation?
- How could it be improved?
- How can this be achieved?
- What will it look like when we get there?

As the purpose and underpinning principles leading to means of achieving the end are essentially the same whatever the nomenclature, this paper will use the phrase 'personal learning plans' throughout, although much of the literature cited uses the phrase 'learning contracts'.

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What do personal learning plans look like?

There is no set formula for writing a personal learning plan, and there is no doubt that individual learning contexts will call for distinct and appropriate documentation. However, the following form should serve as a useful starting point, whatever your status or stage of educational development. Some ideas on how to put your learning objectives onto this form are included in the appendix to this Guide.

What lies behind the plan?

Clearly your objectives and means of achieving them will depend on many factors. One of the most important must be your stage of learning, as the imperatives motivating you to achieve your learning goals will have significantly different origins. Looking across the continuum of medical education, from undergraduate to consultant/GP principal, the 'drivers' (i.e. incentives) may be summarized as:

Undergraduate	**Consultant/GP principal**
Curriculum	Biotechnological developments
Examinations	Clinical audit/indicators
Using protocols	Developing protocols
Career selection	Career enhancement
Personal exploration	Personal expansion
Application in micro-society (course)	Application in macro-society (population)

The personal learning plan, situated within these driving forces, will also be informed by your own history and working

Personal Learning Plan Proposal Form

Learner name ______________________

Adviser/mentor ______________________

Date agreed ______________________

Date for review ______________________

What incident or event made you think about what you need to learn?	Learning objectives (what you intend to learn)	Strategies and resources (what you intend to do and what facilities you need to achieve objectives)	What is to be reviewed/ assessed (the evidence you will produce to show that you have met your objectives)	Criteria for review/ assessment (what will demonstrate that you have been successful)	Timescale (when you intend to have completed this piece of learning)

Signature of learner ______________________

Signature of adviser ______________________

environment. Therefore, for undergraduates, learning objectives are likely to relate to:

- previous assessments and appraisals within the course of study;
- the curriculum of the course;
- the service needs and employer needs which will inform a future choice of career.

For the more experienced practitioner, the learning plan will be informed by, for example:

- clinical audit and other indicators;
- biotechnological developments within the specialty;
- service developments;
- population trends and needs;
- personal career interests and aspirations;
- political imperatives.

Where do I get help from?

During the process of devising and fulfilling a personal learning plan, you will need some degree of support. In an undergraduate setting, this is likely to come from a tutor or a clinician who has been assigned the role of being your mentor. As a more mature professional, you may have a College Tutor or Programme Director to help you. As a consultant or GP you will probably be seeking support from a colleague with a similar level of experience, or someone who is very familiar with your working surroundings. If your personal learning plan has to emerge from a process of appraisal, you may have limited choice about who you will discuss it with. However, it is useful to bear three points in mind:

- Your supporter is there to help you, not work through his/her own agenda.
- You should insist on the right to be supported by someone who has the skills to help you—listening skills, empathy, a non-judgemental attitude, an ability to resist telling you what you 'ought' to do but sufficient knowledge to be able to see what your options are, the ability to give you constructive feedback on how well you are doing.
- It is a sign of strength to be able to see where you could improve your practice, not a sign of weakness

Part Two: The history

Where did personal learning plans come from?

As with many initiatives currently entering medical education, personal learning plans are not new. As long ago as 1974, North East London Polytechnic offered a Diploma of Higher Education by Independent Study, which was based on the concept of a learning pathway negotiated between the learner and the institution. This entailed, in effect, a series of structured personal learning plans leading to a specified award.

Across higher education, the use of personal learning plans was promoted in the movement to encourage the development of key skills amongst undergraduates in the late 1980s and early 1990s. With the expansion of higher education, employers increasingly came to articulate a previously unspoken expectation that all graduates, regardless of discipline, should display, amongst other qualities, flexibility and a degree of autonomy in their approach to work. In particular they required higher education institutions to purposefully integrate skills such as communication, numeracy, IT literacy, problem solving, teamwork and personal development into their curricula. Some institutions met this demand by asking their learners to identify ways in which they could develop these skills, by identifying their needs and finding ways to develop and demonstrate them through the standard assessment processes built into the qualification towards which they were working (Macintosh, 1997). Indeed in their report on 'graduateness' (1996) the Higher Education Quality Council identified flexibility in a range of generic skills, and the ability to plan for personal development as a key hallmark of 'the graduate'.

The Enterprise in Higher Education Initiative (EHE), launched in 1987, was a national scheme which had as its aim the encouragement of "the development of qualities of enterprise amongst those seeking higher education qualifications". The evaluation of this five-year project (Hawkins & Winter, 1997) indicates the various means by which higher education and employers worked together to enhance the skills of graduates, and highlights the fact that a key to success is personal reflection and institutional planning for development.

Since the coining of the phrase 'the reflective practitioner' by Schön (1983) the notion of reflection in professional life has become a key feature in professional development. In essence, it offers a way of revisiting an event and analysing it in a structured way so that learning may ensue. The process involves addressing not only the 'facts' of the event as perceived on thinking back, but also an analysis of the emotional responses which may either help or hinder learning (Boud *et al.*, 1985). The ability to reflect on one's own practice in this way is considered a further key skill, or a mark of professional practice.

This process of working on key skills as well as subject knowledge (propositional knowledge) brought higher education more closely into line with other developments in vocational qualifications, such as the National Vocational Qualifications framework. At the same time, the requirements of General National Vocational Qualifications had built into them the need to develop an action plan that detailed the learning process which each individual would undertake in order to attain the qualification.

During the same period, work-based appraisal systems were being enhanced, alongside requirements to demonstrate continuing professional development in order to maintain membership of professional bodies. This has been the case both within healthcare professions, such as nursing and physiotherapy, and outside, such as in Engineering and the Law Society (Madden & Mitchell, 1993). Often workplace mentors have been used to support the learner in reflecting on learning needs and progression. Where portfolio-based learning and assessment are used, the evidence of learning provided is reviewed in the light of the personal learning targets set by the learner (Challis, 1999).

