



**Clinical
Oncology**

The Royal College of Radiologists

SPECIALTY TRAINING CURRICULUM

FOR

Clinical Oncology

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1 Introduction

Clinical oncology embraces the non-surgical management of malignant disease. Clinical oncologists are involved in the management of all types of cancer. They work in tumour site-specific multidisciplinary teams (MDTs) which focus on the diagnosis and treatment of patients with cancer affecting particular parts of the body or systems, and they manage patients with cancer throughout their disease.

Clinical oncologists help to formulate a patient's treatment plan, and they are responsible for treating patients with both radiotherapy and systemic therapy (chemotherapy, hormone therapy and biological agents). These treatments may be used with the aim of cure (radical or curative treatment), with other treatments to improve the chances of cure (adjuvant treatment), or they may be used to control symptoms or improve the duration of survival without the expectation of cure (palliative treatment). The tumour type, the site of the tumour, the stage of the disease, the patient's general health and the patient's wishes are the main factors that determine which treatments are appropriate. The clinical oncologist must be able to assess the relative merits of different cancer treatments for an individual patient and to explain these to the patient in a way that gives him or her the information required to make an informed decision about treatment options.

Clinical oncologists undergo training in the management of all types of cancer, but increasingly they concentrate on treating two or three types of cancer as a consultant. They work closely with surgeons, physicians, medical oncologists, haematologists, palliative care teams, cancer nurse specialists, radiologists and pathologists in their relevant MDTs. They also work with radiologists, medical physicists and therapy radiographers to deliver radiotherapy, and with pharmacists and chemotherapy nurse specialists to deliver chemotherapy.

Clinical oncologists need to understand the scientific principles that underpin the treatment that they prescribe, including the pathology and biology of cancers, radiation physics, pharmacology of systemic anti-cancer therapies, and statistics. As cancer treatments continue to advance rapidly, clinical oncologists are commonly involved in clinical research which assesses cancer treatments. Some clinical oncologists pursue an academic career, leading laboratory, translational or clinical research.

In clinical oncology, core values shared by the discipline include:

- Active improvement of our treatments through the enhancement of the science relating to the causes and treatment of cancer.
- Engagement with clinical trials and development of technologies for the benefit of patients.
- The importance of empathy and compassion towards patients and colleagues in the practice of oncology.
- The importance of good communication skills and understanding cancer in context.
- Collaboration to develop and enhance cancer services for the benefit of patients.

2 Rationale

2.1 Purpose of the curriculum

The purpose of this curriculum is to define the process of training and the competencies needed for the award of a Certificate of Completion of Training (CCT) in clinical oncology.

The curriculum is defined for each phase of training for the benefit of the trainee, the trainers and those responsible for the organisation and quality assessment of training. Training objectives and methods of assessment are identified for:

- An introduction to clinical oncology that should be completed during the first six months.
- Management of oncology emergencies that should be completed during the first 12 months of training, i.e. by the end of ST3.
- Underpinning sciences modules including some learning outcomes related to research that should be completed by the end of ST4.
- Tumour site-specific training including learning outcomes related to general clinical and communication skills, and research. The stage of training by which these should be achieved is documented for each tumour site.
- Other professional areas ('Common Competencies') including clinical governance, audit, education, ethics, law, team working, management and leadership. The stage of training at which the trainee should achieve specific learning outcomes within these areas is stated.

2.2 Training Pathway

Specialty training in clinical oncology consists of core training and higher speciality training. Core training provides oncologists with the ability to investigate, treat and diagnose patients with acute and chronic medical symptoms, and with high quality review skills for managing inpatients and outpatients. Higher specialty training then builds on these core skills to develop the specific competencies required to practise independently as a consultant clinical oncologist.

Core training may be completed in either a Core Medical Training (CMT) or an Acute Care Common Stem (ACCS) training programme. The full curriculum for specialty training in clinical oncology therefore consists of the curriculum for either CMT or ACCS plus this specialty training curriculum for clinical oncology. The current CMT curriculum can be seen on the JRCPTB website [CMT curriculum](#) and the current ACCS curriculum on the GMC website [ACCS curriculum](#). See section 3.1 below for more information about programme content.

Entrants to specialty training in clinical oncology must, therefore, have successfully completed CMT or ACCS training, and their first year of clinical oncology training will be known as year ST3. All trainees entering training clinical oncology training must have acquired the full MRCP(UK) diploma, as this is a requirement for successful completion of both CMT and ACCS.

2.3 Accreditation of Transferable Competences (ATC)

When moving from one approved training programme to another, a trainee doctor who has gained relevant competences in core, specialty or general practice training should not have to repeat training already achieved. The Accreditation of

Transferable Competences Framework (ATCF) assists trainee doctors in transferring competences achieved in one core, specialty or general practice training programme, where appropriate and valid, to another training programme. This could save time for trainee doctors who decide to change career path after completing a part of one training programme, and transfer to a place in another training programme.

The ATCF applies only to those moving between periods of GMC approved training. It is aimed at the early years of training. The time to be recognised within the ATCF is subject to review at the first Annual Review of Competence Progression (ARCP) in the new training programme.

The RCR accepts transferable competences to training towards a clinical oncology CCT, from the specialty of medical oncology. Details of the maximum duration and a mapping of the transferable competences are set out below.

ATC guidance for medical oncology trainees transferring to clinical oncology

ATCF will only be available to doctors who have successfully completed at least one year in GMC approved medical oncology training, obtaining ARCP1. **The maximum amount of time that can be credited for competences obtained during GMC approved medical oncology training is six months towards training for a CCT in clinical oncology.** This will allow the trainee to take the First FRCR Examination at the appropriate stage in training. Approval of the previous experience must be given by the relevant clinical oncology Training Programme Director, and must be reviewed and confirmed at the first clinical oncology ARCP. The decision as to whether competences achieved in medical oncology training will transfer to the clinical oncology training programme will be individualised according to the trainee.

ATC for medical oncology trainees transferring to the clinical oncology training programme will take effect from the national recruitment round in August 2016.

Competency descriptors	Curriculum reference and assessment requirements as set out in Appendices 1 and 2 of this curriculum	Evidence to be submitted
Common competences	<p>Appendix 1 : Syllabus Section 1, Common competencies for clinical oncology</p> <p>Appendix 2: Underpinning Scientific Knowledge Section 1.1, Principles of tumour biology Section 1.2, Genetics of normal and malignant cells Section 1.3, Normal and aberrant mechanisms of cell growth control Section 1.7, Causation of human cancers Section 1.8, Role of the immune system</p>	Educational Supervisors' reports and/or Training Programme Director report and/or MSc (or equivalent postgraduate qualification) oncology/ cancer care Module

	Section 3, Medical Statistics.	
Oncological emergencies	Appendix 1: Syllabus Section 3, Oncology emergencies syllabus.	Educational Supervisors' reports and/or Training Programme Director report and/or WpBA (or equivalent) demonstrating competences
Systemic therapy	Appendix 1: Syllabus Section 2.1, Authorising chemotherapy Section 2.2, Prescribing chemotherapy Section 2.4, Outpatient consultation Section 2.5, Breaking bad news Appendix 2 : Underpinning Scientific Knowledge Section 2, Clinical Pharmacology.	Educational Supervisors' reports and/or Training Programme Director report and/or MSc(or equivalent) oncology/cancer care module.

