



# Facilitation of Cancer Education and Training (FaCET)



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## Frequently asked questions

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### **Why do you need a curriculum for developing clinical education and training?**

Curricula provide a 'blue print' that helps in defining the what, when, and how of education. Using the analogy of a building without a blue print or architectural plan, it is easy to build a house but walls may not fit together or it may not be safe. In education the curriculum forms the basis for education and is useful for educators in what level of teaching. It shows how best to provide nurses with training that meets practice needs (page II).

### **If I am not providing education in a higher education setting why do I need to take notice of the EU changes?**

The EU changes in academic and vocational education provide guidance for educators and institutions, but have not been implemented in all EU countries. The benefit of understanding how your own courses fit within this framework is that nurses may use programmes in different countries and the framework allows them to build upon existing registration training. In the future, nurses may require evidence of learning outcomes and competences or diploma supplements to satisfy entrance criteria (page II).

### **How do you make an educational course practice based?**

There are several ways of making an educational course practice based. The first is to recognise the experience and skills that nurses bring with them for a post-basic educational programme (page II). The second is to adjust learning outcomes and provide competences that reflect the clinical skills they will need in practice (page II). The third is to adjust learning strategies to case studies: problem-based or role-based teaching helps bring the clinical skills alive for students (page II). A fourth way involves assessing both the theory and practice elements of a programme to legitimise the learning that students undertake in practice (page II).

### **How do I know at what level to set my learning outcomes?**

Levels of learning outcome can be defined by the descriptor you use. These are often defined by the institution that provides local accreditation or awards. The EONS post-basic curriculum outcomes are set at bachelors and graduate level (page II).

### **How do I begin to evaluate the competence of students when I do not control or provide the students' practice?**

Competencies and practice-based skills can be assessed through a variety of means. First, objective clinical examinations can be organised in the education institution and can test developed skills. Secondly, nurses can be assessed by supervisors in practice or reflect on their own practice to identify if they have actually achieved certain competences (page II).



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## Introduction

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### **FACILITATION OF THE EONS POST-BASIC CURRICULUM FOR CANCER NURSING**

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Much has been written about the need for continuing professional development for nurses, so as to enhance their practice and promote quality nursing care. The *EONS Post-basic Curriculum for Cancer Nursing* (2005) is a plan for provision of education to enhance cancer nurses' knowledge and skills. Although an excellent resource in principle, putting the plan into practice requires national societies and higher education institutions (HEIs) to adapt the curriculum to be relevant for their respective cultural and national differences within Europe.

For practitioners and educators, little has been written about the challenges faced by European nurses in providing continuing professional development in specialist clinical areas. Now, the Bologna Declaration requires change within continuing professional education, including vocational curricula, to emphasise practice-based learning outcomes, life-long learning and skills competences in practice. For the educators providing courses, the challenges are not least financial, and include changes in emphasis on methods for education delivery, in the HEI, in the clinical setting and through virtual learning on the Internet.

One of the drivers for change in education provision is the need for oncology nurses with the knowledge and skills to meet the demands of the changing nature of cancer treatment and management. This is because:

- cancer treatment has become more chronic with greater numbers of patients surviving cancer
- there is an increased array of cancer therapies and modes of treatment delivery.

The nature of cancer treatment has changed dramatically, with subsequent improvements in survival so that patients now require support over many months to years. Cancer treatment has become more specialised and sophisticated resulting in shorter inpatient stays and more ambulatory therapy delivery.

European countries are increasingly developing cancer plans to map patient care pathways from cancer unit to centre and back into the community, to improve efficiency and provide better care. Fundamental to these service changes is the education of cancer nurses, but such changes are challenging existing stereotypes of nursing roles. Nurses are seen as central to improving standards in care, with much greater responsibility for making decisions and providing support.

## Introduction (continued)

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The need for supportive and palliative care within the community poses many problems for educators, for learning environment has to adapt and be provided by competition for funds via market-based contracts. In addition, the health service demands more nurses with specialist skills in an economic climate where there are limited resources. More than ever, there is a need to consider the skills needed for such a shift and whether this cancer education is provided:

- as part of community nurse training or
- as part of older people care provision or
- as a cancer speciality.

Indeed, for the oncology nurse specialist in some European Union countries, the changes in role boundaries have increasingly led the employment of nurse practitioners to deliver patient care and skills previously delivered by medical doctors. Accordingly, this has changed the nature of the education programmes required to meet the demands from health service commissioners for competent practitioners to meet these extended roles - hence the need for continuing professional development.

### WHAT IS CONTINUING PROFESSIONAL DEVELOPMENT?

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The American Nursing Association defines continuing professional development (CPD) as '*planned educational activities intended to build upon the educational and experiential bases of the professional nurses for the enhancement of practice, education, administration, research or theory development to the end of improving health care*'. In practice, CPD is often encouraged as a mechanism for delivering service training rather than perceived as a personal developmental plan for the individual health professional – this in turn brings its own tensions within the workplace. It is known that all too often nurses in some European countries not only finance their own education, but also undertake CPD in time allotted for vacation. This in turn has an impact on the mode of delivery of education, with new and innovative strategies for learning, such as distance learning, practice-based and work-based-learning, because large blocks of time are not available for longer programmes of study.

Unfortunately, as EONS acknowledges, within some European countries the nurse specialists are not recognised, which makes access to educational funding difficult. Educators therefore face a difficult task if they wish to provide a range of continuing education rather than a focused specialist education. Therefore the aim of this document is, as its name suggests, facilitation.

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## European developments in higher education

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Changes in academic structures are reflected in the Bologna Declaration, which is a move to harmonise educational levels across Europe. Essentially, this agreement between countries has been about developing a Europe-wide educational system for Bachelors and Masters degrees by 2010. The global aim is the introduction of a common credit transfer system to allow students to study at different higher education institutions and to develop their professional qualifications.

The intentions of the Bologna Declaration are to promote life-long learning within vocational courses and to develop competence-based practice. Although this is generally what educational programmes provide, the agreement requires institutions to demonstrate such learning outcomes and show how they identify the academic progression of individual students that is built upon previous learning. With respect to life-long learning and CPD, this requires good links with practice and mentorship and support for students within the work-based learning environment. This is challenging for organisations involved in education since there are resource implications for the development of practice-based education. Post-basic courses for oncology nursing often fall into the remit of CPD and post-basic training and it is within this field that development is required.

### **BOLOGNA DECLARATION**

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The Bologna Declaration is an agreement for compatible and attractive higher education within Europe by 2010 to aid mobility for students and provide standards for vocational and higher education across Europe. Nine action lines have been identified:

- adoption of a system of easily understandable and comparable degrees
- adoption of an education system based on two cycles (degree cycle 1 and masters cycle 2)
- establishment of a common system of credits (ECTS)
- promotion of student and workforce mobility across Europe
- promotion of European cooperation in quality assurance
- promotion of a European dimension in higher education
- promotion of life-long learning
- higher education institutions and students
- promotion of the European Union as a place of quality Higher Education.

Compliance with the Bologna process is being developed by educational institutions in many countries before they are required to do so by their governments.

## European developments in higher education (continued)

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The following links are useful:

- 2003 Berlin Summit on Higher Education <http://www.bologna-berlin2003.de>
- EUA Bologna basics explained <http://www.eua.be/index.php?id=65>
- EUA Trends in learning structures in higher education <http://www.eua.be/index.php?id=347>

Consistent learning outcomes are a key requirement of the Bologna Declaration and are extensively referred to within the documentation. Clear learning outcomes are essential for shared understanding of education across Europe. Nonetheless, there is a poor level of understanding of the practical implementation, and this presents a significant challenge to the Bologna process. Learning outcomes represent core building blocks for a transparent and harmonious education system and for higher education systems and qualifications. Learning outcomes have application three levels:

- local (for courses and modules of study)
- national (for qualifications frameworks and quality assurance)
- international (in a wider recognition of study).

## TUNING EDUCATIONAL STRUCTURES

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The Tuning projects were organised jointly by the Universities of Groningen (Netherlands) and Deusto (Bilbao, Spain). The projects have aimed to define generic points of reference for specific disciplines, such as nursing. Tuning promotes educational structures and content of studies, for example the development of defined levels of learning outcomes and competences. This has helped develop professional profiles and discussion that in turn begin to explore the relationship between learning outcomes, practice competences and teaching and learning assessment.

## EUROPEAN CREDIT TRANSFER SYSTEM (ECTS) AND DIPLOMA SUPPLEMENTS

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The European Credit Transfer System (ECTS) has been developed as a credit accumulation and transfer system. ECTS credits are defined as a measure of student workload in terms of the learning time required to achieve specified learning outcomes. ECTS encompasses continuing professional development as well as formal and non-formal training.

### Useful links

*The ECTS user guide 2004*, [http://www.hrk.de/de/download/dateien/ECTSUsersGuide\(1\).pdf](http://www.hrk.de/de/download/dateien/ECTSUsersGuide(1).pdf)  
*EUA ECTS explained*, <http://www.eua.be/index.php?id=61>

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## European developments in higher education (continued)

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Institutions can apply for the award of ECTS in first level Bachelor degrees and second level MSc courses. The criteria for ECTS awards include:

- an educational pack or course catalogue (handbook) in two languages, or one if taught in English
- the use of ECTS credits, samples of learning agreements, transcripts or records and proof of academic recognition
- a transcript record of ECTS and learning attained by the student.

The Diploma supplement is a document attached to a higher education qualification providing a standardised description of the nature, level, context, content and status of the studies that were completed by the student. The Diploma supplement provides transparency and facilitates academic and professional recognition.

### QUALITY ASSURANCE DEVELOPMENTS

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Part of harmonising learning outcomes was also to provide common processes in evaluation The European Network for Quality Assurance in Higher Education (ENQA).

Evaluation focuses on reviewing the output of educational programmes, but for this to occur at a European level, external reference points are needed to define educational standards. External benchmarks based on learning outcomes and competences can provide a robust basis on which standards can be maintained, benchmarking the improvements of higher education.