There is a clear principle which underlies all these developments. This is articulated by Anderson *et al.* (1996, p. viii):

> . . . a learning contract puts responsibility on the learner, often with few prepared activities, resources or programmes being directly involved. . . . The process aims to develop the skills and initiative students need to meet their learning needs long after the course has finished.

The personal learning plan therefore clearly links into the current government's priority of lifelong learning, by developing the ability to identify the need for learning, articulate that need and initiate action to meet the need. It is a highly flexible process, being applicable in many different contexts and meeting the needs of learners from many different backgrounds.

What is the educational rationale?

From an educational viewpoint, learning plans are consistent with approaches that develop 'deep' learning (Marton *et al*., 1984) and with assumptions made about adult learning (Brookfield, 1984; Knowles, 1990). Indeed Knowles (1986)) has described the learning-plan approach to learning as that which is "most congruent with the assumptions we make about adults as learners".

The Quality Assurance Agency for Higher Education (QAA) has recently published its consultation paper *Developing a Progress File for Higher Education* (QAA, 1999). This document makes an assumption that the introduction of a progress file, which incorporates a transcript of achievement, will also include a personal development plan. It goes further and suggests that this might involve all higher education institutions using the same tool, based on a set of common principles or expectations.

Why are PLPs important in medical education?

The above generic reasons for supporting learning plans have generally been accepted across higher education and initial and continuing professional development in many professions. In nursing, for instance, an extended curriculum vitae and personal learning plan are a constituent part of UKCC professional development requirements. The current climate of educational change within the medical profession makes this approach particularly appropriate.

The undergraduate years

Within the sphere of undergraduate education, most UK medical schools have made substantial changes to their curricula in response to *Tomorrow's Doctors* (GMC, 1993). In some cases, this has led to a curriculum which is strongly focused on problem-based learning (see for instance Bligh, 1995) whilst others have opted for a 'mixed economy' where more traditional teaching and learning processes are mixed with curricular strands which enhance self-directed learning and personal autonomy. There is growing agreement that it is worth investing in the process of encouraging and supporting learners in developing their own learning plans, both from the point of view of the development of the individual, and for eventual improvements in the quality of healthcare which they offer. The relevance of learning contracts in a range of clinical settings at all levels of medical education is outlined by Parsell & Bligh (1996), who demonstrate that most relevant experience lies in the postgraduate arena, but that there is also value in exploring the issue within undergraduate education.

Anderson *et al*. (1996) give examples of learning plans drawn from a range of undergraduate programmes, including physiotherapy, teaching, business studies, computing science and engineering, and demonstrate their effectiveness. In adopting this approach, there needs to be a revision of the conventional view that students attend a course in order to receive wisdom from an 'expert'. Instead, the focus will be shifted from a teacher-focused environment to one which is learner centred, where students are given some control of what they learn, how they learn it, and how they demonstrate what they have learned. This is not to say that all traditional teaching and assessment techniques should be replaced by negotiated learning, but learning plans can certainly act as a useful alternative strategy alongside the more familiar lecture, tutorial and written or practical examination systems. The use of a plan can encourage more in-depth learning, and can help students to structure assignments and projects that are largely self-directed.

Using such methods means, of course, that the role of the teacher has to change as more decision-making power is handed to the student. Topics for exploration, ways of working and means for presenting findings will result from a process of negotiation and continuous tutorial support will be built in. This must, however, be set against the backdrop of the requirements of the curriculum and the need for academic rigour in assessing learning outcomes. Guidance and support for tutors will therefore be needed if they are to take steps to introduce learning plans with their students.

The inclusion of discussion, negotiation and continuous support make learning plans different from the way in which students approach a standard assignment, as the agreement is open to alteration if circumstances change. Although not for use across all topics in all settings, learning contracts offer the potential to promote deep learning (Marton *et al*., 1984) and are especially well suited to practical and collaborative work, where a range of approaches would be appropriate. There is also particular value in using PLPs in special study modules (SSMs) within the undergraduate curriculum, as these often include a wide range of new skills and interactions which it would be useful to recognize and document.

Personal learning plans for practising doctors

The government is committed to lifelong learning for all sections of society, and has developed a range of strategies for achieving this (DfEE, 1998). Within this framework, the GMC has set an ambitious target that all consultants should undergo a process of regular appraisal, and be involved in a process of periodic revalidation by the year 2002 (GMC, 1998). Whilst many junior doctors already engage in a process of appraisal and year-end review, consultants at the moment are not involved in a similar process. However, doing so will not only bring the most senior medical practitioners in line with other professionals within the trusts in which they work, but will also create a unified educational process through from PRHO to consultant/GP principal. In response to the General Medical Council (GMC) publication *The New Doctor* (1997), a process of continuous assessment for pre-registration house officers (PRHOs) has been developed, based on a combination of the requirements of a syllabus set out in *The New Doctor* and the individual needs of the PRHO. 'Calmanisation' and the Record of In-Training Assessment (RITA) process introduced for specialist registrars (SpRs) offers a framework for individual learning plans to form the basis of in-service assessments which are reviewed at the end of the year. *The Early Years*

(GMC, 1999) opens up a clear pathway for similar processes to be put in place for senior house officers (SHOs). Some early work into the use of learning contracts for SHOs has been carried out by Parsell (1997). Brambleby & Coates (1997) have indicated the desirability of using PLPs within registrar grades, claiming that "systematic self-appraisal of performance against pre-determined objectives is a good habit to acquire early" (p. 281).

Vocational training for GP registrars has, since its introduction, included an element of personal planning in order to maximize the effectiveness of learning opportunities. Within general practice, the process has largely been welcomed by both registrars and trainers (Siriwardena, 1997). Principals in general practice are now able to use personal and professional development portfolios, incorporating a learning plan, to gain their postgraduate education allowance (Mathers *et al*., 1999) and this process will inform the implementation of the recommendations made by the Chief Medical Officer in his report on continuing professional development (cpd) in general practice (DoH, 1998).