2.4 Enrolment with Royal College of Radiologists

Trainees are required to enrol with the RCR, and become trainee members of the College, prior to the commencement of their specialty training. Trainees are required to maintain College membership, including the full payment of all applicable fees, for the RCR to be able to recommend them as being eligible for award of a CCT in clinical oncology. On registering with the RCR, trainees will be given access to the RCR e-Portfolio which should be used to record all aspects of progress through training.

2.5 Duration of training

Although this curriculum is competency-based, the duration of training must meet the European minimum for full-time specialty training, adjusted accordingly for flexible training (EC Directive 2005/36/EC). At the time of writing this is four years but is expected to increase to five years shortly. The RCR advises that training from ST3 will usually be completed in five years of full-time training and be adjusted *pro rata* for those undertaking less than full-time training. It is recommended that the latter should not be undertaken at less than five sessions a week.

2.6 Flexible training

Trainees who are unable to work full-time are entitled to opt for flexible training programmes. EC Directive 93/16/EEC requires that:

- Part-time training shall meet the same requirements as full-time training, from which it will differ only in the possibility of limiting participation in medical activities to a period of at least half of that provided for full-time trainees.
- The competent authorities shall ensure that the total duration and quality of part-time training of specialists are not less than those of full-time trainees.

The above provisions must be adhered to. Flexible trainees should undertake a *pro-rata* share of the out-of-hours duties (including on-call and other out-of-hours commitments) required of their full-time colleagues in the same programme and at the equivalent stage.

LTFT Training should comply with current guidance from the GMC, extracts of which are reproduced below:

- Under normal circumstances the minimum percentage for LTFT should be 50%.
- In exceptional individual circumstances, trainees may be allowed to undertake training at less than 50% of full time. These circumstances should be considered by the trainee's deanery and should have the support of the postgraduate dean or their deputy. A placement at less than 50% of full time should be for a maximum of 12 months and should be subject to regular review to ensure appropriate career progression during the time.
- No trainee should undertake a placement at less than 20% of full time.

Funding for flexible trainees is from Deaneries, and these posts are not supernumerary. Ideally therefore two flexible trainees should share one post to provide appropriate service cover.

To date, flexible training has inevitably been prolonged. With competency-based training, proof of completion of competencies may enable these trainees to finish

their training in a shorter time. This will be the decision of the trainers in discussion with the RCR.

2.7 Academic training

A period of research is encouraged for all trainees during their training. A period of up to six months of full-time research in clinical oncology or related sciences is allowed as part of training. At the discretion of the RCR, up to 12 months of clinically-based research may be incorporated into training.

For trainees holding academic National Training Numbers, it is recognised that some degree of flexibility in balancing clinical and academic training is required, but this should not detract from trainees achieving all of the appropriate clinical competencies in a timely manner to allow progression through training.

Trainees wishing to undertake a higher research degree should apply for an out of programme experience, as outlined in Section 2.7.

2.8 Out of programme activities

Trainees may wish to gain experience in a different environment to further enhance their clinical oncology training. This may be to:

- Gain experience of working in another cancer centre in the United Kingdom or abroad.
- Undertake a period of full-time research.

A trainee who wishes to spend a period out of programme gaining such experience will need to agree the aims and duration of the experience with the RCR and his or her Postgraduate Dean and gain the approval of the GMC (if the experience is to count towards his/her CCT). A proportion of the time spent out of programme may be counted towards CCT, depending on the clinical content of experience and the competencies that can be achieved during this time. A maximum period of three years' out of programme is allowed and the RCR will recognise up to 12 months towards the minimum training time.

The trainee should write to the RCR providing full details of the planned out of programme activity and indicating how much CCT credit is sought. The RCR will review the application and advise the trainee, his/her training programme director and deanery of its decision. If CCT credit is to be sought, the deanery will make an application to GMC, on the trainee's behalf. All applications for CCT credit from out of programme training (OOPT) or out of programme research (OOPR) must be approved prospectively.

Further information is available on the College's website.

2.9 Acting up as a consultant

A trainee who has passed the Final FRCR Examination may spend up to three months, during the final year of specialist training, "acting-up" as a consultant provided that a consultant supervisor is identified for the post, prospective approval has been obtained from the College's Training Office, and satisfactory progress is made. As long as the trainee remains within their original training programme, the GMC does not need to approve this period of "acting-up" and their original CCT date will not be affected.

If the trainee is to act up at a location outside of their original training programme, this will be classed as out of programme activity and prospective GMC approval will need to be sought (see Section 2.8).

3 Content of learning

3.1 Programme content and objectives

Completion of core training (CMT or ACCS) is essential prior to trainees entering clinical oncology, because:

- 1) The majority of patients with cancer have other medical problems; assessment of these problems and their management is essential when considering potential treatment options.
- 2) Patients may develop problems requiring medical treatment as the result of their cancer.
- 3) Patients may develop medical problems due to systemic therapy or radiotherapy.
- 4) Patients with cancer have complex needs requiring excellent communication skills and multidisciplinary team working. Clinical oncology training builds on the communication and team working competences developed in CMT and ACCS.

Core training therefore provides the platform on which more specialised clinical, general and professional competences required for the management of patients with cancer can be developed.

Clinical oncology higher training is divided into:

- 1 Intermediate Clinical Oncology Training which includes Core Clinical Oncology Training
- 2 Advanced Clinical Oncology Training

Details of the learning outcomes to be achieved at each stage are in the Syllabus section of the curriculum (Appendix 1).

Common Competencies

The Common Competencies section covers generic competencies that are required by clinical oncologists. Some of these competencies are intermediate level and others are advanced level. Common competencies relating to history taking, examination and communication skills are embedded within the learning outcomes for Core, Intermediate and Advanced Clinical Oncology Training (see Appendix 1, section1).

Core Clinical Oncology Training

The Core Clinical Oncology Training is part of Intermediate Clinical Oncology Training, and specifically refers to those competencies which must be achieved in the first two years of training (ST3 and 4). It covers:

- An introduction to oncology module, which includes learning outcomes addressing basic chemotherapy, radiation safety, consultation and communication skills and which must be completed in the first six months of training.
- The management of oncological emergencies that must be completed by the end of ST3.
- The majority of learning outcomes for the common malignancies.
- The sciences underpinning clinical oncology. These are taught in structured courses, and they include physics as applied to radiotherapy, radiobiology, cancer biology including molecular biology, the pharmacology of systemic anti-cancer treatments and medical statistics. The knowledge required is defined in Appendix 2 and is assessed in the First Fellowship of the Royal College of Radiologists (FRCR) examination.

Intermediate Clinical Oncology Training:

By the end of Intermediate Clinical Oncology training, the trainee should have achieved the majority of learning outcomes for the slightly less common malignancies and some learning outcomes for the rarer malignancies.