#### Useful links

[http://www.bologna-bergen2005.no/Docs/00-Main\\_doc/050221\\_ENQA\\_report.pdf](http://www.bologna-bergen2005.no/Docs/00-Main_doc/050221_ENQA_report.pdf)

<http://www.enqa.eu/pubs.lasso>

## European developments in higher education (continued)

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### EUROPEAN QUALIFICATIONS FRAMEWORK

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Changes in vocational qualifications frameworks have formed part of the developments required for standardisation across Europe. The professional accreditation bodies and registration agencies are now required to define clear parameters for nurse training and registration. This is to allow transfer of qualifications in nursing across Europe, and thus facilitate mobility of skills. A further challenge is to provide education that is accessible. Paradoxically, students who are keen on professional development are those who do not necessarily need it, yet those who need it resist education. Hence there is the need to motivate all nurses to learn, in order to increase competence, which in turn results in job satisfaction and serves to promote the professionalisation of nursing. Maintaining skills and promoting life-long learning after a programme of study are also key areas for development if the benefits of education are to be sustained. Where educators are able to demonstrate the effectiveness of CPD in improving the care and management of patients with cancer, it not only justifies the resources for CPD, but also shows how best to sustain such improvements.

There are enormous possibilities within healthcare to develop oncology nursing in many settings and contexts, not only as a result of improved survival and treatments but also because of the way vocational programmes of study are being scrutinised as part of Bologna process. Finally, if educators grasp the opportunities CPD provides for improvements in specialist cancer care, they may be translated into other nursing services, thus improving care for patients throughout their cancer journey.

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## Training needs analysis

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Training needs analysis is the first step in a cyclical process of evaluation that aids the understanding of how education should be amended, either at a local or national level. This may be in response to national initiatives, such as a cancer plan, or it may occur by updating existing programmes to meet the new ways that cancer treatment and support are being provided by nurses within different localities. The aim of conducting a training needs analysis is to provide information on the continuing professional development needs of students as well as those of their potential managers. Many of the features of training needs analysis are similar to those of audit, where questions are asked, action is taken and information is fed back to staff with the intention of making sure that change is implemented.

### Steps in the TNA Process

- (1) Planning training needs analysis – it is important to have clear aims for training needs analysis. The aims should be explicit at the outset and those for whom the training is intended must be identified.
- (2) Stakeholder analysis – the opinions are sought of potential stakeholders, nurses, service users, educational providers and commissioners or managers for services in which cancer nurses will work. It is also important to review course evaluation and feedback where appropriate.
- (3) Consideration of national policy context – both organisational and national policy initiatives for continuing professional development of nurses should be explored.
- (4) A realistic approach to sampling – key stakeholders' views are balanced against students' opinions.
- (5) Clear outcomes for education – explicit indicators are required of how the changes in education will, or could be, used to influence training and consequently nurses' skills.

Training needs analysis is a systematic approach to determine what education is needed and the potential skills and competences that cancer nurses should attain from a programme of study.

## Why have learning outcomes?

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Traditionally, academics defined units of study in terms of content and material covered. But developments within clinical and nurse education have supported the reconfiguration of curricula to an outcomes-based approach to learning and teaching. This model is seen as *'a way of designing, developing, delivering and documenting instructions in terms of goals and outcomes'* (Spady 1988). Accordingly, academic programmes' specifications and benchmark statements for academic subjects are generally defined in these terms. Such statements form the basis by which the expected outcomes for students who have successfully completed the programme or a specified level of study may be clarified. Learning objectives are different in that they are about what you are aiming to achieve, whilst an outcome is the destination that students are expected to achieve. It is usual that programme documents that state the learning outcomes are accessible within the public domain for informed choices and opportunities. Known and agreed descriptors are used to describe the expected depth and breadth of knowledge as well as skills competences, to provide clarity for the prospective students and for those who would want to commission courses.

### PREPARING A PROGRAMME OF STUDY

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When preparing a programme of study, you may find this seven-step process helpful in categorising and compartmentalising the learning outcomes, for 'packaging' the individual components into appropriate modules for the individual learning activities (knowledge and clinical skills) and for their assessment (see Table 1).

### WRITING LEARNING OUTCOMES

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Writing learning outcomes has become an essential aspect of curriculum development. In lay terms, a learning outcome is what you would expect a student to learn as a result of attending or taking part in a learning activity. Here are some key aspects to be considered when deciding on how to adapt the learning outcomes in the EONS curriculum in cancer nursing.

#### Levels of education and outcomes

*What is the prior knowledge and past nursing experience in clinical practice?*

The expected level of education of applicants enrolling on the programme must be considered and agreed. Some oncology nurses may not have had a university education but do have previous experiential learning from clinical practice. In such cases, learning in a university-type environment may be daunting and so they are likely to need a pre-programme course in study skills, e.g. taking lecture notes, writing assignments for assessment, using a library and other learning resources. In some instances, students may require training in the use of a computer. Setting achievable learning outcomes is important for all concerned in order to engender confidence and a realistic experience for all – trainees and academic and clinical supervisors.

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 Why have learning outcomes? (continued)
 

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**Table 1: Steps for the development of a programme of study**

Steps for developing a programme	Activity
Step 1 Identify the educational components required for the programme of study.	Arrange the learning outcomes for the programme of study into the individual areas of learning, i.e. with closely related learning outcomes organised into a specific module.
Step 2 Review any existing learning outcomes.	Group the learning outcomes and nursing clinical competences to be covered by each module.
Step 3 Identify how the student will develop and change throughout the programme of study, i.e. academic progression.	<ol style="list-style-type: none"> <li>1. Determine the prior knowledge to be required of students registering for the programme, i.e. what the students should know and skills competences gained before undertaking the learning activity.</li> <li>2. Define the expected knowledge and skills that the student should have attained having undertaken the learning activity.</li> </ol>
Step 4 Identify areas of learning.	Determine the areas of learning in which the learning outcome will sit, e.g. the specific area of medicine and healthcare knowledge or skills.
Step 5 Quantify the content of learning outcomes and practice competences.	Quantify the learning in relation to the academic credit system of the university or college that will be validating the programme of study and ECTS.
Step 6 Identify levels of study.	Identify the level of study at which the learning outcome will sit and thus the appropriate descriptor for the outcome. This will vary, depending on the level of the award, e.g. Bachelor degree, Master's award, and when it is studied, e.g. Cycle 1 or Cycle 2.
Step 7 Prepare or amend learning outcomes for the modules within the programme.	Write the learning outcomes ensuring that they take into consideration the activities identified in Steps 1–6.

## Why have learning outcomes? (continued)

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### *What is the level of learning outcomes?*

For testing knowledge at different academic levels of achievement, specific words are used to describe the level of outcome to be demonstrated and expected to achieve. There is a framework that can be used to help decide on the level of an outcome.

### **General or specific learning outcomes**

Learning outcomes can be general or specific. A general outcome may be relevant to all nurses regardless of their field or area of practice. In oncology nursing, as in all other specialised areas of practice, there are specific learning outcomes that you would expect your nurses to achieve.

When testing specific knowledge about a particular aspect of cancer care you can use words such as define...or list....

To ascertain whether students have grasped the concepts and understand issues, you can use verbs that demonstrate that the understanding has been achieved, for instance, describe..., discuss..., explain..., outline..., review...

When there is academic progression with respect to knowledge and skills, this progression may be tested by testing and evaluating the application of knowledge. In which case, try using words such as: analyse..., critique..., distinguish between..., demonstrate..., identify..., locate..., write...

Where there is a particular need to check the ability for thinking laterally and synthetically about knowledge and concepts, it may be helpful to provide clear indication of what is expected of your student. Suitable words include: arrange..., construct..., design..., organise..., prepare...

### **Examples of ways to test learning outcomes**

You can now try to decide what aspects of your students' learning you wish to test. Is it their knowledge? Has it got to do with their application? Here are some examples of questions you might ask to test various learning outcomes.

- Describe the epidemiological concepts of morbidity (incidence and prevalence), mortality, relative risk and survival in relation to common cancers.
- Discuss the purpose of cancer registries.
- Describe how cancer risk indicators are identified.
- Discuss the importance of diet in both causing and preventing cancer, and in particular the causal role of obesity.
- Discuss breast cancer in the proportion of patients where there is an identifiable genetic cause.

## Why have learning outcomes? (continued)

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- Identify the conditions are associated with an increased risk of colon cancer.
- List the modes of potential spread of cancer.
- Discuss the blood/brain barrier.
- Describe approaches to the diagnosis and staging of cancer and the nurse's role in this area.
- Describe the main features of metastasis.
- Identify important familial cancer syndromes and describe the molecular basis, mode of inheritance, associated risk of disease and implications for family counselling.
- Explain the principles and application of commonly used treatment modalities.
- Demonstrate how to administer cancer treatments in a safe and effective manner.

### Advice when testing learning outcomes

Use an active verb such as 'describe', or 'explain' so that you can test the learning outcome in an assessment. **Do not** use vague words, such as 'have appreciation of', and 'be aware of'.

Do not use the word 'understand' – it is almost impossible to test understanding, Some students learn academic work for a written examination in the same way that others learn Shakespeare – learning the words without actually *understanding* the concepts.

Write the learning outcomes as if you were writing a written examination question, which by definition, provides a focus for student attainment rather than what is being taught on the module.

Provide information on the task (written or clinical skill) to be performed that links with the assessment criteria.

## Why have learning outcomes? (continued)

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### RELATIONSHIP BETWEEN LEARNING OUTCOMES AND COMPETENCES

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Learning outcomes are the expected result of taking part in a learning activity, which may be knowledge-based or skills-based. With respect to competences this is where the health professional, e.g. an oncology nurse, is able to demonstrate that he or she can undertake a specific task at a specific level and perform that task with the following characteristics:

- knowledge of how to perform the task
- knowledge of why the task is being performed
- capability to perform the task safely.

When discussing the relationship between learning and competence, in relation to individual trainees or students, the following questions are to be considered.

- What is the nature of competence to be learned and tested?
- When is a trainee deemed to be competent?

Cancer nurses are required to have a minimum standard of knowledge, skills and professional attitudes with respect to patient care and safety. But how is competence tested? To rely on verbal declaration by the trainee they are able/competent would plainly be unacceptable. Therefore it is necessary to describe and then test the following.

- What learning outcomes had been achieved? For example:
  - knowledge about drugs delivery and adverse drug reactions
  - ability to communicate with patients.
- When was the skills competence achieved and is the person still competent? For example, with respect to giving intravenous drugs, one might ask the following questions.
  - When was the skill learnt?
  - When did the trainee last perform the task?
  - Is the trainee up to date with the latest technique and safety measures?
- Are learning outcomes for any given learning activity or module set realistic and relevant to the programme content? Here are some examples.
  - If a planned learning outcome is that the trainee be able to list the different routes of entry for drug delivery, their advantages and complications, then the knowledge should be tested, not their ability to give drugs via every route described in the lecture.
  - If the learning outcome is that the trainee should be able to give drugs intravenously, then the skill needs to be taught and examined.