The wider picture

It is clear that the educational climate in postgraduate medical education is ripe for the use of personal learning plans for all doctors, and indeed is already embracing the concept in some way at all stages of initial and continuing professional education. However, the political imperatives being imposed by the regulatory bodies in the NHS are also pushing the medical workforce into an environment where personal learning plans are to be significantly important.

The introduction of clinical governance has highlighted the need for clinicians to be able place their clinical practice within a framework of personal and professional development. It is clear that clinical governance can only be effective as a means of analysing both past behaviours and predicted change if it is closely tied in with an educational process that enhances the learning of teams, both within primary care and hospital settings.

Anxieties which clinicians have felt around the issue of clinical governance have been added to by the more recent debate about revalidation, which may hit at the heart of the tradition of professional self-regulation which the medical profession has held for many years. Although the precise method for implementing this is as yet undecided, it is clear that the intention is that it will be "a proactive, inclusive programme, designed to demonstrate that the performance of doctors is acceptable" (Southgate & Pringle, 1999, p. 1180). It is likely to include all dimensions of a doctor's individual practice, and so will seek evidence of current acceptable practice in terms of:

- professional values;
- professional relationships with patients;
- keeping up to date and maintaining performance;
- responses to complaints or comments from patients.

A personal development plan could provide a framework for monitoring and evaluating improvements across all aspects of a doctor's practice.

Practice professional development plans (PPDPs)

The Chief Medical Officer's report on continuing professional development (cpd) in general practice first introduced the notion of the practice professional development plan (PPDP) (CMO, 1998). This group plan is expected to incorporate and reflect the personal learning plans of all staff working within the practice. The principle of personal learning plans is also incorporated into the process of cpd envisaged in the later publication from the DoH, *Continuing Professional Development: Quality in the New NHS* (DoH, 1999, p. 6), were it is stated that "the core principles are that cpd should be:

- purposeful and patient centred;
- participative (i.e. fully involving the individual and other relevant stakeholders);
- targeted at identified educational need;
- educationally effective;
- part of the wider organizational development plan in support of local and national service objectives;
- focused on the development needs of clinical teams, across traditional professional and service boundaries;
- designed to build on previous knowledge, skills and experience;
- designed to enhance the skills of interpreting and applying knowledge based on research and development".

What is professional learning?

In the current environment, most doctors will be unaccustomed to identifying their learning needs and finding ways of meeting them. Indeed, many may find the whole process at best challenging and time consuming, and at worst an affront to their professionalism. Each of these views is understandable, but the stark fact is that shortly there will be no choice. It is anticipated that all doctors working within the NHS will have to engage in the process and they are likely to be required to produce some sort of plan and evidence of achievement in order to continue to be registered with the GMC.

So, how can the difficulties be addressed and overcome so that the potential of the personal learning plan can be harnessed?

One of the challenges in engaging with the process of personal learning planning is that it requires the learner to engage rather differently with the way they view their professional learning. As professionals, we act in a holistic way, rather than viewing our work as a series of separate and staged activities. In other words, we transform formal knowledge—found in the world around us—into personal knowledge which we then use in practice (Eraut, 1994). External cues such as protocols or guidelines are an important feature, but they provide a framework within which we apply our own 'professional artistry'. We have to use this personal approach, because working as a professional is normally and naturally messy and unpredictable—our natural working environment is what Schön (1987) calls the 'swampy lowlands'. The political imperatives of our current context lead us to believe that the only way in which we can improve practice is to be involved in and oppressed by complex systems of quality control and accountability. An alternative to this model of 'imposed' professional development is to learn how to understand and indeed articulate the complexity of professional practice in order to maintain what is important to improved learning and, therefore, improved healthcare (Fish & Coles, 1998). This is difficult, because it involves not only looking at complex issues, but also finding ways to describe and address them.

A personal learning plan can serve as a vehicle for undertaking this task.

Where do personal learning plans fit in with appraisal and organizational development?

Consultants and GP principals are quite unusual within the field of professional development in so far that they do not currently have anyone assessing overtly whether their activities are in line with either personal, professional or organizational goals. Whilst, in extreme cases, doctors' activities may lead to censure by the GMC, it is not the norm for adequate, or even excellent, practice to be acknowledged. The introduction of personal learning plans for this group of doctors will ensure that periodic appraisal can ensure not only safe practice, but also planned and identified improvement or consolidation of practice. Further, PLPs may be used to consider new ways of delivering services to patients and meeting the needs of patients and society.

For general practitioners, personal learning plans, or personal development plans, will take place within the context of the Practice Professional Development Plan—a document that will chart the direction in which the practice develops. Field (1999) shows the relationship between the personal and the practice plan in a diagram (Figure 1), which also demonstrates that both fit within the primary care group development plan and national and regional objectives.

Within a hospital setting, the picture might translate into that shown in Figure 2.

Personal learning plans also fit logically within a strategic management cycle, as indicated in Figure 3.

This diagram shows how the process of devising and implementing personal learning plans is an integral part of organizational planning. The goal-setting process may incorporate not only personal learning goals, but also those that relate to the team, the department or even the whole organization. Implementing this appraisal cycle, which will incorporate the self-assessment process outlined above, will ensure that 'mavericks' are able to follow their own interests

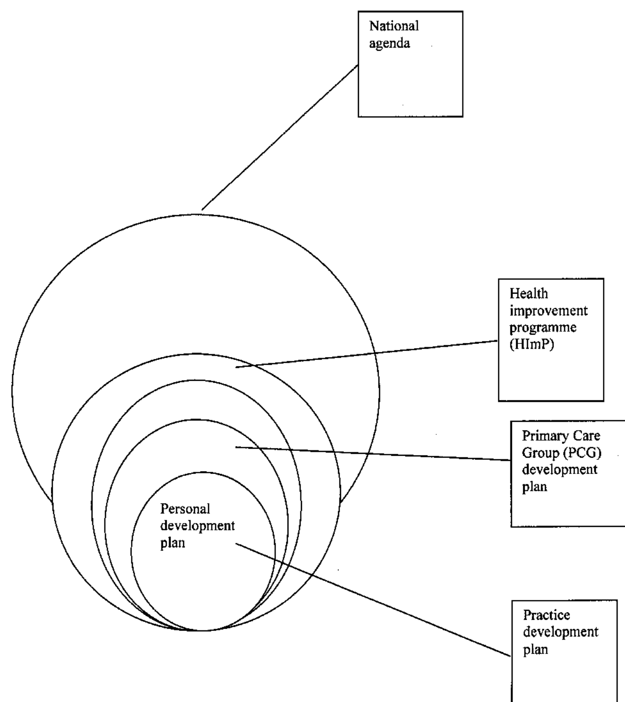

Figure 1.