Advanced Clinical Oncology Training:

This covers the clinical learning outcomes which are associated with tumour site specialisation. At least two tumour site specialties must be studied. The trainee should progress to be able to make decisions in situations of uncertainty. They should learn how to develop tumour site-specific departmental guidelines. The minimum period of each training attachment during advanced specialist training is six months to allow for tumour site specialisation; it is therefore not possible to complete Advanced Clinical Oncology Training in less than one year.

3.2 Good Medical Practice

The General Medical Council has translated Good Medical Practice 2013 (GMP) into a Framework for Appraisal and Revalidation that provides a foundation for the appraisal and assessment system for revalidation.

GMP covers the following domains:

- Domain 1 – Knowledge, skills and performance
- Domain 2 – Safety and quality
- Domain 3 – Communication, partnership and teamwork
- Domain 4 – Maintaining trust

The “GMP” column in the syllabus (Appendix 1) and in Underpinning Scientific Knowledge (Appendix 2) defines which of the four domains are addressed by each competency. Most parts of the syllabus relate to domain 1 (knowledge, skills and performance) but some parts will also relate to other domains.

3.3 Syllabus

Appendix 1 details the syllabus. Each table in the syllabus shows the learning outcomes together with **possible** appropriate assessment methods that could be used to assess each competency. It is not expected, however, that all competencies will be assessed, nor that when they are assessed, every method will need to be used. See Section 5 for more details on assessment.

4 Learning and teaching

4.1 The training programme

The organisation and delivery of postgraduate training is the statutory responsibility of the GMC, which in turn devolves responsibility for the local organisation and delivery of training to the Deaneries. Most Deaneries oversee a “School of Medicine” which comprises the regional Specialty Training Committees (STCs) in each medically-based specialty, including clinical oncology. Responsibility for the organisation and delivery of specialty training in clinical oncology in each Deanery is, therefore, the remit of the regional oncology STC. The exception to this is London, where the Deaneries have established a School of Oncology that is responsible for the organisation of clinical oncology training in London. Each clinical oncology training programme has a Training Programme Director (TPD) who co-ordinates the training programme in the specialty.

The usual duration of training in clinical oncology is five years.

Training is divided into:

- Intermediate Clinical Oncology Training (ST3, 4 and 5)
- Advanced Clinical Oncology Training (ST 6 and 7)

It is anticipated that Intermediate Clinical Oncology Training will last three (occasionally four) years. Advanced Clinical Oncology Training is therefore anticipated to last two (minimum one) years.

The first two years of Clinical Oncology Training (ST3 and 4) are termed Core Clinical Oncology Training. They include:

- An Introductory Module
- Oncological Emergencies
- Underpinning Sciences
- The majority of the Tumour Site-specific Learning Outcomes for the common cancers
- Common (generic) Competencies as outlined in the syllabus (Appendix 1, Section 1) and ARCP decision grid (Section 5.5)

During the next one to two years (ST5 to 6), trainees complete Intermediate Clinical Oncology Training which covers all cancers, but the depth of knowledge and skills acquired depends on the cancer type. The expected learning outcomes are specified for each tumour type in the syllabus (Appendix 1, Section 4). During Core and Intermediate Clinical Oncology Training, clinical attachments should last a minimum of three months, and if possible longer, to ensure that the trainee has the opportunity to follow patients through a course of treatment.

Advanced Clinical Oncology Training lasts a minimum of one year, during which the trainee should gain experience in at least two tumour site-specialist areas. Clinical attachments should be a minimum of six months in each tumour site. The advanced level common competencies should also be completed.

There must be a sufficient clinical caseload for the number of trainees working in a training department, so that each trainee has the opportunity to acquire appropriate experience. A training programme should provide experience in all branches of clinical oncology as laid down in the syllabus and enable acquisition of competences for a wide range of malignancies.

The sequence of training should ensure appropriate progression in experience and responsibility. The training to be provided is defined to ensure that, during the programme, the entire curriculum is covered and unnecessary duplication and educationally unrewarding experiences are avoided. The sequence of training, however, should also be flexible enough to allow the trainee to gain the required general clinical oncology experience and develop a minimum of two tumour site-specialist interests.

4.2 Teaching and learning methods

The curriculum will be delivered through a variety of learning experiences. Trainees will learn from practice, clinical skills that are appropriate to their level of training and to their attachment within the department.

Trainees will achieve the competencies described in the curriculum through a variety of learning methods. There will be a balance of different modes of learning from formal teaching programmes to experiential learning 'on the job'. The proportion of time allocated to different learning methods may vary depending on the nature of the attachment within a rotation.

This section identifies the types of situations in which a trainee will learn.

Work-based experiential learning. The content of work-based experiential learning is decided by the local faculty for education but includes active participation in:

- Outpatient clinics that should be under consultant supervision to allow the clinical findings and management plans to be presented to the training consultant and discussed. The trainee should gain experience of managing both new and follow-up patients. The degree of responsibility taken by the trainee will increase as his or her competency increases.
- Chemotherapy clinics that should be under consultant supervision to allow the patients to be presented to the training consultants and discussed. As the trainee's competency increases, he or she should prescribe chemotherapy, initiate courses of chemotherapy and obtain patient consent. The trainee must gain experience in both inpatient and outpatient chemotherapy and the management of complications.
- Radiotherapy planning sessions. There must be comprehensive teaching of radiotherapy planning that is appropriate to the stage of training, including simulation, virtual simulation, 3-dimensional (3-D) conformal planning, image fusion and intensity-modulated radiotherapy (IMRT), Volumetric Modulated ARC Therapy (VMAT) and image-guided radiation therapy (IGRT). Each trainee must be timetabled for the equivalent of at least one radiotherapy planning session per week, and there must be opportunities to discuss treatment plans with the supervising consultant. A trainee may not prescribe a treatment unless he or she has fulfilled the Ionising Radiation (Medical Exposure) Regulations (IRMER) requirements of the clinical oncology department where the trainee is working.
- Radiotherapy treatment review clinics. Trainees must gain experience in the acute and long-term complications of radiotherapy.
- Theatre sessions to allow trainees to gain experience of intracavitary and interstitial brachytherapy.
- Radioisotope treatment sessions to allow the trainee to gain experience of the therapeutic use of unsealed radioactive isotopes.
- Consultant-led ward rounds. Trainees must have the opportunity to observe senior doctors assessing and communicating with patients and their relatives. Feedback should be given on the trainee's clinical and decision-making skills.

- Personal ward rounds and provision of ongoing clinical care for oncology inpatients. Following patients through the course of their illness provides the trainee with learning opportunities in making both diagnostic and management decisions in partnership with patients and their relatives. This also allows trainees to practice, reflect on and improve their communication skills.
- Specialty-specific on-call experience that allows the trainee to develop competences in the diagnosis and management of oncology emergencies. Trainees must gain experience of out-of-hours emergencies by participating in an on-call rota during at least part of their training. When on-call they must be supervised by a named consultant.
- MDT meetings where patients are discussed with doctors from other disciplines. These provide excellent opportunities for observation of clinical reasoning.

The degree of responsibility taken by the trainee will increase as his or her competency increases. There should be appropriate levels of clinical supervision throughout training with increasing clinical independence and responsibility as learning outcomes are achieved, as described in Section 5 (Supervision and Feedback).