### Why have learning outcomes? (continued)

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There are many positive aspects of defining the competences in oncology nursing, including:

- maintenance of standards and clinical governance within a programme that is transferable between academic institutions
- accountability both of the individual with the qualification and the institution that employs them
- competence assurance for all oncology nurses and their colleagues
- patient confidence and satisfaction in the nurses involved in their care
- creation of a sense of achievement, which in turn raises morale in both individual and team.

The main difficulty in defining the competences in cancer nursing is mainly that of subjectivity with respect to the examiner and examinee. Moreover, there may be gaps and variation in the nature and level of education being delivered within the healthcare setting in different countries and across Europe. It is therefore essential to review the competences provided within the EONS curricula in light of national requirements.

## The learning environment

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### METHODS FOR CURRICULUM DELIVERY

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Facilitated learning, rather than an inflexible or didactic approach (which are less appropriate for adult learners), is increasingly being adopted in programmes of study with a practical application. A strong emphasis on practice-based learning (clinical and scientific) may be used throughout, with a focus on self-directed learning. Mature students often have many other commitments in their personal lives than younger students and so welcome the opportunity to have guided self-directed learning, giving them flexibility in arranging study time. Alongside face-to-face teaching and learning, group work, which is co-ordinated and guided by a facilitator, will develop critical reading, bedside training in clinical skills and the synthesis and application of clinical information and knowledge.

#### Spiral curriculum

Clinical learning may be delivered as a 'spiral curriculum', where areas are revisited throughout the year and subsequent learning builds on previous information delivered. This strategy helps to ensure that learning happens in context. Accordingly, certain themes run through the years of learning, spiralling upwards, getting broader, with more knowledge, skills and appropriate attitudes being established as the learner develops (Harden & Stamper 1999).

#### Mastery curriculum

Alternatively, where learning happens in discrete blocks a mastery curriculum, which focuses the learning on gaining a deeper understanding of a specific topic, may be the method of choice. There is less repetition so the trainee learns and then moves on to another area. From the facilitator's perspective, mastery curriculum helps to eliminate teacher boredom, as there is less repetition, and students learn what they need to on a specified subject then move on to another topic.

#### Useful links

An overview of curriculum design can be found at: <http://www.heacademy.ac.uk/795.htm>

## The learning environment (continued)

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### METHODS FOR LEARNING DELIVERY

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#### Lectures

The formal lectures should be interactive and, wherever possible, include overviews, discussion and descriptions of difficult areas of medicine, e.g. theories, mechanisms of disease.. In other words, lectures should be 'sign-posts' to the literature that will direct students to the relevant reading and learning materials, rather than being merely didactic and factual.

#### Expert forum

This may be on a weekly basis, with an expert health professional to answer student-generated questions on a topic or issues arising from the learning week. This is an exciting method for interactive learning.

#### Symposia

These are whole days or half-days devoted to in-depth study of a particular area of oncology.

#### Workshops

These comprise whole days or half-days devoted to in-depth skills, communication training using models, simulated patients and recording equipment to assess and evaluate the results of training.

#### Seminars

Group-led seminars are convened to debate issues in health care, e.g. moral and ethical issues.

#### Posters and seminar presentations

Students may produce poster and seminar presentations of project or other work.

#### Clinical case-based learning (CCBL)

For this, students are arranged in groups of around seven, with a CCBL facilitator, to work on a clinical problem. They will:

- discuss the clinical case
- have a period of independent study time
- reconvene to discuss their findings.

## The learning environment (continued)

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Clinical cases may be paper-based and, wherever possible, involve meeting real patients. A wide selection of triggers, e.g. media articles, scientific journals and videos, may be used. If attendance at CCBL sessions is compulsory, then performance in CCBL sessions may be included in the assessment of skills and competences, and of professional attitude and conduct.

### Skills-based and portfolio-based learning

Clinical skills may be practised on models under supervision in a clinical skills laboratory, prior to an opportunity to work with patients under continued supervision. A portfolio of evidence (see section on assessment) is gathered to maintain a record and a logbook is kept of the skills and learning opportunities in the clinical setting, with comments and reflection (as appropriate). The portfolio and logbook are useful tools for assessing skills progress. Progress of the clinical skills-based learning may be discussed at regular meetings with the students' academic tutors or clinical supervisors.

### Computer-assisted learning (CAL)

Interactive computer assisted learning and assessment programmes are of use, provided the students are computer literate. If the students are not familiar with using computers (and this is possible in students who did not have access to computers in secondary school) then training is required for this mode of learning to be accessible. A word of caution – when planning CAL programmes, ensure that the programme employed is user-friendly. It is very frustrating for students to have a CAL programme that is difficult to navigate – they are less likely to persevere and learn. Computer-assisted programmes are also available for a 'virtual notice board and discussion forum' and this is an excellent and efficient way of communicating with students, particularly when learning is based at multiple sites, such as a university campus, hospitals and clinics.

### Patient-focused learning and placements

Learning basic biosciences, medicine and humanities from experiences with real patients in a supervised dialogue with active patient participation is a very effective method of delivering information. It also prepares trainees by allowing them access to patients and enabling them to see how the nurse–patient relationship has changed. These experiences, with patient data anonymised, may also form part of their portfolio of evidence in clinical practice.

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## The clinical setting as the learning environment

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The aims of clinical supervision are to oversee learning within the practice-based setting, to identify and resolve problems and related concerns in order to improve practice and increase understanding of professional issues. Essentially, clinical supervision brings together trainee practitioners and skilled supervisors to reflect on practice.

### **DEFINITIONS OF CLINICAL SUPERVISION**

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Generally, supervision supports and advances professional development to guarantee patient safety within the training environment. Thus the role is, at least in part, both evaluative and hierarchical. As regards theoretical models for clinical supervision, some have suggested that social learning theory is a reasonable description of professionalisation (Bowen and Carline, 1997) and, within the nursing literature, the models tend to be narrative and philosophical. One of the key issues with clinical supervisors is the need for them to be available and accessible in order to oversee the activities of the trainee. Therefore the number of trainees that a clinical supervisor is overseeing must be as small as necessary to ensure that each trainee feels secure and has direction. The levels of supervision are likely to vary, depending on the knowledge and previous experience of the trainee.

### **WHAT IS THE ROLE OF THE CLINICAL TRAINING FACILITATOR?**

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The main roles of the clinical training facilitator of students in placement setting are to:

- provide learning opportunities for students in their clinical setting
- give students helpful and appropriate feedback to enable them to learn, develop and enhance their competence in clinical skills
- provide a safe environment for student to be assessed with respect to clinical competence
- work with students in order to provide positive reinforcement.

### **THE RATIO OF CLINICAL SUPERVISOR TO TRAINEE ONCOLOGY NURSES**

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The ratio of supervisor to trainees should be agreed locally with respect to achieving a realistic workload for the supervisor and satisfactory educational outcome for the trainee. It is possible that EONS might consider advising on the ratio in order that some minimum acceptable standard is adopted.

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## The clinical setting as the learning environment (continued)

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### A FRAMEWORK FOR IDENTIFYING KEY AREAS FOR SUPERVISION OF KNOWLEDGE AND SKILLS

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There are educational rationales for developing a tangible framework for the learning experience:

- acceptance of the requirement for a methodical approach to planning the learning experience
- the need to work towards a work-based learning strategy rather than the old 'apprenticeship role', which is likely to be unacceptable since trainees taking such programmes of study are adults and as such take responsibility for their own learning. In turn this form of learning supports education whilst 'doing the job'.

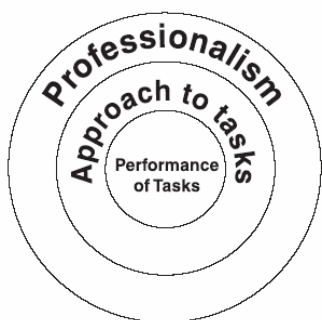
Frameworks may include:

- seminars and skills sessions that include the use of simulated patients and clinical simulator models
- the use of standard-setting techniques to create criteria for assessing knowledge and skills competences to assure fitness to practice.

It is good practice to compile written records of supervisory sessions that might include what and how issues were raised, discussed or recorded and how confidentiality is addressed for all those involved in the education (patient, simulated patient, supervisor and trainee oncology nurse).

The preparation of such a framework should be based on the desired learning outcomes from the programme of study. Harden et al., (1999) provide a model that portrays the development of a trainee health professional from learning knowledge and tasks to developing the correct professional attitude and conduct to support and assure patient confidence and safety (see Figure 1).

**Figure 1: Characteristics of effective clinical supervisor/mentor**



Taken from Harden et al., (1999)

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## The clinical setting as the learning environment (continued)

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Work-based learning represents a wide range of knowledge and skills-training activities which share a common purpose and focus. In the context of the oncology nursing curriculum, it has provided the mechanism for structured learning opportunities that derive from, or that are focused on, the work role of cancer nurses within organisations. It is normal practice to complement the experiential learning with directed reading, research or group work to ensure that learning is placed in the context of current theory or practice, in this case, of oncology nursing.

Trainees and their clinical supervisors/mentors may thus focus on work practices and identify needs that are important and relevant for oncology nursing care delivery and its development. At the same time, the learning needs must also take into account the concerns or clinical governance framework of the employer. Accordingly, robust quality assurance mechanisms need to be in place for the safety of the patients and other professional healthcare colleagues.

### SUPPORT SYSTEM PROVIDED BY CLINICAL SUPERVISION

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The significant motivation for clinical supervision is to bring together practitioners and skilled supervisors to reflect on practice. Supervision requires considerable investment of time, skills and resources, and aims to identify solutions to problems, improve practice and increase understanding of professionals.

The fundamental role of the clinical supervisors is to provide the professional support environment in which:

- good practice in skills and reflection are encouraged
- practice can be challenged, developed and improved;
- the emotional load can be shared – particularly important with new colleagues in the care of oncology patients
- there is an opportunity to enhance personal and professional awareness.