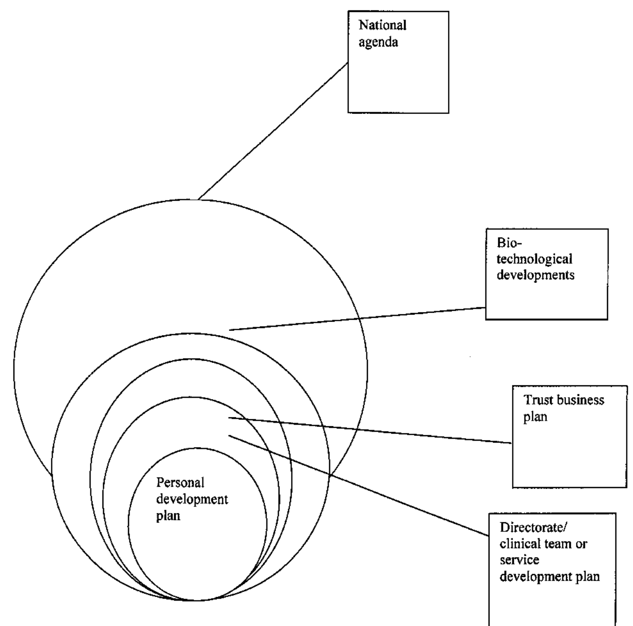

Figure 2.

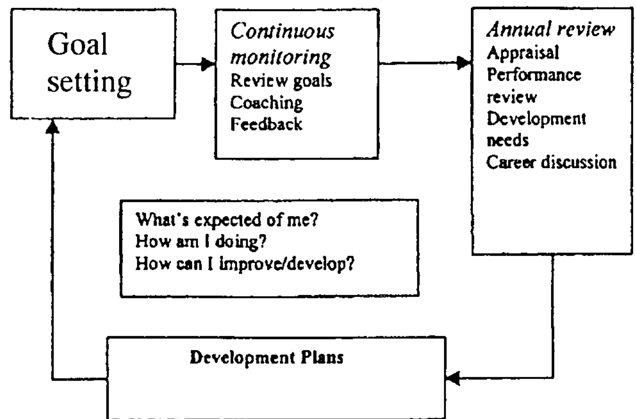

Figure 3.

only to the point where these contribute to a wider, agreed picture of development.

What are the challenges in introducing personal learning plans?

As with all innovations, personal learning plans present a range of challenges to both learners and those supporting learning. The particular circumstances surrounding their introduction will define the limits of their usefulness, and there is always the danger that they will become nothing more than a means of demonstrating that ends have been met in order to meet the demands of accountability placed upon all involved. This will particularly be the case where there is not total commitment to maximizing the learning gains that can be achieved through a systematic process of planning and giving feedback on the outcomes of the process. Negotiation of the learning plan is dependent upon a mutual understanding between learners and advisers (Piper & Wilson, 1993).

At an individual level, there is the challenge of deciding who will be an appropriate person to support the learning plan: should it be a colleague within the team, an 'outsider' who will bring fresh viewpoints and impartiality, or someone

in a hierarchically superior position who will bring an institutional perspective? At the organizational level, there is the challenge of developing sufficient numbers of advisers/mentors across the spectrum of staff, so that individuals have a degree of choice about who they choose to support them.

In addition, the issue of motivation to become involved in personal learning plans must also be taken into account. Learners who are accustomed to more traditional learning methods, such as attendance at seminars or lectures which are of general interest or are given by well-known figures, may be unwilling to engage in a process that asks them to explain how such activity relates to overall, planned, educational or professional development. Enforcing the process will not overcome resistance to engaging with the process in such a way that the benefits may be garnered.

Another barrier to engagement may be that the individual does not have the skills to identify or articulate learning needs. This may arise from a general sense of insecurity in admitting to what may be seen as 'gaps' in knowledge or skill, and so both self-confidence and verbal and written articulacy are essential ingredients in creating a meaningful learning plan. Under these circumstances, the role of the facilitator or mentor becomes crucial. The full personal and professional context in which the learner is working has to be understood in order to provide support which will help to overcome such difficulties.

The lack of self-confidence may arise from cultural difference—for example that it is not professionally acceptable to admit to insecurity, or to believe that the teacher or supervisor has all the answers, and to negotiate according to personal needs is a sign of weakness or disrespect. In order to overcome some of these difficulties, it should be borne in mind that one of the underlying principles of the learning plan (see part one of this guide) is that it is negotiated. The needs of the learner, the supervisor and the organization are all integral aspects to be considered, so that issues of who controls the learning agenda are discussed and, where appropriate, compromise can be agreed.

Similarities arise here between the concepts of personal learning plans and portfolio-based learning (Challis, 1999). In both contexts, the learner has to accept a high degree of responsibility for engaging with the process and undertaking the activities agreed to enhance and demonstrate learning. Gradual introduction of the new scheme will help to demonstrate the advantages without risking outright rejection in the early and crucial stages. The purpose of using learning plans is to encourage autonomous and lifelong learning, not to impose a new set of hurdles to be overcome. However, autonomy does not imply solitariness. A learning plan can, and often will, involve working with others in order to achieve its goals, and at the same time will help to meet the learning needs of others. Indeed it may be argued that true autonomy within an organization is gained by taking the organization's goals and incorporating the direction of travel of the organization within one's own PLP—thus making explicit the link between individual, team and organization.

Personal learning plans are not a panacea for all the ills of initial and continuing professional development. They can, however, instil into the learner the ability to recognize and cope with the challenges that will be encountered throughout a career, particularly as these change and become more complex as the professional world changes.