The timetable should contain an appropriate mix of outpatient clinics (new and follow-up), radiotherapy treatment sessions, chemotherapy clinics, MDT meetings, ward rounds and other appropriate clinical activities.

Independent self-directed learning. Trainees will use this learning method in a variety of ways depending upon their stage of learning. Suggested activities include:

- Reading, including journals and web-based material.
- Maintenance of a personal portfolio (e.g. personal development plan (PDP), reflective learning, and self-assessment).
- Audit, quality improvement and research projects.
- Achieving personal learning goals beyond those described as essential in the relevant section of the syllabus.

Learning with peers. There are many opportunities for trainees to learn with their peers. Local postgraduate teaching opportunities allow trainees of varied levels of experience to come together for small group sessions. Examination preparation encourages the formation of study groups.

Formal postgraduate teaching. The content of these sessions are determined by the local faculty of medical education and will be based on the curriculum. There are many opportunities throughout the year for formal teaching in local postgraduate teaching sessions and at regional, national and international meetings.

Trainees must be able to attend formal teaching sessions free from any clinical responsibility. These will include:

- A formal course of instruction specifically designed to cover the sciences underpinning the practice of clinical oncology that are assessed in the First FRCR examination. It is suggested that trainees should participate in a minimum of 160 hours of formal instruction to cover physics, medical statistics, clinical pharmacology, cancer biology and radiobiology. This should include lectures, tutorials and practical sessions. Attendance at this course should be monitored.
- Formal courses to cover the clinical aspects of the curriculum.
- Formal courses in other key areas such as management and communication.

Other opportunities for formal teaching include:

- Case presentations
- Radiotherapy planning meetings
- Departmental lectures
- Tutorials
- Journal clubs
- Audit meetings
- Research meetings
- National and international courses and conferences

4.3 Research

Trainees who wish to acquire extensive research competencies, in addition to those specified in this curriculum, may undertake a research project. An option to be considered is taking time out of programme to complete a specified project or research degree (time out of programme for research; OOPR). Applications to research bodies, the Deanery, and RCR will need to be completed by the trainee (see Section 2.7). Funding will need to be identified for the duration of the research.

4.4 Academic training

See Section 2.6.

5 Assessment

5.1 The assessment system

The purpose of the assessment system is to:

- Enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, measure their own performance and identify areas for development.
- Drive learning and enhance the training process by making it clear what is required of trainees and by motivating them to ensure they receive suitable training and experience.
- Provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme.
- Ensure trainees are acquiring competencies within the domains of GMP.
- Assess trainees' actual performance in the workplace.
- Ensure that trainees possess the essential underlying knowledge required for their specialty.
- Inform the Annual Review of Competence Progression (ARCP), identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme.
- Identify trainees who should be advised to consider changes of career direction.

The integrated assessment system comprises workplace-based assessments and knowledge- and skill-based assessments. Individual assessment methods are described in more detail in Section 5.3.

Workplace-based assessments will take place throughout the training programme to allow trainees to gather evidence of learning and to provide trainees with formative feedback. They are not individually summative but overall outcomes from a number of such assessments provide evidence for summative decision-making, i.e. informing the educational supervisor's structured report and hence the ARCP. The number and range of these will ensure a reliable assessment of the training relevant to the trainee's stage of training and achieve coverage of the curriculum.

The outcome of all assessments including examinations and workplace-based assessments will be recorded in the trainee's e-portfolio. This will allow individual workplace-based assessments to be linked to the relevant curriculum competencies, helping to demonstrate coverage of the curriculum.

5.2 Assessment blueprint

The appropriate assessment methods for each area of the curriculum are identified in the syllabus (see Appendix 1). The workplace-based assessment methods shown are those that are appropriate as **possible** methods that could be used to assess each competency. It is expected that competencies will be sampled for assessment and that a variety assessment methods will be used, i.e. it is not expected that all competencies will be assessed nor that where they are assessed, every method will be used.

5.3 Assessment methods

Examinations and certificates

- The complete MRCP(UK) Examination is required for entry into the specialty (see Section 2.2).
- The First FRCR Examination assesses knowledge of the sciences that underpin clinical oncology practice, i.e. physics, medical statistics, clinical pharmacology, cancer biology and radiobiology. Each subject is assessed by single best answer (SBA) questions. The syllabus for this examination is described in Appendix 2. As the knowledge assessed in this examination is essential to clinical oncology practice, this examination must be completed during Core Clinical Oncology Training (ST3 and 4).
- The Final FRCR Examination is in two parts, Part A and Part B. It focuses on how to manage patients with cancer and assesses the knowledge, skills and some of the behaviours required to complete Intermediate Clinical Oncology Training. It comprises three components – an SBA examination, a clinical examination and an oral examination. The syllabus for the Final FRCR Examination covers all areas of oncology covered in Intermediate Clinical Oncology Training (see Appendix 1). As the knowledge, skills and behaviours assessed in this examination are essential as a basis for developing advanced tumour site-specialist expertise, the examination must be completed before the trainee progresses to Advanced Clinical Oncology Training.

Information about the FRCR examinations, including guidance for candidates, is available on the RCR website.

Workplace-based assessments (WpBAs)

- mini-Clinical Evaluation Exercise (mini-CEX)
- Direct Observation of Radiotherapy Planning Skills (DORPS)
- Direct Observation of Systemic Therapy (DOST)
- Multi-Source Feedback (MSF)
- Case-based Discussion (CbD)
- Patient Survey (PS)
- Quality Improvement Project/Audit Assessment Tool (QIPAT)
- Teaching Observation (TO)

These methods are described briefly in this section. More information about these methods including guidance for trainees and assessors is available in the ePortfolio and on the RCR website. Workplace-based assessments should be recorded in the trainee's ePortfolio. The workplace-based assessment methods include feedback opportunities as an integral part of the assessment process. This is explained in the guidance notes provided for the techniques. These assessments may be undertaken by appropriately trained consultants, more senior oncology trainee and other health professionals, e.g. chemotherapy nurse specialists, radiotherapy medical physicists or radiographers, with relevant expertise in the area being assessed. During ST3 and ST4, a minimum of 50% of WpBA must be undertaken by consultant oncologists and during ST5-ST7 a minimum of 75% of WpBA must be undertaken by consultant clinical oncologists.

mini-Clinical Evaluation Exercise (mini-CEX)

This tool evaluates a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination and clinical reasoning. The trainee receives immediate feedback to aid

learning. The mini-CEX can be used at any time and in any setting when there is a trainee and patient interaction and an assessor is available.

Direct Observation of Radiotherapy Planning Skills (DORPS)

The DORPS is an assessment tool designed to assess the performance of a trainee in undertaking radiotherapy planning, against a structured checklist. The trainee receives immediate feedback to identify strengths and areas for development.

Direct Observation of Systemic Therapy (DOST)

The DOST is an assessment tool designed to assess the performance of a trainee in undertaking, authorising, prescribing and taking consent for chemotherapy, against a structured checklist. The trainee receives immediate feedback to identify strengths and areas for development.