### TRAINING FOR CLINICAL SUPERVISORS

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Government policy documents have been published in the UK (e.g. Dept of Health 2000a, 2000b) with the aim of improving the outcomes and processes of cancer treatments. A major focus of these documents has been to ensure that oncology patients receive high quality information, reliable communication, effective control of symptoms, e.g. pain and nausea, as well as holistic aspects of care, i.e. psychological, spiritual and social support. To this end, the individual oncology centres have been required to develop training and education strategies for their healthcare professional colleagues.

## The clinical setting as the learning environment (continued)

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In these days of public accountability, it is essential to satisfy the professional accreditation bodies, the institution where treatment is offered and one's colleagues. It is in the interests of the patients to be served by health professionals who have passed accredited training that assures competence, so it is essential that the very people examining oncology nurses and deeming them to be competent to practice are themselves seen as competent to train and examine.

Focusing on the education of the trainers assures a minimum standard and quality of learning experience (Hesketh et al., 2001) for the trainee oncology nurse. Accordingly, the clinical training facilitators also must be confident that the participation or involvement of trainees does not compromise the needs of the patients. Hesketh et al., (2001) provide a framework for training clinical educators that builds on the work of Squires (1999), who evaluated the clinical professional trainer in terms of three distinct questions.

- What do teachers do?
- How do they do it?
- What affects what they do?

### **BENEFITS OF HAVING TRAINED CLINICAL SUPERVISORS**

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There are enormous benefits of properly governed clinical supervision. Some of the basic issues include the maintenance of standards of oncology nursing care by assuring the development of the appropriate professional expertise and innovations within practice. Identifying training needs, as well as providing that essential link between practice and research, is essential. Moreover, the critical evaluation of practice is of real benefit, in relation to examining personal beliefs and values, and how they might influence decision-making about those in the care of the oncology care. By providing a safe environment where trainees and supervisors can interact, innovation and development may then be promoted via self-assessment and evaluation that evaluates practice and skills with the local and national guidelines.

Successful clinical supervision/mentorship promotes confidence in the trainee oncology nurses within a secure environment – see Table 2 for information on how trainees learn, i.e. learner behaviours.

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**The clinical setting as the learning environment (continued)**


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**Table 2: Learner behaviours**

1. Reflecting (R)	Working with (thinking about and listening to) the information in the session, e.g. giving background information, thinking through things, asking questions
2. Experimenting (E)	Role play, group discussion
3. Conceptualising (C)	Evidence that learner has discovered a new perspective (suggested by leader or self-discovery), can demonstrate understanding as a result of leader intervention or as a result of own reflection; realisation; aha-experience
4. Experiencing emotion (EM)	Either expressing emotion or attitude to a situation, e.g. tears, smiling, laughing, disgust, discomfort while watching video Or giving detail of emotional state, e.g. 'I feel more comfortable now', 'I felt uneasy about this'
5. Planning (P)	Entails making decisions, setting goals, etc. in order to test out new understanding or new method; interaction with peers to plan/goal set, etc.; making decisions, e.g. 'what I want to ask him next session . . .', 'I would like to try giving her this homework task...'
6. Other (O)	To be used when observer cannot decide on a suitable category from the above or learner's reaction is not observable; other behaviours, e.g. social chat, paperwork, off-task behaviour

[Taken from Milne & James (2002)]

## The clinical setting as the learning environment (continued)

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One of the essential roles of a clinical supervisor/mentor is to inspire in the trainees confidence that will succeed, but to do this there needs to be real honesty within the relationship, so the supervisor/mentor must also provide a safe environment for trainees to admit mistakes and errors. (See Table 3 for information on supervisor behaviours).

The following steps provide an indication of the qualities that should be looked for when seeking to recruit for such a role. A clinical supervisor/mentor would ideally demonstrate the ability to:

- be articulate, empathetic and understanding
- facilitate flexible interventions and empower trainees, thus engendering confidence
- demonstrate unconditional positive regard and be a good listener

Key prerequisites for providing good feedback to trainees include:

- listening to what the trainee has said/asked
- being able to paraphrase, in the supervisor's own words, what the trainee has said
- ability to reflect on the possible underlying feelings of the trainee;
- having empathy with the trainee, particularly where there are emotional or ethical issues involved
- taking responsibility for feedback given
- being able to postulate hypothetical scenarios that explore new situations and assess decision-making skills.

Clinical mentors and supervisors have a role in encouraging reflection on practice but, for an effective dialogue, the trainee needs to prepare for each session by considering specific areas for discussion, so that there is a focus of attention on relevant issues. Accordingly, learning outcomes can be agreed and used as part of each trainee's personal development plan. In some cases, learning outcomes may be entered into a professional portfolio to contribute, where relevant, to the requirements for becoming licensed as a registered practitioner. Thus, in conjunction with targeted skills development, supervision of practice promotes the attainment of skills competence for those with responsibility for cancer patients (Hicks & Fide, 2003).

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 The clinical setting as the learning environment (continued)
 

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**Table 3: Supervisor behaviours: Supervisor behaviours coded by the process evaluation of teaching and supervision (PETS) observation instrument**

1. Managing (M)	Organising and managing the flow of the session, e.g. 'I would like to cover X today', 'Let's move on now', 'What would you like to talk about today?'
2. Listening (L)	Active listening/observing, silent attention 'listening' is not 'verbal' and not 'non-verbal feedback'
3. Supporting (Sup)	Verbal and non-verbal, non-specific reassurance, agreeing and encouraging, e.g. 'that's right', 'fine', 'good', 'well done'; nodding, smiling, laughing; empathy, warmth, genuineness.
4. Summarising (Sum)	Summarising information in order to clarify links and understanding, e.g. 'let me see if I got that right...', 'so what you've done is...'
5. Feedback (F)	Provision of specific verbal or written feedback that is intended to weaken/strengthen aspect of the learner's behaviour/thoughts/feelings, can be positive and negative, e.g. 'the way you set the agenda was very good', 'you let him go off on a tangent there', 'that was an excellent behavioural experiment', 'you could have strengthened this with an experiment'
6. Gathering information (GI)	Asking for information and facts, not testing knowledge, defining the trainee's problem, e.g. 'how old is she?', 'was that his first episode?', 'what did you do then?'
7. Checking theoretical knowledge base (CK)	Explicitly monitoring, checking or evaluating competence, asking for an opinion, e.g. 'what would you do here?', 'what does Beck suggest about...', 'what kind of homework task would you set here?'
8. Challenging (C)	Getting learner to rethink/reason their view, similar to knowledge base but causes to rethink current perspective, e.g. 'how else could you have done this?', 'what would have been a better way...?'
9. Informing/educating (I)	Providing abstract (not personal) data to learner; information transmission (e.g. facts and figures, theories, formulations, ideas and methods); didactic approach (e.g. traditional teaching); directive, indicating what learner should do to achieve goals; convergent emphasis, e.g. 'generally what you do here is...', 'there have been trials to treat panic in one session', 'the way to approach this is...'

## The clinical setting as the learning environment (continued)

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**Table 3: Supervisor behaviours (continued)**

10. Guided experiential learning (GEL):	(Modelling, role-play, other.) Leading practical learning activities in which the learner actively develops competence, e.g. modelling/ demonstrating correct performance; simulation role-play exercises, learning tasks, behavioural exercises
11. Self-disclosing (SD)	Leader refers to self in order to reveal something new about self (experience, limitations, goals), e.g. 'I have always found these cases difficult to handle', 'I would like to improve myself in . . .', 'I myself find it very hard to . . .'
12. Disagreeing (D)	Verbal or non-verbal direct negative reaction which is <b>non-specific</b> to learner's opinion or grasp of facts, e.g. shaking head, verbal correction
13. Video observation (V)	Watching video of taped therapy session, generally a case example from trainees' experience
14. Other (O)	Where you cannot decide on suitable category among the above; not observable; other behaviours; off-task behaviour, e.g. social chat, jokes, paperwork, setting up equipment

[Taken from Milne & James (2002)]

## Learning resources for training oncology nurses

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The nature of the facilities required for training will greatly depend on the requirements of the curriculum. Nonetheless, there are obvious needs with respect to the training infrastructure for learning and teaching of knowledge and skills.

### LIBRARY

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The library may be a real building or a virtual library with remote access, but whatever mode of access is to be used, many issues remain the same with respect to the books, journal articles, and web-based online learning packages

#### Relevance

Do the materials available cover the correct subject matter for the programme of study?

#### Appropriate level

Are the learning materials at the right academic level for the programme and not too simplistic? Is in-depth learning material available for those who would like to explore the literature further?

#### Currency

Oncology is a fast-moving discipline, and therefore it is essential to be aware of the publication date of books and journals, so that the recommended literature is up to date.

#### Availability

The literature must be available in sufficient quantity within the learning resource centre so that all students have access to it. Where it is specialist and rare information held in a printed format it may be appropriate to investigate the local/national copyright regulations and provide each student with a learning pack of relevant journal papers. Single copies may be left with the librarian for each student to copy his or her own set.

#### Language

Many textbooks and oncology journals and much other information available on the Internet are in English. Although foreign students may have a working knowledge, if English is a second language it can lead to problems with studying. Therefore it is helpful to develop a glossary of terms that offers an explanation (in the native language of the student) of the English vocabulary used in oncology, medical and nursing literature.

## Learning resources for training oncology nurses (continued)

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### **SKILLS TRAINING LABORATORY**

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The evolution from the role of passive student to practitioner starts with learning the first clinical skill, and this transition can be stressful for all – both the trainee practitioners and their tutor. Therefore, to maximise the educational opportunities, the learning and practising of a skill within a clinical skills laboratory provides a focus for both learning and assessment in a safe environment. Moreover, having the facilities, instruments and anatomical models with all the appropriate equipment immediately available for use allows trainees to repeat and perfect their skills. Simulated patients are increasingly used rather than the real patients encountered within the clinical setting, for they provide a mechanism for standardising the learning experience. This is also of benefit to patients who do not want to be ‘practised’ upon when they may be feeling unwell. In addition, hypothetical and alternative questions may be asked and new situations explored that might not be appropriate when dealing with a real patient.