Part Three: The process

What goes into a personal learning plan?

Remember that the stages you will be going through in developing your personal learning plan are the following:

- Recognize the need (What is the issue?)
- Identify what this means to you (Why is it important now?)
- Describe what achievement will look like (What are your measurable objectives?)
- Carry out what you have described (What will you do to achieve your objectives and what resources will you need?)
- Record outcomes and progress (How will you know if you have achieved your objectives?)
- Make links with previous and future learning.

As its name implies, your learning plan will be based on your own personal and professional development needs. This means that it is impossible to state specifically what will go into it or the areas it will cover. Southgate & Pringle's (1999) indication of typical aspects which might be reviewed for the purposes of revalidation—professional values, professional relationships with patients, keeping up to date, responses to complaints—show clear links with the development of a personal learning plan, which they refer to as 'an extended curriculum vitae'.

Fundamental to this framework for recording professional activity and change is your ability to reflect on your own practice and make appropriate changes in services and patient care.

The National Association of Non-Principals in General Practice (NANP 1999) has developed a recording process for personal development planning which falls under seven headings:

- family and friendships;
- career and learning;
- environment/surroundings;
- physical health;
- hobbies/interests;
- finances;
- spiritual.

Their guidance to individuals choosing to undertake the process of planning for personal and professional development is:

> Under each of the seven suggested headings, write down as many relevant points that spring to mind as possible. These can include thoughts, plans, hopes, aspirations, hurdles and barriers extending over the next few months or even the rest of your life. You may find it useful to consider your plan in terms of short-term, medium-term, and long-term goals.

The same document also advocates the use of patients' unmet needs (PUNs) and doctors' educational needs (DENs). PUNs are discovered in consultations by asking, after the patient has gone, 'How could I have done better?' If an unmet need is discovered through this process, or

other means for stimulating reflection such as clinical audit or critical incidents, this leads to the identification of a DEN. PUNs and DENs are recorded in a logbook that outlines the issue/area for improvement and the educational steps which are undertaken to meet the recognized learning need. The logbook is confidential to the individual doctor, but may form the basis of discussions with colleagues or a learning group.

However, learning requirements are not only related to individual patient care or gaining clinical knowledge or skill, but may also refer to a broader set of needs which will help you in managing your professional life. It would therefore be quite normal to find a consultant or GP setting targets in relation to some or all of the following examples:

- how to develop a personal learning plan;
- negotiation skills;
- time-management skills;
- IT and the use of informatics;
- education and teaching theory;
- research;
- team-building and team-working skills;
- financial management.

Similarly, it will be normal to find a range of resources used to meet individual needs. These will include:

- books and journals;
- CD ROMs, email and other electronic media;
- audio and video materials;
- colleagues and other professionals including subject specialists;
- seminars and conferences;
- visiting colleagues to observe their practice;
- professional associations;
- case notes;
- TV and radio;
- librarians;
- personal diary or journal;
- secondments;
- preparing for accreditation processes—being accredited or accrediting others.

How do I know what I need to know?

You probably already have in your mind a list of items that you want to find out about. This may have come out of the syllabus laid down by the university or college, but in addition there will be many aspects of your professional learning which you have discovered for yourself. They may relate to clinical or interpersonal or teamworking aspects of your life, or they may simply be things that have occurred to you as you go about your daily routines. Examples of the types of stimulus which will help you to recognize your needs are:

- your own experience (e.g. mistakes and successes);
- interactions with clinical team and department;
- non-clinical activities (e.g. conferences, professional conversations);
- formal structures to enhance quality management and risk assessment (e.g. audit, patient-satisfaction questionnaires);
- peer review.

You will probably find it helpful to keep a notebook for jotting down ideas as they occur to you so they do not get lost as you move on to your next task. Some people have found it useful to keep a note of 'critical incidents'—thought-provoking events which occur without warning—that act as a stimulus to further learning. You may, for instance, see a patient who presents particularly unusual symptoms, or you may find yourself in the middle of some crisis, whether or not of your making, which you would like to handle better if something similar should occur again in the future. Reflecting on these incidents in a structured way will help you to identify what you need to learn. These events will, of course, be in addition to your natural inclination to increase your specialist clinical knowledge and will form the basis of expanding your ability to deal with both routine and non-routine events more efficiently and effectively.

What are learning objectives?

Learning objectives are statements of the things that you intend to focus on during your planned learning activity. They will arise out of the process of thinking about what you want to learn, which in turn will arise from personal, local and national agendas which you want to meet. Your learning objectives should include a clear statement of what you will be able to do by the time you have undertaken your planned learning. Writing these objectives is a skill in itself, and will take practice. They should be short, specific and clearly stated:

- to improve my IT skills;
- to ensure I make time to give feedback to my trainees;
- to explore new research methodologies;
- to explore the impact of clinical governance on my day-to-day activity;
- to find out more about parvoviruses.

Do not fall into the trap of writing down so many objectives that you have no chance of meeting them. The purpose of undertaking the planning process is to ensure that you do actually meet your needs, rather than having a 'wish list' which is unachievable. You will therefore need to prioritize. Which of the things that it would be nice to explore are actually going to be useful, or even essential in the foreseeable future, and which can wait until the environment is right to pursue them?

Speaking to peers, colleagues or your mentor will help to determine service-related as well as personal priorities, and how these interrelate. If you are on a course that has specified learning outcomes, you should relate your personal objectives to these outcomes (Harden *et al.*, 1999).

However, even once you have decided what major areas you want to work on, you will need to give some thought to what you actually want to know or be able to do at the end of your learning process. This means breaking down your primary objective into smaller chunks of learning that will be identifiable and measurable once you have achieved them.

So, 'improve my IT skills' may, at a very simple level, be broken down into:

- decide which computer system best meets my needs at the moment;
- be able to type letters or documents to a standard format or template;
- be able to use a range of tools within a word-processing package (e.g. changing font, formatting the page, using a colour printer);

- be able to move between documents and 'cut and paste' data as necessary.