Multi-Source Feedback (MSF)

This tool is a method of assessing generic skills such as communication, leadership, team working and reliability, across the domains of GMP. It provides objective systematic collection and feedback of performance data on a trainee, derived from a number of colleagues. 'Raters' are individuals with whom the trainee works, and include doctors, administration staff, and other allied professionals. The trainee will not see the individual responses by raters; feedback is given to the trainee by the Educational Supervisor.

Case-based Discussion (CbD)

The CbD assesses the performance of a trainee in his or her management of a patient, and it provides an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by trainees. The CbD should include discussion about a written record (such as written case notes, outpatient letters or discharge summaries). A typical encounter might be when presenting newly-referred patients in the outpatient department.

Patient Survey (PS)

The PS addresses issues which are important to patients including behaviour of the trainee and effectiveness of the consultation. It is intended to assess the trainee's performance in areas such as interpersonal skills, communication skills and professionalism, by concentrating solely on their performance during one consultation.

Quality Improvement Project/Audit Assessment Tool (QIPAT)

The QIPAT is designed to assess a trainee's competence in completing an audit or quality improvement project. The assessment can be based on a review of audit/QIP documentation or a presentation at a meeting. If possible the trainee should be assessed on the same audit or QIP by more than one assessor.

Teaching Observation (TO)

The TO form is designed to provide structured, formative feedback to trainees about their competence at teaching. The TO can be based on any instance of teaching undertaken by the trainee that has been observed by the assessor.

5.4 Decisions on progress

The Annual Review of Competence Progression (ARCP) is the formal method by which a trainee's progression through his or her training programme is monitored and recorded. The ARCP is not an assessment; it is a review of the evidence of training and assessment. The ARCP process is described in 'A Reference Guide for Postgraduate Specialty Training in the UK' (the 'Gold Guide', which is available from the website (www.mmc.nhs.uk)). Deaneries are responsible for organising and conducting ARCPs. The evidence to be reviewed by ARCP panels should be collected in the trainee's ePortfolio.

The WpBAs will be spread throughout each clinical attachment to ensure that progress is being made and to allow trainees' development needs to be identified. The required WpBAs will be reviewed with the trainee's Educational and Clinical Supervisor(s) at each appraisal meeting. As trainees progress through training, the complexity of the clinical problems addressed during WpBAs should increase.

The First FRCR Examination assesses the trainee's knowledge of the sciences that underpin clinical oncology. The Final FRCR Examination assesses the trainee's knowledge and skills in managing patients with cancer.

The ARCP Decision Aid is included in Section 5.5, and it gives details of the evidence required of trainees for submission to the ARCP panels. This identifies the minimum requirements for trainees to progress and it may be helpful or appropriate for trainees to undertake additional assessments during a given period of training.

The RCR will provide externality for the ARCP process in the form of peer review by an External Advisor. The External Advisor, a clinical oncology RSA from a different region, will liaise with the Deanery to ensure that College and Deanery processes are fulfilled. The guiding principle is that the clinical oncology External Advisor is independent and from a different Deanery, and that reciprocal arrangements should not exist. The External Advisor should review at least 10% of the ARCP outcomes and any recommendations from the panel about trainees for whom there is concern over progress. Educational Supervisors will be required to undertake a detailed assessment of their trainees' portfolios in preparation for the annual Educational Supervisor's Structured Report for each trainee. The External Advisor should ensure that curriculum delivery across a training programme is of an acceptable standard on the basis of the Educational Supervisors Structured Reports, evidence of work-place based assessments being performed in a timely manner, interviews with trainees in difficulties and the results of Fellowship examinations. The External Advisor should produce a summary report on the ARCP process to be forwarded to the Chairperson of the Deanery STC, and which can be used as an evidence source for the Deanery Annual Specialty Report. The summary report will also form part of the evidence used to compile an annual report on each training programme for the RCR Faculty of Clinical Oncology. Clinical oncology External Advisors require formal training in appraisal and assessment, equality and diversity, requirements of the Gold Guide, and GMC's Standards for Trainers. Full details are available on the RCR website.

5.5 ARCP decision aid

Standards for satisfactory ARCP progression (Outcome 1)

The tables that follow (Tables 1-5) define the minimum requirement for progression for each year of training. It is anticipated that trainees will at times cover parts of the

syllabus beyond the minimum defined, especially when acquiring tumour site-specific competencies. Trainees are expected to build year-on-year on the competencies previously acquired.

Workplace-based assessments should sample across the entire curriculum and be conducted in a timely manner throughout each clinical attachment (i.e. generally spread evenly through training and not all completed in the final weeks of an attachment).

List of abbreviations in the ARCP decision grid (Tables 1-5):

Workplace-based assessments:

CbD	Case-based Discussion
DORPS	Directly Observed assessment of Radiotherapy Planning Skills
DOST	Directly Observed assessment of Systemic Therapy skills
mini-CEX	mini-Clinical Evaluation Exercise
MSF	Multi-Source Feedback

Other

CCT	Certificate of Completion of Training
GCP	Good Clinical Practice
FRCR	Fellowship of the Royal College of Radiologists
MRCP	Membership of the Royal College of Physicians
ST	Specialty training year

Table 1. The minimum requirements for progression from year ST3 to ST4.

Progression point	ST3 to ST4
Curriculum coverage and competencies achieved	<p>Common (generic) competencies:</p> <ul style="list-style-type: none"> • 30% of intermediate competencies completed <p>Core clinical oncology competencies:</p> <ul style="list-style-type: none"> • Introductory module completed • Oncological emergencies module completed • Core tumour site-specific competencies for at least one Group A tumour completed • Started to acquire core competencies for at least one other tumour site
Satisfactory workplace-based assessments ¹ A minimum of 50% to be assessed by a consultant oncologist	<p>2 Cbd 2 DORPS 2 DOST 2 mini-CEX MSF</p>
Clinical Trials and GCP	Current GCP certificate

¹See Section 5.2 (Assessment blueprint)

Table 2. The minimum requirements for progression from year ST4 to ST5.

Progression point	ST4 to ST5
Curriculum coverage and competencies achieved	<p>Common (generic) competencies:</p> <ul style="list-style-type: none"> • 60% of intermediate competencies completed in total <p>Core clinical oncology competencies:</p> <ul style="list-style-type: none"> • Core tumour site-specific competencies for all Group A tumours completed <p>Intermediate tumour site-specific competencies:</p> <ul style="list-style-type: none"> • Started to acquire intermediate competencies for at least one Group B to D tumour
Satisfactory workplace-based assessments ¹ A minimum of 50% to be assessed by a consultant oncologist	4 CbD 4 DORPS 4 DOST 4 mini-CEX Patient Survey QIPAT Teaching Observation
Examinations	First FRCR
Clinical Trials and GCP	Current GCP certificate

¹See Section 5.2 (Assessment blueprint)

Table 3. The minimum requirements for progression from year ST5 to ST6.