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## Assessments to demonstrate attainment of learning outcomes

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Assessment is a generic term for a series of activities that measure the learning outcomes in relation to knowledge acquired and skills competences attained. From the perspective of the academic provider, assessment also provides a mechanism for evaluation of the effectiveness of the learning environment. Assessments are the basis on which students are classified or graded according to their performance and for the demonstration of academic progression. Such data are also useful for the pastoral care of students as they can be evaluated to assess whether a student is progressing well, and if he or she is not, then questions may be asked, e.g. problems at work, family, personal health. Inevitably the final award is based on the main assessment that provides the principal source for gaining public recognition of achievement.

### TYPES OF ASSESSMENT

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There are three main types of assessment:

- diagnostic
- formative
- summative.

#### Diagnostic assessment

This is normally undertaken before the potential student registers on the programme of study, for it provides a mechanism for identifying the following characteristics:

- aptitude and earlier achievements that suggest that the student is at the appropriate academic level to be able to study
- possible learning needs, dealing with which will increase the assurance of success.

#### Formative assessment

This does not contribute to the overall assessment. It is an assessment that is intended to provide students with feedback on their academic progress and development, identifying potential areas of concern on which they should concentrate in order to increase the chances of success.

#### Summative assessment

This contributes to the overall assessments and is used to provide a measure of the level of achievement with respect to each student's performance in relation to the intended learning outcomes of the programme of study.

## Assessments to demonstrate attainment of learning outcomes (continued)

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### End-of-module assessments

The end-of-module assessments are designed chiefly to provide a quantified judgement on the academic attainment of student. With any module being assessed, there is generally more than one element to the assessment. For example:

- a written assessment on a given subject and of a specified word length
- an examination (written or clinical practice-based).

The weighting of the respective elements of assessment are used to calculate the final mark awarded for the assessment of the module. For example:

- a written assessment contributing 60% of the final mark
- a clinical practice-based assessment contributing 40% of the final mark.

Thus, if the student is awarded:

- 67% for the written assessment, then 60% of 67% = 40%
- 65% for the clinical practice-based assessment, then 40% of 65% = 26%

Final mark = 40% + 26% = 66%.

### WHAT AND WHEN TO ASSESS

---

On deciding the form of assessment for a specific module, information and guidance on expected knowledge and skills competences need to be accessible and made explicit to all – students, academics, clinical placement supervisors and the external examiners of the programme. To ensure that consistency and reliability of assessments are achieved, it is essential to have a marking scheme agreed between those marking the assessments and those who assure the mark, i.e. second markers, moderators and external examiners (see section on 'Quality assurance' below). This in turn is a fair basis for robust arrangements for the monitoring and evaluation and to demonstrate the equivalence of assessments between academic years of assessments.

### Schedule of assessment

It is good practice to provide all students at the start of the programme with a schedule of assessments, which is a document that contains the nature of the assessments, the weighting of the marks, and the deadline for their submission. It is a safeguard that assures that sufficient information has been given to allow students to timetable their work for assessment. There is real wisdom in compiling such a document with the programme team, in order to ensure that the submission and taking of assessments are staggered throughout the academic year. One of the main complaints

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## Assessments to demonstrate attainment of learning outcomes (continued)

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students have, particularly those who study part-time, is that deadlines for assessments tend to come at around the same time, and this is very stressful, as the students feel they are unable to give their best efforts.

There must be clarity about the appropriate links between the curriculum organisation and the delivery of the learning. Students need adequate time to reflect on their learning before being assessed. Although it is stating the obvious, the outcome of an assessment needs to demonstrate that the learning outcomes have been attained. Therefore, the nature of the assessment for a module must be appropriate for the learning outcome being tested. For instance, a multiple-choice examination paper may be a valid test of knowledge, but does not test an ability to share bad news with a patient. Communication skills are better examined using an interactive test.

As the programme of study develops, changes may be required to a curriculum, its delivery and assessment. Therefore, it is advantageous to have a regular forum in place for discussion of the proposed changes between academic staff, administrators, clinical teachers, students and the external examiners. It is also best for there to be general agreement on how frequently such discussions need to take place, and procedures for the approving and implementing agreed changes.

### WHAT ARE ASSESSMENT CRITERIA?

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Assessments are the tasks that a student must perform, but the detail of the assessment, i.e. the agreed subject and criteria by which it is marked, are the basis for the examiner's judgement of whether the work has reached the threshold to be considered a pass.

Assessment statements give information on:

- the level and nature of the activity the student must perform, e.g. a report written in a given format; a task performed in a specified manner, preparation before undertaking the task
- the quality of work to be delivered; for example, in relation to the academic level and required review of the literature.

In the case of a written assessment, the assessment criteria might include:

- length in words, e.g. 2,500–3,000 words
- whether the work may be hand-written or word-processed
- the subject or title of the work to be undertaken
- academic requirements in relation to the structure of the written work, e.g. an abstract, footnotes, reference list.

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## Assessments to demonstrate attainment of learning outcomes (continued)

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The availability of assessment criteria would suggest that criterion referencing is used which has a learning outcomes focus, thus the examiner's judgement of the student's assessment is based upon the quality of the work in relation to the pre-defined criteria. In the case of clinical-based and vocational programmes of study such as oncology courses, precise details of assessment criteria are likely to be significant for the professional accreditation. A word of caution is needed in these days of academic autocracy: defined learning outcomes and assessment criteria may be pleasing to those in administration, but it is essential that they do not detract from the real learning experience.

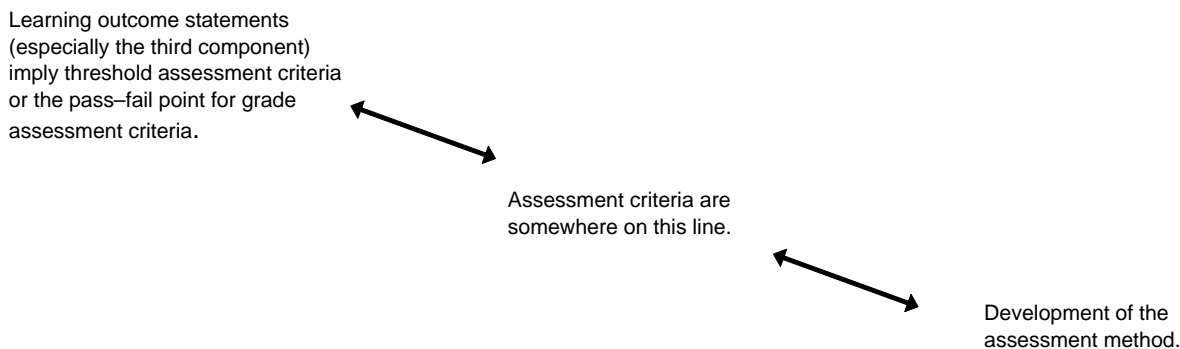
The assessment criteria must match the learning outcomes; for instance, if you stipulate that the student should be able deliver a verbal presentation on a given subject, e.g. chemotherapy in children, then it would be inappropriate to assess them on a written assignment of the same material. Thus when writing learning outcomes it is advisable to use speculative language, e.g. the student is expected to.., since it is impossible to make a student actually learn! In the case of assessment criteria, there is a need to define thresholds of achievement, whether they are skills competences or evidence of gaining specific knowledge.

### WRITING AND THE USE OF ASSESSMENT CRITERIA

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When writing the learning outcomes, knowing the academic and skills expectations of the student at the end of the module or programme of study is fundamental. Thus the assessment criteria and learning outcomes are, by definition, interrelated (see Figure 2). Yet an assessment criterion provides a more precise requirement than a learning outcome, in that it demarcates the threshold of performance a student must attain in order to be awarded a pass mark.

**Figure 2: The relationship between learning outcomes and assessment criteria**



Taken from Moon <[http://www.see-educoop.net/education\\_in/pdf/edinburgh-moon-oth-enl-t02.pdf](http://www.see-educoop.net/education_in/pdf/edinburgh-moon-oth-enl-t02.pdf)>.

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## Assessments to demonstrate attainment of learning outcomes (continued)

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Giving students the assessment criteria on which their efforts are judged allows them to understand what is expected in their assessed work. The information on the nature of the assessment (e.g. verbal, written, individual, group sessions), and the nature of the expected work (e.g. title, and length in words) should be given in advance in the module documentation so students are aware of what is required in order to pass. It is good practice to provide individual examiners of assessments with marking grid assessment criteria so that they can make an informed decision on each student's work (see Table 4).

**Table 4: Example of marking grid for the assessment criteria**

### **A**

- Quality of the work is exceptional, making correlations between theory and practice
- Work demonstrates a level of academic rigour that was beyond expectations of the programme
- Written assessment is extremely well-written, and the style well-suited to the purpose
- High level of original thought and demonstrated academic maturity
- High degree of thoughtfulness and perception
- Good evidence of reading of the extended literature
- Highly-developed sense of self-evaluation

### **B**

- Very good work, demonstrating a clear indication of academic attainment
- Demonstrates ability to make correlations between theory and practice
- Written assessment is well written
- Evidence of reading around the subject within the appropriate literature

### **C**

- Demonstrates a limited ability to make correlations between theory and practice
- Written work shows an ability to write
- Some evidence of reading of literature other than textbooks
- Adequate knowledge of learning within the lectures and practical sessions is demonstrated

### **D**

- Minimal effort demonstrated with respect to the written assessment
- Little evidence of outside reading around the subject
- Demonstrates no real ability to make correlations between theory and practice
- Inadequate demonstration of knowledge gained by learning within the lectures and practical sessions

### **E**

- No evidence of real interest in reading around the subject
- Demonstrates an inability to make correlations between theory and practice
- Demonstrates no ability or aptitude for learning within the lectures and practical sessions.

### **F**

- Failure – unacceptable work and aptitude for the module

## Assessments to demonstrate attainment of learning outcomes (continued)

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### FEEDBACK TO STUDENTS ON ASSESSMENT

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Academic progression of students is enhanced by good feedback about assessed work (both written and clinical skills). A key feature is that feedback must be timely in order to provide the opportunity for students to act on the information received so as to improve their performance. It is helpful for the student to know in advance the extent of feedback to expect, and this can be explained within the module documentation, which should also explain why, in some circumstances, it is inappropriate to give the feedback. Feedback therefore needs to be:

- given soon after the event
- specific
- non-judgemental
- encouraging and
- descriptive.