You will find it helpful to try and phrase your objectives so that they begin with some sort of 'action' word such as:

- describe;
- evaluate;
- identify;
- analyse;
- predict;
- list;
- define;
- select etc.

If you start with a word such as 'understand' then you will find it difficult to judge whether you have actually met your objective. What does 'understand the uses of IT' actually mean if you have to describe what you have learned or can do as a result of your learning? The word is too broad and abstract to be very helpful to you in knowing whether you have met your target.

At the same time, you should be asking yourself what would constitute an appropriate set of criteria against which you can measure your learning. For instance, if you are exploring word processing, you might want to undertake to show that you can use the cut-and-paste facility in any type of document, not only letters; that you can adapt a letter format to discharge letters or requests for further information from a colleague. In other words, if there were such a thing as 'pass' or 'fail', what would constitute a 'pass'?

How do I set about meeting my learning objectives?

Once you have decided what your priority objectives are, and what you will know or be able to do once you have met them, you are in a position to think about how you are going set about your learning. The tradition of medical education has always favoured 'going on a course' as a means of learning, and obviously there are times when this is totally appropriate. However, much very valuable learning can be done on your own, or in a small group of people who have similar learning needs. These can be incorporated and valued within a personal learning plan. You now have the freedom to choose the learning method which best suits your needs—in terms of method, time, place and pace.

You may also find that some objectives can be achieved much more quickly than others, which leaves you more time to work on other aspects of your learning plan. Do not be surprised if, in the course of meeting one learning objective, you uncover other learning needs.

For instance, if you are in the initial stages of learning about computers, you may well start with something like basic word processing, or electronic medical records. A friend or colleague, or a simple manual can help you at this stage, and there will be no need to spend time and money going on a course. However, as you go through this process you may find that it would be useful to be able to record some of your data on a spreadsheet or create a database to help you with an audit project. You may also discover the potential of email and electronic discussion groups, or realize how helpful it would be to be able to do a literature search on Medline instead of having to go to the library and find the appropriate journals. You will have to decide whether you are going to pursue these additional dimensions, which were unseen at the time of writing your global objective, because you were unaware of the range involved in 'improve my IT skills'.

Similar decisions will have to be made whatever the initial content of your learning plan: clinical, non-clinical, interpersonal, personal. Having an outline of what you intend, and your priorities for learning, however, will help you to get started and give you the opportunity to go further in one aspect, or call a halt and return to another topic.

As an example, your starting point for meeting your objectives in relation to your computing needs, as outlined in the previous section, might be:

- talk to some colleagues and/or an IT consultant on which computer system would meet my needs;
- buy or borrow a basic guide to word processing;
- sit down with my daughter/trainee/nurse/secretary/ colleague who appears to know rather more than I do and watch how they use the computer;
- try and type out a letter or document;
- make amendments to this document using a range of tools and different formats.

How do I judge my personal learning plan?

You might find the following questions helpful in assessing the value of your learning plan—either for purposes of self-assessment, or as the basis of a discussion with colleagues or the person supporting you throughout the process of using the learning plan.

At the personal level:

- On reflection, what do I now know or understand that I didn't before?
- Has my plan met my original learning needs?
- How does my practice show what new knowledge/skills I have gained?
- Have I questioned my original ideas and assumptions?
- Is this the learning that I wanted to do and is it of my own choice?

At the impact level:

- Has my learning helped me in my work or with my understanding of a subject?
- Has it assisted my personal development?
- Has it had any effect on other people I deal with?
- Has the theory made a difference to how I work or plan to work in the future?
- Has this learning changed me in my workplace or as a student on my course?
- Overall, has the result justified the effort?

How is the learning plan assessed?

Just as you will find the above questions useful in undertaking a self-appraisal of your learning plan, there will almost certainly be someone else who will also be looking at your plan and how you have carried it out. In order for them to do this, you will need to offer evidence of your learning achievements, and this will need to be planned in order to meet the deadline for the review (e.g. the date for a meeting with your educational supervisor, your RITA, or appraisal

session). The evidence may be as varied as the objectives and the means for meeting your objectives. It will often consist of paper-based material—for example accounts of critical incidents, a reflective journal or log-diary, critical reviews of articles, tutorial or teaching session outlines, audits and project work. However, it could equally well include video or audio recordings, or even artefacts if you are aiming to develop a new instrument or piece of clinical apparatus. The key question to ask yourself is: what can I produce which appropriately shows that I have achieved my objectives?

In the case of the IT novice whose progress we have tracked so far, evidence that the learning objectives have been met might be:

- a written or verbal justification of the system that has been selected;
- copies of documents that have been produced, demonstrating the range of different tools which have been used in their production (with some follow-up questioning to ensure that this is not someone else's work).

Your reviewer will be asking, either implicitly or explicitly, certain key questions in order to judge the appropriateness of the claims to learning which you have presented. The context in which the plan has been developed and implemented will vary, but the following general questions may help your reviewer—or you if you are reviewing someone else's plan—to understand not only what it was, but what its impact has been:

- Have the learning objectives been achieved?
- Have new objectives arisen which have augmented or replaced the original plan?
- Is the evidence of learning and achievement presented appropriately?
- Is there evidence of reflection and original thought?
- Is there evidence of research and further reading?
- Are there clear links between theory and practice?
- Is there evidence of new learning?
- Is there demonstrated awareness of the key issues relevant to the topic area?
- Has the work been useful to the learner?
- Is the learner satisfied with what has been achieved?
- Has the learner made appropriate links between this learning plan and both past and future learning?

Where does support come from?

You are likely, at least at the beginning, to need support in undertaking your personal learning plan, or it may be that you are the person who is asked to support others in undertaking theirs. Appropriate support may be found naturally within three major groups in the professional learning context:

- peer learners—that is people at approximately the same stage of educational development, or who are closely involved in the same or similar projects;
- people charged with supervising and supporting learners—for example a course tutor or an educational supervisor;
- colleagues—both medical and non-medical (a lot of the experience in handling personal learning plans lies with nurses and other professions within trusts).