Progression point	ST5 to ST6
Curriculum coverage and competencies achieved	Intermediate common (generic) competencies completed Intermediate tumour site-specific competencies completed
Satisfactory workplace-based assessments ¹ A minimum of 75% to be assessed by a consultant clinical oncologist	4 CbD 4 DORPS 4 DOST 4 mini-CEX Patient Survey MSF
Clinical Trials and GCP	Current GCP certificate

¹See Section 5.2 (Assessment blueprint)

Table 4. The minimum requirements for progression from year ST6 to ST7.

Progression point	ST6 to ST7
Curriculum coverage and competencies achieved	Common (generic) competencies: <ul style="list-style-type: none"> • Started to acquire advanced competencies Advanced clinical oncology training: <ul style="list-style-type: none"> • Started to acquire advanced tumour site-specific competencies in at least one tumour site
Satisfactory workplace-based assessments ¹ A minimum of 75% to be assessed by a consultant clinical oncologist	6 CbD 4 DORPS 4 DOST 2 mini-CEX QIPAT Patient Survey Teaching Observation
Examinations	Final FRCR
Clinical Trials and GCP	Current GCP certificate

¹See Section 5.2 (Assessment blueprint)

Table 5. The minimum requirements for progression from year ST7 to CCT.

Progression point	ST7 to CCT
Curriculum coverage and competencies achieved	Advanced common (generic) competencies completed Advanced tumour site-specific competencies completed for at least two cancer sites
Satisfactory workplace based assessments ¹ A minimum of 75% to be assessed by a consultant clinical oncologist	6 CbD 4 DORPS 4 DOST 2 mini-CEX QIPAT Teaching Observation MSF
Clinical Trials and GCP	Current GCP certificate

¹See Section 5.2 (Assessment blueprint)

5.5 Complaints and appeals

The RCR has complaints procedures and appeals regulations that apply to all examinations run by the Royal Colleges of Radiologists and that are documented on its website.

All workplace-based assessment methods incorporate direct feedback from the assessor to the trainee and an opportunity to discuss the outcome. If a trainee has a complaint about the outcome from a specific assessment this is their first opportunity to raise it. If the trainee does not feel that the complaint has been adequately addressed, the trainee should raise the issue with his or her educational supervisor. If the complaint remains unresolved, this will be handled by the Deanery as outlined below.

Appeals against decisions concerning ARCP outcomes will be handled at Deanery level, and Deaneries are responsible for setting up and reviewing suitable processes. If a formal complaint about assessment is to be pursued, this should be referred in the first instance to the chair of the STC who is accountable to the regional Deanery. Continuing concerns should be referred to the Associate Dean.

6 Supervision and feedback

6.1 Supervision

All trainees will be provided with a local Educational and Clinical Supervisor by the TPD/STC.

All elements of work in training posts must be supervised appropriately. The level of supervision will vary depending on the experience of the trainee, the clinical context and the case mix of patients. Outpatient and radiotherapy planning supervision must routinely include the opportunity to discuss all cases if required. As training progresses, the trainee should have the opportunity for increasing autonomy, consistent with safe and effective care for the patient.

The responsibilities of supervisors have been defined by GMC in the document "Operational Guide for the GMC Quality Framework". These definitions have been agreed with the National Association of Clinical Tutors, the Academy of Medical Royal Colleges and the Gold Guide team at MMC, and are reproduced as follows:

Educational Supervisor. A trainer who is selected and appropriately trained to be responsible for the overall supervision and management of a specified trainee's educational progress during a training placement or series of placements. The Educational Supervisor is responsible for the trainee's educational agreement.

Clinical Supervisor. A trainer who is selected and appropriately trained to be responsible for overseeing a specified trainee's clinical work and providing constructive feedback during a training placement. Some training programmes appoint an Educational Supervisor for each placement. The roles of Clinical and Educational Supervisor may then be merged.

The Educational Supervisor should be part of the clinical specialty team. Thus, if the clinical directorate (Clinical Director) have any concerns about the performance of the trainee, or there are issues of doctor or patient safety, these would be discussed with the Educational Supervisor. These processes, which are integral to trainee development, must not detract from the statutory duty of the trust to deliver effective clinical governance through its management systems.

The GMC has published plans for implementing new arrangements for the formal recognition of trainers, with local systems to be in place by July 2013 and all trainers in the roles of educational supervisor and clinical supervisor to be fully recognised by July 2016. Resources to support trainees and trainers can be found on the RCR website.

Roles and responsibilities of the Educational Supervisor

The Educational Supervisor is central to the trainee's learning experience and progress through training, and is responsible for ensuring that clear learning objectives and outcomes are set. The Educational Supervisor has a responsibility for the trainee's longitudinal supervision during a period of training. He or she should provide effective and timely processes for appraisal, advice and support and may be based outside the trust in which the trainee is currently based. The trainee should have the same Educational Supervisor for at least one year, and the Educational Supervisor may be the same person throughout the whole of training. At times the Clinical Supervisor and Educational Supervisor may be the same person.

Educational Supervisors will be trained to fulfil their roles to comply with GMC guidance, “Standards for Educational Supervisors”.

An Educational Supervisor should be responsible for a maximum of four trainees at any given time.

The responsibilities of the Educational Supervisor are to:

- Have overall educational responsibility for an individual trainee for a period of training.
- Ensure that the trainee is making the necessary clinical and educational progress.
- Ensure that the trainee is meeting with his or her Clinical Supervisor(s) on a regular basis and that an appropriate learning and development plan is in place for each clinical attachment in compliance with the curriculum for clinical oncology.
- Help the trainee to develop his or her learning educational objectives, and ensure that these are documented and can be used as a point of reference for future appraisal and review.
- Ensure that the trainee’s Clinical Supervisor(s) understand(s) the trainee’s educational needs.
- Appraise the trainee as a minimum at the beginning, middle and end of each year of training.
- Review the trainee’s progress by:
 - Reviewing the trainee’s portfolio.
 - Ensuring that appropriate work-place based assessments have been undertaken.
 - Liaising with the trainee’s Clinical Supervisor(s).
- Meet with the trainee at the beginning of each year of training to:
 - Review the outcome of the ARCP.
 - Help the trainee to formulate his or her personal learning and development plan to meet the requirements of the clinical oncology curriculum, including:
 - Clinical attachments to be undertaken.
 - Appropriate audit/quality improvement, teaching and management experience.
 - Develop a learning agreement and set educational objectives with the trainee which are mutually agreed and are the point of reference for future appraisal for the coming year.
- Meet with the trainee prior to the ARCP to:
 - Ensure that the trainee has made the necessary clinical and educational progress through the previous year, taking into account:
 - Workplace-based assessment outcomes.
 - Examination results if appropriate.
 - Clinical Supervisors’ reports.

- Audits, quality improvement projects, research projects undertaken, teaching and management experience.
 - The trainee's learning and development plan.
 - Discuss the content of the ARCP report.
- Ensure that the Educational Supervisor's Structured Report to inform the ARCP of the trainee's progress is returned within the necessary timescales. This includes:
 - A detailed review and synopsis of the trainee's learning portfolio.
 - The outcome of examinations.
 - A summary of feedback from Clinical Supervisors.
- Meet with the trainee if concerns arise about the trainee's performance.
- Contact the employer (usually the Medical Director) and the Postgraduate Dean should the level of performance of a trainee gives rise for concern.
- Undertake the trainee's workplace-based NHS appraisal, linking the educational appraisal and performance review based on GMP.
- Provide advice and support to the trainee as requested.
- Help the trainee to access career management advice.
- Support the delivery of the educational contract which exists between employers which provide postgraduate training (e.g. Trusts) and postgraduate Deaneries.
- Document clearly any responsibilities that have been delegated to the trainee's Clinical Supervisor.