Clinical supervision and mentors have a vital role in providing feedback in the clinical setting (see section on the 'Clinical setting as a learning environment'), yet from an educational research perspective, feedback is one of the areas that is least investigated. It is a complex activity that may occur in many different types of clinical setting, but most significantly it involves exchanges of ideas and communication. Constructive feedback to students is an essential part of the learning process, thus for dialogue to be effective the quality of the relationship between supervisor and trainee is the single most important factor to get right. Although professionals may find it difficult to highlight areas for change and development, without this students' skills will not progress. Personal development plans and self- evaluation of tasks and skills are useful elements when learning clinical skills, but it is also very important that fully qualified professionals are available for critical appraisal, as a support in training for developing skills.

#### **Useful links**

Tips for assessing how students' learning is enhanced through effective feedback are given on:  
<http://www.heacademy.ac.uk/senlef.htm>

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## Assessment of competence in the clinical setting

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Individual clinical institutions are likely to have their own areas of expertise and interests. Nonetheless, in offering to provide clinical placements for a specified programme of study, there are certain minimum required standards:

- an efficient administrative infrastructure to support the students
- supervisors and mentors with appropriate clinical knowledge
- a suitable learning environment with sufficient resources available
- appropriately trained clinical supervisors and mentors who are accountable for the clinical teaching and learning they provide.

Within most university hospitals, expertise is available for clinical supervision and mentorship, but training schemes for professionals willing to fulfil these roles are essential. Ideally, such schemes should be timetabled before students take up placements in order to validate the training of the mentors and supervisors, whose ability must also be assessed.

### ASSESSMENT OF SKILLS COMPETENCES

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There are a number of methods for assessment of clinical skills competences that may include examinations within a clinical setting. A reflective log of clinical encounters and contact within supervised practice may form part of a portfolio, which may also be assessed.

With respect to specific clinical skills, here is an advised four-stage process through which a student may develop and be examined on competence in a specific clinical skill.

Stage 1: Having observed a demonstration of the clinical skills by an expert, to practise within the safety of clinical skills laboratory sessions.

Stage 2: Observing the procedure in the clinical setting.

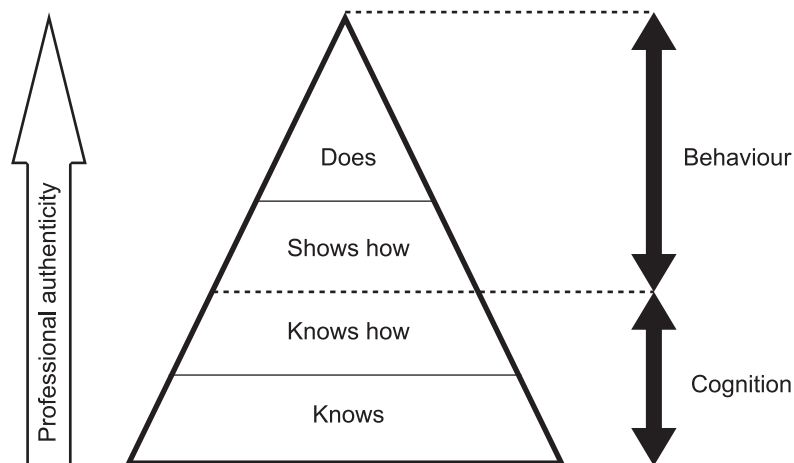
Stage 3: Performing skill in the clinical setting under close supervision.

Stage 4: Examination by an appropriate expert within the clinical setting when the student feels confident in his or her ability.

The above educational framework is well recognised, characterised by an understandable and reproducible focus for learning and assessment, i.e. Miller's pyramid (see Figure 3 and Table 5). Miller's pyramid shows the division between cognition and behaviour and the demonstration of progression from knowing about a skill to demonstrating competence.

Assessment of competence in the clinical setting (continued)

Figure 3: Miller’s pyramid of competence – Clinical Skills Competence and Performance Assessment.



[Adapted from Miller (1990)]

Table 5: Interpretation of Miller’s pyramid

Knows	Factual knowledge tested by assessments, e.g. examinations, essays, oral tests
Knows how	Applied knowledge tested – clinical knowledge tested in the context of a medical case
Shows how	Performance assessed by testing clinical skills in a controlled environment, e.g. laboratory, OSCE
Does	Performance assessed in the clinical setting

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## Methods for assessing clinical skills

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### PORTFOLIO OF EVIDENCE

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Portfolios are a file or log of evidence that may be used for a personal development plan and documentary evidence of success, e.g. certificates (qualifications), log of individual assessments of skills within the clinical setting, written assignments and the feedback received, patient diaries and case studies, reflective writing on encounters and experiences within the clinical setting.

Some students find portfolios useful, whereas those who lack confidence in their abilities to write and reflect on experiences are sometimes less keen to produce a substantial portfolio of evidence. Portfolio assessments are a newer form of assessment, and as such are being closely examined in the education of health professionals as a method of authentic assessment. One of their many advantages is their unique capacity to summarise and demonstrate learning and academic progression in a way that other forms of assessment may not. Moreover, a clinical portfolio affords the trainees the opportunity, through reflection on their nursing practice, to understand and then adapt their nursing skills and clinical decisions in light of this evidence.

### OBJECTIVE STRUCTURED CLINICAL EXAMINATIONS (OSCES)

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OSCEs are a reliable and valid method for assessment of clinical and communication skills. They consist of a series of timed 'stations' in a circuit and individual students progress through each of the stations in order to complete the examination (see Fig. 4). Examinees are given a fixed time to complete the task, e.g. 5–10 minutes. Stations can consist of a patient, a standardised patient (i.e. actor), and or a video, together with an examiner who assess the performance of the examinee according to a structured mark sheet (i.e. a task-specific check list – see Table 6 as an example of a mark sheet for an OSCE station on patient confidentiality).

When examining via an OSCE:

- all the examinees are given with the same test – so it is **objective**
- all the examinees are marked on the same marking scheme for each station, so the examination is **structured**
- there are specific **clinical** skill modalities tested at each station.

For example, marks are given for:

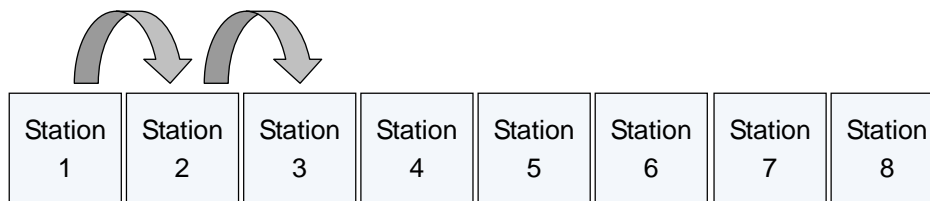
- history taking
- explanation of disease, clinical procedure, ethics
- clinical examination;
- procedures carried out.

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## Methods for assessing clinical skills (continued)

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**Figure 4: Diagrammatical representation of an OSCE**



Documentation is required as follows:

- instructions for patient (as appropriate)
- instructions for the examinee
- mark sheet for examiner.

Examiners are responsible for agreeing the minimum pass mark for a specific station that would recognise the examinee as competent for the skill or task being examined – in some cases the pass mark may need to be 100% when assuring fitness to practice. It is good practice for the examiners to meet before the examination in order to agree the minimum pass mark, and thus reduce the risk of examiner–examinee bias. The greater number of stations increases the reliability and validity of the examination for it should generate enough scores to make a reliable pass–fail judgement on the examinee.

The detailed review of how to plan, set up and implement a multi-station OSCE by Sydney Smee (2003) is very comprehensive and provides the initial information required if you are considering using this form of assessment for clinical skills and communication.

### **WHY USE OSCES IN THE ASSESSMENT OF CLINICAL SKILLS AND COMMUNICATION?**

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The OSCE is constructed so that each station is carefully prepared to test specific knowledge or skills. As there are many stations (usually around 16), the examinee is observed over a wide range of different activities. Because the examiners' marking schedule is structured and all examinees perform the same tasks, the risk of examiner bias is reduced, provided examiners accurately follow through the mark sheet. As to the question of how often the students should be assessed in the OSCE format, that is dependent on the programme of study and the skills being assessed.

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**Methods for assessing clinical skills (continued)**


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**Table 6: Example of an OSCE station mark sheet**

In an examination on patient confidentiality, the examinee must explain to Mr. Kones, the son of a patient, that it is not possible to discuss his mother's care and therapy without her consent.

**Examinee number:**

- |   |                      |
|---|----------------------|
| 1 Examinee introduces him- or herself to Mr Kones.  | <input type="text"/> |
| 2 Examinee explains to Mr Kones why it is not possible to discuss his mother's care (duty of confidentiality).  | <input type="text"/> |
| 3 Examinee explains that if Mr Kones returns with his mother or if she gives permission for the information to be shared with him, and then his mother's care can be discussed. | <input type="text"/> |
| 4 Examinee suggests that Mr Kones expresses his concerns to his mother.   | <input type="text"/> |
| 5 Examinee remains and responds calmly when Mr Kones becomes angry and distressed.  | <input type="text"/> |
| 6 Examinee suggests that Mr Kones might like to discuss the issue with a more senior member of their clinical oncology team.  | <input type="text"/> |

**Overall scoring on general issues**

- |   |                      |
|---|----------------------|
| 7 Examinee was not judgemental.   | <input type="text"/> |
| 8 Simulated patient considered that the examinee listened and acknowledged Mr Kones' concerns and distress. | <input type="text"/> |
| 9 Global rating: Acceptable / Cause for concern / Unacceptable.   | <input type="text"/> |

**Score for each item on the mark sheet**

2 = performed the task well

1 = performed the task acceptably

0 = did not perform task.

## Methods for assessing clinical skills (continued)

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### WHO SHOULD TRAIN AND ASSESS IN PRACTICE?

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The choice of who should carry out skills training and examining depends on the clinical skill being taught and developed, and the regulations of the institution. Some institutions may allow supervision and examination to be delivered by a practitioner who is not an oncology nurse, provided that the practitioner is competent and has completed a training programme for skills training and examination of assessment.

When considering the trainer/examiner for the assessment of a clinical skill or competence, here are some recommended criteria for the trainer and examiner. They must:

- be trained and competent in the specific skill;
- have undergone training as a clinical skills trainer and examiner so as to be able to provide constructive feedback to aid the learning experience
- not be a relative or friend of the examinee.

It is best practice for the academic institution to provide documentation about who they consider is worthy of being an examiner in the clinical setting – some would expect the examiner to be an oncology nurse, like the examinee. This is not always possible, however, so where it is the skill rather than the profession being examined, then anyone who can demonstrate evidence of all the above criteria may be considered appropriate.