Whichever is most appropriate for your learning context, there are a variety of ways in which the support itself may be organized. These may be summarized as:

- study groups—informal or formal meetings, organized by learners themselves to meet their own agenda;
- learning partnerships—regular contact with someone else, such as a facilitator or mentor, with whom learners are comfortable discussing ideas that are raised in professional learning contexts;
- joint contracts—where learners negotiate to work together on a particular area.

What is the role of the facilitator/mentor?

The elements of self-appraisal, disclosure of that appraisal, and giving and receiving feedback on it, are challenging to most people. For the process to be effective, participants need to be open to themselves and their learning needs, and to others' perceptions of their analysis of these. Quite naturally there is often much apprehension in these circumstances, as there are perceived personal and interpersonal risks involved. The need for a facilitator/mentor who appreciates the vulnerability of each individual involved is therefore crucial.

The role of the person (or persons) undertaking to support the development and achievement of a learning plan should therefore be to:

- enable participants to have confidence in themselves—and in each other if a peer approach is adopted;
- help to create a supportive environment, especially in areas of greater personal or professional risk;
- help participants to understand and engage in each stage of the process;
- allow enough time for the process to unfold according to the needs of the individual;
- be ready and able to diffuse tensions and conflicts which arise;
- ensure that appropriate ground rules for the process are established, including issues of confidentiality;
- help individuals to work through and achieve 'closure' of each stage of the process;
- offer constructive and non-judgemental feedback to the individual;
- encourage maintenance of timetabled review.

How are support relationships established?

Taking on this role implies that the person facilitating or supporting the PLP process has a range of 'helping' skills. It may therefore be necessary for anyone wishing to introduce personal learning plans within a trust or a directorate to prepare the ground by undertaking training for these supporters, or identifying where people with the appropriate skills may already be in place within the organization. Individual learners may wish to choose their supporter, but it would be wise for a third party to be involved in the 'matching' process to ensure that the process is meaningfully established and maintained.

Training courses should include such aspects as:

- how personal learning plans fit into the organisational structure/planning cycle;

- developing listening skills;
- developing empathy, and a non-judgemental attitude;
- giving and receiving constructive feedback;
- dealing with conflict;
- negotiation skills;
- the role of the mentor.

It may be useful for all clinicians to attend such provision as a matter of course—not only to help them in developing and supporting personal learning plans, but because these features underpin many of the interpersonal relationships which are part and parcel of life as a doctor and a teacher of medicine.

In conclusion

Personal learning planning is a core concept within the vision of both undergraduate and postgraduate medical education and continuing professional development for the immediate and foreseeable future. If handled with care and sensitivity it becomes part of a cycle of continuing professional development and review, and fits with both personal and organizational models of appraisal. The process may appear daunting and threatening at first but, despite fears to the contrary, it is capable of allowing each practitioner to prioritize and justify areas for development which may be set within both individual and team priorities. The result is one of strengthening rather than weakening autonomy in choosing what to learn, when, and how, with the desired outcome of improving patient care and effective use of time and other resources.

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References

ANDERSON, G., BOUD, D. & SAMPSON, J. (1996) *Learning Contracts: A Practical Guide* (London, Kogan Page).

BLIGH, J. (1995) Problem-based learning in medicine: an introduction, *Postgraduate Medical Journal*, 71 (836), pp. 323–326.

BOUD, D. (1995) *Enhancing Learning through Self-assessment* (London, Kogan Page).

BOUD, D., KEOGH, R. & WALKER, D. (Eds) (1985) *Reflection: Turning Experience into Learning* (London, Kogan Page).

BRAMBLEBY, P. & COATES, R. (1997) Learning contracts in higher professional training: a user's guide, *Postgraduate Medical Journal*, 73, pp. 279–282.

BROOKFIELD, S. (1984) *Understanding and Facilitating Adult Learning* (San Francisco, Jossey Bass).

CHALLIS, M. (1999) Portfolio based learning and assessment, *Medical Teacher*, 21 (4), pp. 370–386.

CHIEF MEDICAL OFFICER, (1998) *Review of Continuing Professional Development in General Practice* (Department of Health, London).

DEPARTMENT FOR EDUCATION & EMPLOYMENT (1998) *The Learning Age–a renaissance for Britain* (London, DfEE).

DEPARTMENT OF HEALTH (1999) *Continuing Professional Development: Quality in the New NHS* (London, Department of Health).

ERAUT, M. (1994) *Developing Professional Knowledge and Competence* (London, Falmer Press).

FIELD, S. (1999) The future of continuing professional development in primary care, *Education for General Practice*, 10, pp. 339–341.

FISH, D. & COLES, C. (1998) *Developing Professional Judgement in Health Care* (Oxford, Butterworth-Heinemann).

GENERAL MEDICAL COUNCIL (1993) *Tomorrow's Doctors*, Report of the Education Committee of the GMC London (London, General Medical Council).

GENERAL MEDICAL COUNCIL (1997) *The New Doctor* (London, General Medical Council).

GENERAL MEDICAL COUNCIL (1998) *Good Medical Practice* (London, General Medical Council).

GENERAL MEDICAL COUNCIL (1999) *The Early Years* (London, General Medical Council).

HARDEN, R.M., CROSBY, J.R., DAVIS, M.H. & FRIEDMAN, M. (1999) AMEE Medical Education Guide No 14, Part 5: From competency to meta-competency: a model for the specification of learning outcomes, *Medical Teacher*, 21(6), pp. 546–552.

HAWKINS, P. & WINTER, J. (1997) *Mastering Change: Learning the Lessons of the Enterprise in Higher Education Initiative* (Sheffield, DfEE).

HIGHER EDUCATION QUALITY COUNCIL (1996) *Graduate Standards Programme: Draft Report and Recommendations* (London, HEQC).

KNOWLES, M.S. (1986) *Using Learning Contracts* (San Francisco, Jossey Bass).

KNOWLES, M.S. (1990) *The Adult Learner: A Neglected Species*, 4th edn (Houston, Gulf Publishing).

MACINTOSH, H. (1997) *Key Skills in Higher Education: a personal account in Supporting Key Skills in Higher Education* (Nottingham, University of Nottingham).