Employers of Educational Supervisors must recognise this role within the consultant's job plan.

Roles and responsibilities of the Clinical Supervisor

The Clinical Supervisor is responsible for supervising the trainee during a clinical attachment. The role of Clinical Supervisor may only be undertaken by consultants who are appropriately trained.

There must be a named Clinical Supervisor for each tumour site-specific aspect of a clinical attachment. Where a trainee is working with more than one consultant covering the same tumour site, only one of these consultants will act as the Clinical Supervisor. In contrast, where a trainee is working with consultants covering different tumour sites both consultants should act as Clinical Supervisor for each specific tumour site. If there is no trained Clinical Supervisor available for a clinical attachment, the responsibilities for clinical supervision should be undertaken by the trainee's Educational Supervisor.

The arrangements for supervision should be agreed by the Educational Supervisor, Clinical Supervisor and the trainee concerned. The duration of responsibility should be defined at the beginning of the period.

The Clinical Supervisor's responsibilities are to:

- Ensure that the trainee is making the necessary clinical and educational progress.
- Meet with the trainee on a regular basis:
 - At least every three months.
 - At the beginning and end of each clinical attachment.
 - In the middle of a clinical attachment, if there are any concerns after contacting the trainee or reviewing the trainee's portfolio.
- Help the trainee to formulate his or her personal learning and development plan:
 - For each clinical attachment.
 - Including appropriate audit/quality improvement, teaching and management experience.
 - In compliance with the curriculum for clinical oncology.
- Help the trainee to develop his or her learning educational objectives, and to ensure that these are documented and can be used as a point of reference for future appraisal.
- Ensure that other consultants with whom the trainee is working in the site-specialist team understands the trainee's educational needs if appropriate.
- Review the trainee's progress by:
 - Reviewing the trainee's portfolio.
 - Ensuring that there are appropriate opportunities to undertake workplace-based assessments.
 - Ensuring that appropriate workplace-based assessments have been completed.
 - Liaising with other consultants with whom the trainee is working.
- Provide regular feedback to the trainee on his or her progress.
- Notify the Educational Supervisor if the trainee's performance gives rise to concern. The Educational Supervisor has responsibility for ensuring that these issues are addressed.
- Support the delivery of the educational contract which exists between employers which provide postgraduate training (e.g. Trusts) and postgraduate Deaneries.

Employers of Clinical Supervisors must recognise this role within the consultant's job plan.

Training Educational and Clinical Supervisors

All clinical oncology Educational and Clinical Supervisors must have attended a local (Deanery) course for Educational Supervisors and have received additional training in those areas of supervision specific to clinical oncology. The RCR holds regular training days for Educational and Clinical Supervisors to address the latter. At least one supervisor from each training programme is required to attend. Attendees are then provided with an education pack to enable them to roll out training to their colleagues locally.

The RCR has held similar training days on the use of workplace-based assessments and used the same method to roll out training to each training programme.

6.2 Appraisal and feedback

A formal process of appraisals and reviews underpins training. This process ensures adequate supervision during training, and it provides continuity between different rotational attachments and supervisors. All appraisals should be recorded in the RCR ePortfolio. Opportunities for feedback to trainees about their performance will arise through the use of the workplace-based assessments, regular appraisal meetings with supervisors, other meetings and discussions with supervisors and colleagues, and feedback from the ARCP.

Annual Induction Appraisal

The trainee and Educational Supervisor should have an appraisal meeting at the beginning of each year to review the trainee's progress so far, set the learning objectives for the trainee to achieve over the course of the coming year and identify the learning opportunities presented by the post. Reviewing progress through the curriculum will help trainees to compile an effective Personal Development Plan (PDP) of objectives for the upcoming year. This PDP should be agreed during the Annual Induction Appraisal. The trainee and supervisor should also both sign the educational agreement in the ePortfolio at this time, recording their commitment to the training process.

Mid-year Review

This meeting is an opportunity to review progress, and it provides a guide to the trainee and Educational Supervisor about what still needs to be done to achieve the learning objectives for the year. At this meeting trainees should review their PDP with their supervisor using evidence from the ePortfolio. Workplace-based assessments and progress through the curriculum can be reviewed to ensure trainees are proceeding satisfactorily, and attendance at educational events should also be reviewed. The PDP can be amended at this review.

End-of-year Appraisal

Trainees should review the PDP and their curriculum progress with their Educational Supervisor using evidence from the ePortfolio. Specific concerns may be highlighted from this appraisal. The past year should be reviewed, including achievements, plus any areas which still need development or give cause for concern. The End-of-year Appraisal presents an opportunity to prepare for completion of the Educational Supervisor's Structured Report prior to the ARCP.

Clinical Supervisor's meetings

The trainee and Clinical Supervisor should have a meeting at the beginning of each rotational attachment to review the trainee's progress so far, agree learning

objectives for the attachment ahead and identify the learning opportunities presented by the attachment. The PDP and the learning objectives for the year should be reviewed. The Clinical Supervisor should also add learning objectives which are relevant to that particular rotational attachment.

A Mid-point Review is not mandatory, but is encouraged, particularly if either the trainee or Clinical Supervisor has training concerns. At this meeting, trainees should review their PDP with their supervisor using evidence from the ePortfolio. Workplace-based assessments and progress through the curriculum can be reviewed to ensure trainees are proceeding satisfactorily, and attendance at educational events should also be reviewed. The PDP can be amended at this review.

At the end of the rotational attachment, trainees should review both the PDP and their curriculum progress with their Clinical Supervisor using evidence from the ePortfolio. Specific concerns may be highlighted from this appraisal. The End of Attachment Appraisal form should record the areas where further work is required to overcome any shortcomings. Further evidence of competence in certain areas may be needed, such as planned workplace-based assessments, and these should be recorded. If there are significant concerns following the End of Attachment Appraisal then the Educational Supervisor and Training Programme Director should be informed.

7 Managing curriculum implementation

Educational and Clinical Supervisors will have access to training provided by their Deaneries and by the RCR, which that includes workplace-based assessments, the ePortfolio, and the roles of Educational and Clinical Supervisors.

The RCR document “Quality Assurance of Specialty Training, Role of the RCR Faculty of Clinical Oncology, External Peer Review” outlines a framework for the role of the College in the Quality Assurance (QA) of clinical oncology training and is available on the College website. This is to ensure that consistent national standards are maintained, that there is sharing of exceptional practice, and that educational strategies are meeting individual learning needs. A clinical oncology External Advisor will be appointed to each training programme. These External Advisors will be Regional Specialty Advisors (RSAs) in their own training programmes. They will be involved in the ARCP process, and they will produce a report on this for the Deanery and the Faculty of Clinical Oncology. They will also be available to give external advice on clinical oncology training issues as necessary, at the Deanery’s request. The RCR will review a report on each training programme prepared with joint input from the local RSA and the External Advisor annually. The RCR will use the information from these annual training programme reports to compile its annual report to GMC on the national state of clinical oncology specialty training. The External Advisor will also work in conjunction with the Deanery for triggered visits to training programmes if there are issues relating to curriculum delivery.