### STANDARD SETTING FOR CLINICAL COMPETENCE

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There have been radical changes to the methods of assessing competence in programmes of study for healthcare professionals. Previously, norm-referenced assessed marking schemes have been used, where the pass mark is set and based on performance of a large representative sample of students taking an assessment, i.e. students are compared with one another. Where fitness to practice is an issue, however, criterion-referenced marking and standard-setting techniques should be the marking schemes of choice.

With criterion-referenced assessments, the standard of the competence level required is defined and absolute. In this context, the minimum level of knowledge and skills a student must attain in order to pass is stipulated. The failure rate may vary according to the ability of the specific year group. Angoff scoring is a common example of a method used for criterion referencing, particularly for practice and clinical skills-based assessments. The Angoff method requires a group of expert examiners to estimate the expectation for performance of a borderline student within an examination. Individual examiners each make a decision, the scores are averaged and this score is taken as the minimum pass mark.

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## Quality assurance of the education of oncology nurses

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Within the wider spectrum of education and training provision for health professionals, there are a number of key features that include:

- a strong vocational commitment, which led them to make a career as oncology nurses
- an employer who has an involvement in the process, since much of their learning is likely to be work-based
- having a 'licence' to practice in the clinical setting following academic success
- a continuum between pre- and post-education and training.

Therefore, quality assurance of the education process is one of mechanisms used to satisfy the requirements of the 'customers'. In this context, the customers are:

- the employer who expects that, following education and training, those who qualify have the desired knowledge and skills, and are safe and competent, having achieved standards that merited the award, and
- the trainee, who now has expectations for their own career development following the education and training.

The experience of the student is shaped by the following stakeholders, who have an interest in the success:

- the provider of education, who is interested in the student attainment, i.e. that they have reached a standard that is worthy of the award;
- the employer, who is interested in knowing that the nurse gaining the award has the knowledge, skills and competences that are of use within their work environment
- the professional accreditation body, which is interested in fitness to practice issues whereby it determines whether the individual attaining the award is worthy to be licensed/registered as an oncology nurse specialist.

## Quality assurance of the education of oncology nurses (continued)

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### EXTERNAL QUALITY ASSURANCE

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#### Degree validation

Validation of the degree programme, its content, delivery and assessment are key issues within the academic quality process. At the validation event, internal and external university academics scrutinise and assess the documentation on the programme of study, its rationale, construction, module content, delivery and assessment, and student support issues will be scrutinised before the programme is allowed to register students for study. In the case of clinical placements, these too are likely to be visited and evaluated as to whether the infrastructure for supporting the learning process, i.e. clinical supervisors, nature of clinical training, learning support (e.g. clinical skills laboratories, training wards/clinics, learning resources within libraries) provides an acceptable standard for practice-based learning. The mechanisms in place for the academic and pastoral support for students will also be considered.

#### External examiners

Assessments and the final award to students will be scrutinised by internal examiners of the university offering the programme of study, and also by specialist examiners who are experts within the area concerned to assure that those being awarded the diploma or degree are comparable to other students taking an equivalent qualification.

#### Professional accrediting body

Where an award gives a successful candidate the licence to practice as an oncology nurse specialist, the profession may have its own validation standards and inspections before the programme of study is delivered. In addition, the professional body may also wish to know the admissions policy, health and safety and fitness-to-practice committee structures.

### INTERNAL QUALITY ASSURANCE

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#### Organisational issues

For an effective programme the following areas require consideration:

- provision of the clinical and knowledge-based education with a realistically constructed timetable where all involved agree to their time slots
- a secure contractual obligation between the education provider and the clinical placement providers
- availability in the education and clinical setting of essential information to facilitate and support the learning process

## Quality assurance of the education of oncology nurses (continued)

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- facilities for students to be enrolled and receive induction and orientation on their education at the clinical sites where their learning is to take place.

In the case where the employer of the students is not the clinical placement provider, the administration and infrastructure should be organised in such a way that the students know where they need to be and when, and equipment/dress code required.

### Curriculum content

An effective and accredited programme will succeed if:

- the programme incorporates an acceptable and adequate level and depth of knowledge and skills learning;
- it has the required learning outcomes for accreditation, where appropriate
- there is input from clinical supervisors and representatives from healthcare institutions so that the curriculum delivered is relevant, up to date and matches the needs of those employing successful graduates of the programme.

The following are needed for successful and happy students:

- clear channels of communication between students and educators
- well-managed and organised learning environments
- attention to interprofessional education and awareness.

### Internal assessment

Where the assessments may be marked and moderated by more than one marker, it is necessary to assure a non-biased mark for the assessment and the operationalisation of the process.

- Academic and clinical staff must receive adequate training in learning support and assessment.
- The student performance and academic progression is monitored and evaluated, and is a systematic process with timely feedback to the students so they can improve their performance.
- The assessment is appropriate for the expected curriculum learning outcomes.

## Quality assurance of the education of oncology nurses (continued)

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With respect to clinical-based learning the clinical-based teachers have a full role in the assessment process. This includes:

- monitoring the quality of the learning environment for practice-based learning
- evaluating and monitoring the provision for learning within the clinical setting.

Provision must be made to monitor:

- satisfaction of students
- students' active responses to feedback, especially when there is a problem
- satisfaction of clinical supervisors and their active responses to feedback, especially when there is a problem
- that experience within the clinical setting is appropriately wide and staff are supported to achieve the learning outcomes of the programme of study
- access to patients and clinical areas
- the physical resources available in the learning and teaching environment, for example:
  - seminar rooms, and their equipment, such as whiteboards, video, projector facilities, IT resources
  - equipment for learning clinical skills and access to an appropriate level of clinical supervision
  - sufficient attention to social issues, such as catering and parking facilities, accommodation when working in the clinical setting at night.

### STAFF-STUDENT LIAISON COMMITTEES

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These committees are where the students and staff meet together to discuss details of the programme and its management:

- assessments and their processes for feedback
- 'house-keeping' issues of the programme, e.g. administration, timetabling of learning sessions
- availability of learning resources and support, e.g. books and journal articles.

In such committees, students may share their experiences in a non-threatening environment and have a voice with respect to the wider process of evaluation and management of the programme. These experiences are relayed back to the teaching team and contribute to the development and maintenance of the programme.

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## Quality assurance of the education of oncology nurses (continued)

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### INFORMATION FOR APPLICANTS AND STUDENTS ON THE ACCREDITATION STATUS OF PROGRAMMES

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A programme of study may be all or part of a qualification regime for a professional award. Therefore, those organising the programme have an obligation to the students to ensure that the programme meets the module selection criteria required by the validating professional body so that successful students will be accredited for a licence to practise. The accreditation status of the programme must be shared with the applicants to the programme before they register for study. Where there are specific module requirements for professional accreditation, then such information must be made available before module choices are made, and applicants must be told the level / grade required to meet the requirements of the statutory body for registration.

### DOCUMENTATION REQUIRED BY STUDENTS TO STUDY

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Once discrete areas of learning have been organised into specific modules, the students require the following types of documentation to aid them in their academic orientation within the programme of study.

#### Manual for the programme of study

Information within the manual should provide detailed information on the following:

- contact details and methods of communication with administrative staff and academics, and the times when the latter are available for tutorials
- timetables
- details of procedures for enrolment and registration on the programme
- expectations for attendance at lectures, tutorials and clinical-based sessions and procedures to follow in event of personal circumstances that prevent attendance, e.g. illness
- details of where and when lectures are held or arrangements for remote communication between students and the academics
- where, when and how to submit assessments for marking
- an overview of the structure of the programme of study, and descriptors of the individual modules and their assessments
- descriptors of learning and teaching methods
- information technology policy of the institution, e.g. use of e-mail and the Internet

## Quality assurance of the education of oncology nurses (continued)

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- information on unfair practice and plagiarism policies
- health and safety information
- information for students with special needs, e.g. dyslexia
- the student complaints process.

### Handbooks for the individual modules

Information in the module handbooks needs to include:

- aims and objectives of the module
- learning outcomes– these may be knowledge-based and/or clinical skills competence-based
- curriculum content that gives an indication of the subjects that will be included, and what is intended for group learning or for private study
- learning and teaching methods to be used – this prepares the students for the types of learning activity in which they will engage
- methods of assessment and the criteria used for marking the assessments
- a recommended reading list, including the recommended textbooks and journal articles.

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## Concluding remarks

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This document has aimed to enhance educators and managers awareness of issues relating to the development of an outcome-based curriculum for oncology nurses. To this end, we have provided topics for discussion on how to develop such programmes, and their assessment, both within the university setting and in clinical practice. One of the key features for the success of an oncology nursing programme is the involvement of academic and clinical colleagues who are both motivated and trained in learning and assessment. Therefore, we have also provided guidelines for training clinical supervisors and assessors.

All programmes are open to scrutiny by others within the institution delivering the programme, and from academics at external institutions involved in the quality assurance of the curriculum, its delivery and assessment. Indeed, there will be others that have a keen interest in the oncology nurses who successfully complete the programme of study, i.e. other applicants considering whether to register on the programme, healthcare institutions that would want to employ them while they are studying and after qualification. Therefore, we have included details of quality assurance measures used in education and the guidelines relating to requirements for the provision of education in Europe.

## References and further reading

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### TRAINING NEEDS ANALYSIS

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Gould, D. et al. (2004), 'Training Needs Analysis: An Evaluation Framework', *Nursing Standard* 18 (20): 33–6.

Hicks, C. & Hennessy, D. (1997), 'The Use of Customized Training Needs Analysis Tool for nurse practitioner development', *Journal of Advanced Nursing*, 26: 389–98.

### LEARNING OUTCOMES

---

AMEE (1999), *Outcome-Based Education. AMEE Education Guide No 14* (Dundee: AMEE).

Beaty, L. (1998), 'The Professional Development of Teachers in Higher Education: Structures, Methods and Responsibilities', *Innovations Educ. Training Int.*, 35 (2): 99–107.

Litzelman, D.K., Stratos, G.A., Marriot, D.J. & Skeff, K.M. (1998), 'Factorial Validation of a Widely Disseminated Educational Framework for Evaluating Clinical Teachers', *Acad. Med.*, 73 (6): 688–95.