MADDEN, C.A. & MITCHELL, V.A. (1993) *Professions, Standards and Competence* (Bristol, University of Bristol).

MARTON, F., HOUNSELL, D. & ENTWISTLE, N. (Eds) (1984) *The Experience of Learning* (Edinburgh, Scottish Academic Press).

MATHERS, N., CHALLIS, M., HOWE, A. & FIELD, N. (1999) Portfolios in continuing medical education–effective and efficient?, *Medical Education*, 33, pp. 521–530.

NATIONAL ASSOCIATION OF NON-PRINCIPALS (1999) Striving for Quality—a learning portfolio for continuing professional development (Leeds, NHSE).

PARSELL, G. (1997) Handbooks, learning contracts, and senior house officers: a collaborative enterprise, *Postgraduate Medical Journal*, 73, pp. 395–398.

PARSELL, G. & BLIGH, J. (1996) Contract learning, clinical learning and clinicians, *Postgraduate Medical Journal*, 72, pp. 284–289.

PIPER, J. & WILSON, E. (1993) Negotiating complete programmes of study, in: J. STEPHENSON & M. LAYCOCK (Eds) *Using Learning Contracts in Higher Education*, pp. 40–45 (London, Kogan Page).

QUALITY ASSURANCE AGENCY FOR HIGHER EDUCATION (1999) *Developing a Progress File for Higher Education* (London, Quality Assurance Agency).

SCHON, D. (1983) *The Reflective Practitioner: How Professionals Think in Action* (London, Basic Books).

SCHON, D. (1987) *Educating the Reflective Practitioner* (London, Basic Books).

SIRIWARDENA, A.N. (1997) The acceptability of personal learning plans in vocational training, *Postgraduate Medical Journal*, 73, pp. 289–292.

SOUTHGATE, L. & PRINGLE, M. (1999) Revalidation in the United Kingdom: general principles based on experience in general practice, *British Medical Journal*, 319, pp. 1180–1183.

Appendix

Appendix: Sample objectives

These examples are intended to be indicative of the types of objectives that might be appropriate for doctors at a range of stages in their training and continuing professional development. Grades in parentheses in the first column show typical stages at which this objective might be relevant. This is NOT a personal learning plan which might be put together by a single doctor, but objectives have been drawn from typical events or scenarios which might indicate a need for learning around a specific topic.

What incident or event made you think about what you need to learn	Learning objectives (what you intend to learn)	Strategies and resources (what you intend to do and what facilities you need to achieve your objectives)	What is to be reviewed/assessed (what evidence will you produce that you have met your needs)	Criteria for review/assessment (what will demonstrate that you have been successful)	Timescale (when will you have completed this learning plan)
(PRHO) Attempt to put in a chest drain	How to do insertion for pleural fluid or air	Read up on theory Observe others (SHO/SpR) carrying out task Attempt under supervision and then under observation	Record of having tried and successfully achieved task, signed by educational/clinical supervisor	Safe, correct and consistent procedure used to carry out task	Before end of placement
(SHO, surgery) Observed consultant tying sutures rapidly when closing skin	How to use different methods of skin closure with advantages of each Increase dexterity	Review literature and attend skills lab Ask for method to be demonstrated prior to attempting under observation Practise	Observed use of appropriate method Quality of skin closure Efficiency of closure	Observed and recorded use of method with success (approx. 10 times)	1 week skills lab 10 closures in a patient within 1 month
(SHO) Failure to answer bleep because tired—little support from SpR	To use assertive techniques to arrange satisfactory workload and off-duty rest	Discuss with educational supervisor and other trainees Use support networks, including home	Altered workload Log of off-duty rest and reflection on use of time	Increased support from SpR Reduced feelings of tiredness and more responsiveness to bleep Clearer identification of work patterns and intensity	1 month
(SpR, Anaesthetics) Confusion during resuscitation of road traffic accident patient (feedback from nurse)	To become more organized in approaching a trauma case	Discuss with educational supervisor Review basic texts on trauma care Attend ATLS course Seek assistance at next trauma case	Observed organizational skills during trauma case and analysis of those in need of improvement Record of attendance at cases and ATLS Reflective case study of a trauma case	Improved approach to managing a case (ABC)	Initial review, 1 week Final assessment after ATLS (approx 4 months)
(SpR, Medicine) Unable to understand blood gas result	To be able to interpret blood gas results	Read literature Visit ITU for tutorial Review results on ITU patients	Use of MCQ in publication Review by educational supervisor	Ability to correctly interpret blood gas results	2 weeks
(GPR) Overlooked abnormal blood sugar result on pathology form	How to establish a safe and reliable system for reviewing path. forms	Discuss with trainer and colleagues how current system works Visit/email other practices to find out about their systems	Notes of meetings/discussions Agreed written protocol	Systematic procedure in place, understood and adhered to by all in team	2 months
Sectioning a patient	Current legal position, and who local contacts are	Re-read Mental Health Act Discuss with colleagues, social worker etc.	Notes of salient points from Act Notes of discussions Plan of procedure for sectioning	More confidence in knowing when and how to carry out sectioning	Within the next 6 weeks
Delayed visit to patient	How to prioritize and respond at appropriate time to request for visit	Discuss with primary healthcare team process of receiving and passing on request for visit	Log of urgent visits and response times	Fewer delayed visits and reduced number of complaints	One week
History of late starts to surgery, and over-running	How to plan and use time appropriately	Explore underlying reasons for mismanagement of time Allow more time for travel to surgery Explore with colleagues the knock-on effects for them of delayed surgeries	Personal time sheet Comments from colleagues on their perspective on improvements	Surgeries start and end on time Improved relationship with other team members	Immediate start Review in 4 weeks
Patient non-compliance with management plan for raised cholesterol	Take account of socioeconomic factors in patient management	Read and discuss with colleagues effects of socioeconomic factors in compliance/non-compliance	Papers collected and read Notes of reading and discussions with colleagues	More sensitive and individualized patient-negotiated management plans	Start immediately Review monthly for next 6 months