7.1 Intended use of curriculum by trainers and trainees

This curriculum is a web-based document which is available from the RCR website.

Educational Supervisors and other trainers can access the up-to-date curriculum from the RCR website to use this as the basis of their discussion with trainees. Both trainers and trainees are expected to have a good knowledge of the curriculum and they should use it as a guide for their training programme.

Each trainee will demonstrate their engagement with the curriculum by maintaining an ePortfolio. The trainee will use the curriculum to develop learning objectives and reflect on learning experiences.

The RCR will help to ensure that trainees experience training that reflects the curriculum through:

- RSAs who attend regular meetings at the RCR and who sit on the Deanery STCs.
- Provision of the curriculum on the RCR website.
- Provision of the ePortfolio which supports the curriculum including recording appraisals and workplace-based assessments.
- Provision of training days (workplace-based assessments, ePortfolio and supervisor roles).
- QA, including provision of External Advisors for each training programme.

7.2 Recording progress

On enrolling with RCR, trainees will be given access to the ePortfolio for clinical oncology. The ePortfolio allows evidence to be built up to inform decisions on a trainee's progress, and it provides tools to support trainees' education and development.

The trainee's main responsibilities are to ensure their ePortfolio is kept up to date, arrange assessments and ensure they are recorded, prepare drafts of appraisal forms, maintain their PDP, record their reflections on learning and record their progress through the curriculum.

The supervisor's main responsibilities are to use ePortfolio evidence such as outcomes of assessments, reflections and PDPs to inform appraisal meetings. They are also expected to update the trainee's record of progress through the curriculum, write end-of-attachment appraisals and supervisor's reports.

Deaneries, training programme directors, college tutors and ARCP panels may use the ePortfolio to monitor the progress of trainees for whom they are responsible.

The RCR will use summarised, anonymous ePortfolio data to support its work in quality assurance.

All appraisal meetings, personal development plans and workplace based assessments (including MSF) should be recorded in the ePortfolio. Trainees and supervisors should electronically sign the educational agreement. Trainees are encouraged to reflect on their learning experiences and to record these in the ePortfolio. Reflections can be kept private or shared with supervisors.

Reflections, assessments and other ePortfolio content should be linked to curriculum competencies in order to provide evidence towards acquisition of those competencies. Trainees can add their own self-assessment ratings to record their view of their progress. The aims of the self-assessment are:

- To provide the means for reflection and evaluation of current practice
- To inform discussions with supervisors to help both gain insight and assists in developing personal development plans.
- To identify shortcomings in experience, competencies and other areas defined in the curriculum in order to guide future clinical exposure and learning.

Supervisors can sign-off and comment on curriculum competencies to build up a picture of progression and to inform ARCP panels.

8 Curriculum review and updating

The curriculum was originally developed by the Faculty of Clinical Oncology STAC, RSAs in the UK, representatives of the ORF, members of the First and Final FRCR Examination Boards, Fellows of the College with specialist training in ethics, and managers of cancer centres. The Clinical Oncology Patient Liaison Group was consulted via its members on STAC and the Faculty's Specialty Training Board. TPDs and Fellows of the RCR were also consulted. The document was approved by the Specialty Training Board of the Faculty of Clinical Oncology of the RCR, which also includes lay representation.

In 2016, the curriculum and syllabus was amended to include VMAT and the oncology emergencies section was revised to include VTE, recognition of when escalation of care is indicated and to reflect the need to refer to other specialties when indicated. The existing Audit Assessment (AA) tool was replaced with the Quality Improvement Project and Audit Assessment tool (QIPAT) to allow both audits and quality improvement projects to be assessed.

In 2015, the curriculum was subject to minor revisions and re-wording for clarification purposes, and to introduce the accreditation of transferrable competences.

In 2013 the curriculum and syllabus were reviewed by the Curriculum Committee. The main changes were to revise the elements of the curriculum relating to training in IMRT and IGRT.

In 2012 the STAC was replaced and curriculum revision is now undertaken by the RCR's clinical oncology Curriculum Committee, reporting to the Specialty Training Board.

A 2012 update to the 2010 curriculum was undertaken for the Specialty Training Board by a curriculum review group chaired by the Warden of the Faculty and comprising members of the First FRCR Examination Board, the STAC and a trainee member from the Oncology Registrar's Forum (ORF). The main changes of significance were to the scientific knowledge required to support core training - Cancer Biology and Radiobiology, Clinical Pharmacology, Medical Statistics and Physics.

The 2010 version of the curriculum replaced the previous version dated 2007, with changes to ensure the curriculum met the General Medical Council's (GMC's) Standards for Curricula and Assessment, and it incorporated revisions to the content and delivery of the training programme. Major changes from the previous curriculum include the incorporation of leadership, health inequalities and common competencies.

The Curriculum Committee meets during the year to review the function of the curriculum and identify any changes that might be required, especially in the light of new developments in clinical oncology. Amendments that may be required will be agreed by the Specialty Training Board and will then be submitted GMC for approval. The RCR will undertake a formal review of the curriculum at least every two years.

9 Equality and diversity

The Royal College of Radiologists will comply, and ensure compliance, with the requirements of the Equality Act 2010.

The Royal College of Radiologists believes that equality of opportunity is fundamental to all clinical oncology practice and to the many and varied ways in which individuals become involved with the College, either as members of staff and Officers; as advisers from the medical profession or in a lay capacity; as members of the College's professional bodies or as clinical oncologists in training and examination candidates. Accordingly, it warmly welcomes contributions and applications from as diverse a population as possible, and actively seeks to recruit people to all its activities regardless of race, religion, ethnic origin, disability, age, gender or sexual orientation.

Deanery quality assurance will ensure that each training programme complies with the equality and diversity standards in postgraduate medical training as set by GMC. Compliance with anti-discriminatory practice will be assured through:

- Monitoring of recruitment processes.
- Ensuring all College representatives have attended appropriate training sessions prior to appointment or within 12 months of taking up post.
- Ensuring trainees have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature.
- Monitoring of College examinations.
- Ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly disadvantage trainees because of gender, ethnicity, sexual orientation or disability (other than that which would make it impossible to practise safely as a clinical oncologist). All efforts shall be made to ensure the participation of people with disabilities in training.

The Royal College of Radiologists takes its obligations under the relevant equal opportunities legislation seriously. This includes ensuring that members of staff involved in the delivery of examinations receive appropriate briefing on the implications of race equality in the treatment of candidates.

Those appointed as examiners must demonstrate that they have undergone appropriate equality and diversity training and that they are willing to abide by good practice in these areas.

The RCR has an Adjustments Procedure for FRCR Examinations published on our website which provides a formal means for candidates to submit a request for an adjustment to be applied in examinations to compensate for disability. All adjustment requests will be considered by the College in a fair and consistent way.