McLeod, P.J., Steinert, Y., Meagher, T. & McLeod, A. (2003), 'The ABCs of Pedagogy for Clinical Teachers', *Medical Education*, 37:7, 638–44.

Miller, G. (1990), 'The Assessment of Clinical Skills/Competence/Performance', *Acad. Med.*, 65 (9 suppl): S63–7.

Spady, W.G. (1988), 'Organising for results: The Basis of Authentic Restructuring and Reform', *Educational Leadership* 1988; 46 (2): 4–8.

### ASSESSMENT

---

Barman, A. (2005), 'Critiques on the Objective Structured Clinical Examination', *Ann. Acad. Med. Singapore*, Sept, 34(8): 478–82.

Brosnan, M., Evans, W., Brosnan, E. & Brown G. (2006), 'Implementing Objective Structured Clinical Skills Evaluation (OSCE) in Nurse Registration Programmes in a Centre in Ireland: A Utilisation Focused Evaluation', *Nurse Educ. Today*, 26 (2): 115–22.

Humphrey-Murto, S., Smee, S., Touchie, C., Wood, T.J. & Blackmore, D.E. (2005), 'A Comparison of Physician Examiners and Trained Assessors in a High-Stakes OSCE Setting', *Acad Med.* Oct, 80 (10 Suppl): S59–62.

Khattab, A.D. & Rawlings, B. (2001), 'Assessing Nurse Practitioner Students Using a Modified Objective Structured Clinical Examination (OSCE)', *Nurse Educ Today*, 21 (7): 541–50.

---

## References and further reading (continued)

---

Rees, C. & Sheard, C. (2004), 'Undergraduate Medical Students' Views About a Reflective Portfolio Assessment of Their Communication Skills Learning', *Med Educ.*, 38: 125–8.

Smee, S. (2003), 'ABC of Learning and Teaching in Medicine – Skill-Based Assessment', *BMJ*, 326: 703–6.

### CLINICAL SUPERVISION, SKILLS ASSESSMENT AND COMPETENCE IN PRACTICE

---

Ayer, S., Knight, S., Joyce, L. & Nightingale V. (1997), 'Practice-led Education and Development Project: Developing Styles in Clinical Supervision', *Nurs. Educ. Today*, 17: 347–58.

Bishop V. (1994), 'Clinical Supervision for an Accountable Profession', *Nurs. Times*, 90 (39): 35–9.

Bond, M. & Holland, S. (1998), 'Skills of Clinical Supervision for Nurses' in: Bond, M., Holland, S., (eds.) (1998), *A Practical Guide for Supervisees, Clinical Supervisors and Managers*. Buckingham: Open University Press.

Bowen, J.L. & Carline, J. (1997), 'Learning in the Social Context of Ambulatory Care Clinics', *Acad Med*, 1997, 72 (3): 187–90.

Butterworth, T. & Faugier, J., (eds.) (1992), 'Clinical supervision as an emerging idea in nursing', in: *Clinical Supervision, Mentorship in Nursing*. (London: Chapman & Hall).

Cleary, M. & Freeman, A. (2005), 'Self-directed learning and portfolio development for nurses: developing workbooks as a facilitative tool', *Contemp. Nurse*, Sept. 20 (1): 14–20.

Cowan, D.T., Norman, I. & Coopamah, V.P. (2005), 'Competence in Nursing Practice: A Controversial Concept – A Focused Review of the Literature', *Nurse Ed. Today*, 25: 355–62.

Curtis, P., Butterworth, T. & Faugier, J., (eds.) (1992), 'Supervision in clinical midwifery practice', in *Clinical Supervision, Mentorship in Nursing* (London: Chapman & Hall).

Fowler J. (1996), 'The Organisation of Clinical Supervision within the Nursing Profession: A Review of the Literature', *J. Adv. Nurs.*, 23: 471–8.

Gibson, F. & Soanes, L. (2000), 'The Development of Clinical Competencies for Use on the Paediatric Oncology Course Using a Nominal Group Technique', *J. Clin. Nursing*, 2000, 9: 459–69.

Harden, R.M., Crosby, J.R., Davis, M.H. & Friedman, M. (1999), 'Guide No 14: Outcome-Based Education: Part 5, from Competency To Meta Competency: A Model for the Specification of Learning Outcomes', *Med. Teacher*, 1999, 21 (6): 546–52.

## References and further reading (continued)

---

- Harden, R.M. & Stamper, N. (1999), 'What is a spiral curriculum?' *Medical Teacher*, 21: 141–3.
- Hesketh, E.A., Bagnall, G., Buckley, E.G., Friedman, M., Goodall, E., Harden, R.M., Laidlaw, J.M., Leighton-Beck, L., McKinlay, P., Newton, R. & Oughton, R. (2001), 'A Framework for Developing Excellence as a Clinical Educator', *Med. Educ.*, 35 (6): 555–64.
- Jasper, M.A. & Fulton, J. (2005), 'Marking Criteria for Assessing Practice-Based Portfolios at Masters' Level', *Nurse Ed. Today*, 25: 377–89.
- Keller, J.F., Protinsky, H.D., Lichtman, M. & Allen, K. (1996), 'The Process of Clinical Supervision: Direct Observation Research', *Clin. Supervisor*, 14 (1): 51–63.
- Maki, D.R. & Delworth, U. (1995), 'Clinical Supervision: a Definition and a Model for the Rehabilitation Counselling Profession', *Rehab. Couns.*, 38 (4): 282–93.
- McCready, T. (2006), 'Portfolios and the Assessment of Competence in Nursing: A Literature Review', *Int. J. Nurs. Stud.*, Apr, 21.
- Milne, D.L. & James, I. (2002), 'A The observed impact of training on competence in clinical supervision. *Br. J. Clin. Psychol.*, 41: 55–72.
- Ramritu, P.L. & Barnard, A. (2001), 'Como comprende la competencia los enfermeros recién licenciados. Consejo Internacion de Enfermeras', *International Nursing Review en Español*, 48, 51–61.
- Severinsson, E.L. & Borgenhammar, E.V. (1997), 'Expert Views on Clinical Supervision: A Study Based on Interviews'. *J. Nurs. Manage.*, 5 (3): 175–83.
- Severinsson, E.L. & Hallberg, I.R. (1996), 'Clinical supervisors' views of their leadership role in the clinical supervision process within nursing care', *J. Adv. Nurs.*, 24: 151–61.
- Squires, G. (1999), *Teaching as a Professional Discipline* (London: Falmer Press).

## EUROPEAN DIRECTIVES IN EDUCATION

---

- Barriball, K., While, A. & Norman, I. (1992), 'Continuing professional education for qualified nurses: a review of the literature', *J. Adv. Nursing*, 17 (9): 1129–40.
- Conference of European Ministers (2005), Oslo, 'From Berlin to Bergen'.
- Corner, J. (2001), Academia, cancer nursing and a new decade', *Euro. J. Cancer Care*, 10: 164–5.

---

**References and further reading (continued)**

---

Corner, J. & Wilson-Barnett, J. (1992), 'The newly registered nurse and the cancer patient: an educational evaluation', *International Journal of Nursing Studies*, 29 (2): 177–90.

Douglas, H., et al. (2003), 'Economic evaluation of specialist cancer and palliative nursing: Macmillan evaluation study findings', *Int. J. Palliat. Nurs.*, 10: 429–38.

European Commission (2005), *Tuning educational structures in Europe*.

Furze, G. & Pearcey, P. (1999), 'Continuing education in nursing: a review of the literature', *J. Adv. Nursing*, 29 (2): 355–63.

Gopee, N. (2005), Facilitating the implementation of lifelong learning in nursing. *Br. J. Nursing*, 14 (1): 761–67.

Gould, D., et al. (2004), 'The impact of commissioning processes on the delivery of continuing professional education for cancer and palliative care', *Nurse Education Today*, 24: 443–51.

Kirshbaum, M., Booth, K. & Luker, K. (2004), 'The changing face of cancer care in the UK: can nurses help to structure new services?', *Euro. J. Cancer Care*, 13: 246–53.

Kristjanson, L. & Scanlon, J. (1989), 'Assessment of continuing nurse education needs: a literature review', *J. Continuing. Edu. Nursing*, 20 (3): 118–23.

Parkin, D. (2001), 'The scale of the challenge of cancer in Europe', *Euro. J. Cancer*, 37: S1.

Pearce, S., Kelly, D. & Steven, W. (2001), 'More than just money'- widening the understanding of the costs involved in cancer care', *J. Adv. Nursing*, 33: 371–9.

Peto, J. (2001), 'Cancer epidemiology in the last century and the next decade', *Nature*, 411, 391–5.

**USEFUL WEBSITES:**

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[http://www.bologna-berlin2003.de/pdf/bologna\\_declaration.pdf](http://www.bologna-berlin2003.de/pdf/bologna_declaration.pdf)

[http://europa.eu.int/comm/education/index\\_en.html](http://europa.eu.int/comm/education/index_en.html)

<http://tuning.unideusto.org/tuningeu/>

[http://www.hrk.de/de/download/dateien/ECTSUsersGuide\(1\).pdf](http://www.hrk.de/de/download/dateien/ECTSUsersGuide(1).pdf)

<http://www.enqa.eu/pubs.lasso>

## References and further reading (continued)

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### OTHER READING

---

Audit Commission (2001), *Hidden Talents: Education, Training and Development for Healthcare Staff in NHS Trusts* (London: HMSO).

Cancer Collaboration (1997), *The workforce and training implications of the Calman-Hine Report*. London, Cancer Research Campaign, Kings Fund and Macmillan Cancer Relief.

Clarke, D.J. & Copeland, L. (2003), 'Developing nursing practice through work-based learning', *Nurse Education in Practice*, 3, 236–44.

Dept of Health (2000a), *The NHS Cancer Plan* (London: HMSO).

Dept of Health (2000b), *The nursing contribution to cancer care* (London: HMSO).

Glasgow Caledonian University (2000), *Good Practice in work-based learning* (Glasgow: Department of Learning and Educational Development).

Hicks, C. & Fide, J. (2003), 'The educational needs of non-specialist breast care nurses', *Nurse Education Today*, 23, 509–21.

Kromer, C. (2000), 'Cancer nursing as a speciality', In: Kearney, N., Richardson, A. & Di Giulio, P. (eds) *Cancer Nursing Practice: A Textbook for the Specialist Nurse* (Churchill Livingstone).



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