

Appendix 1

RCR Clinical Oncology Syllabus

Sections

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List of abbreviations

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 |
| PS | Patient Survey |

Others

| | |
|--------|--|
| ARSAC | Administration of Radioactive Substances Advisory Committee |
| BMA | British Medical Association |
| DVH | Dose volume histogram |
| FRCR | Fellowship of the Royal College of Radiologists |
| GMC | General Medical Council |
| GMP | Good medical practice |
| ICRU | International Commission on Radiation Units and Measurements |
| IRMER | Ionising Radiation (Medical Exposure) Regulations |
| MDT | Multidisciplinary team |
| NCEPOD | National Confidential Enquiry into Patient Outcome and Death |
| NHSMEE | NHS Medical Education England |

Domains of Good Medical Practice (GMP) Key

| | | | |
|---|-----------------------------------|---|---|
| 1 | Knowledge, Skills and Performance | 3 | Communication, Partnership and Teamwork |
| 2 | Safety and Quality | 4 | Maintaining Trust |

It is expected that trainees will maintain knowledge, skills and behaviours previously learned and build on them as they progress through training, so that by CCT they will have developed all of the skills required to work as a consultant in clinical oncology. **All of the knowledge, skills and behaviours acquired during intermediate clinical oncology training may be assessed in the Final FRCR examination.**

The workplace-based assessment (WpBA) 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. WpBAs 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). This document should be used in conjunction with the ARCP Decision Aid (Curriculum Section 5.5)

1 Common competencies for clinical oncology

Underpinning attitudes and behaviours

Common competencies identified in this section are generic competencies that are required by clinical oncologists. They build upon each area of competence which a trainee has acquired during core medical training. It is recognised that for many of the competences outlined there is a maturation process whereby the doctor becomes more adept and skilled as his/her career and experience progresses.

All the clinical learning outcomes listed in this curriculum are underpinned by appropriate attitudes and behaviours. These are drawn from Good Medical Practice (GMP).

1.1 Personal behaviour

To demonstrate the behaviours that will enable the doctor to become a senior leader able to deal with complex situations and difficult behaviours and attitudes.

To work increasingly effectively with many teams and to be known to put the quality and safety of patient care as a prime objective

To demonstrate the attributes of someone who is trusted to be able to manage complex human, legal and ethical problem.

To be someone who is trusted and is known to act fairly in all situations

| Knowledge | Assessment Methods | GMP |
|--|------------------------------------|-------|
| Defines the concept of modern medical professionalism | CbD | 1 |
| Outlines the relevance of professional bodies (Royal Colleges, NHSMEE , GMC, Postgraduate Deaneries, BMA, medical defence societies, etc) | CbD | 1 |
| Skills | | |
| Practises with professionalism, showing: <ul style="list-style-type: none"> • integrity • compassion • altruism • continuous improvement • aspiration to excellence • respect of cultural and ethnic diversity • regard to the principles of equity | CbD, mini-CEX, MSF, Patient Survey | 1,2,4 |
| Works in partnership with patients and members of the wider healthcare team | CbD, mini-CEX, MSF | 3 |
| Liaises with colleagues to plan and implement work rotas | MSF | 3 |
| Promotes awareness of the doctor's role in utilising healthcare resources optimally and within defined resource constraints | CbD, mini-CEX, MSF | 1,3 |
| Recognises and responds appropriately to unprofessional behaviour in others | CbD | 2,3 |

| Behaviour | | |
|---|---|---------|
| Recognises personal beliefs and biases and understand their impact on the delivery of health services | CbD, mini-CEX, MSF | 1,3 |
| Refers patients on appropriately where personal beliefs and biases could impact upon professional practice | CbD, mini-CEX, MSF | 1,3 |
| Uses all healthcare resources prudently and appropriately | CbD, DOST, DORPS, mini-CEX | 1,2 |
| Improves clinical leadership and management skill | CbD, mini-CEX | 1 |
| Recognises situations when it is appropriate to involve professional and regulatory bodies | CbD, mini-CEX | 1 |
| Acts as a leader, mentor, educator and role model where appropriate | CbD, mini-CEX, MSF | 3 |
| Continues to: | CbD, mini-CEX | 2,3,4 |
| <ul style="list-style-type: none"> • Deal with inappropriate patient and family behaviour • Respect the rights of children, elderly, people with physical, mental, learning or communication difficulties • Adopt an approach to eliminate discrimination against patients from diverse backgrounds including age, gender, race, culture, disability, spirituality and sexuality • Place needs of patients above own convenience • Behave with honesty and probity • Act with sensitivity in a non-confrontational manner | | |
| Accepts mentoring as a positive contribution to promote personal professional development | CbD, mini-CEX, MSF | 1 |
| Participates in professional regulation and professional development | CbD, mini-CEX, MSF | 1 |
| Takes part in 360 degree feedback as part of appraisal | CbD, MSF | 1,2,3,4 |
| Promotes the right for equity of access to healthcare | CbD, mini-CEX, | 3,4 |
| Demonstrates reliability and accessibility throughout the healthcare team | CbD, mini-CEX, MSF | 3,4 |
| Level Descriptors | | |
| Intermediate | <p>Responds to criticism positively and seeks to understand its origins and works to improve</p> <p>Praises staff when they have done well and where there are failings in delivery of care provides constructive feedback</p> <p>Comprehends when other staff are under stress and not performing as expected and provides appropriate support for them</p> <p>Takes action necessary to ensure that patient safety is not compromised</p> | |
| Advanced | <p>Engenders trust so that staff feel confident about sharing difficult problems and feel able to point out deficiencies in care at an early stage</p> <p>Helps patients who show anger or aggression with staff or with their care or situation and works with them to find an approach to manage the difficulties being experienced by the patient and the healthcare team</p> | |

1.2 Time management and decision making

To prioritise and organise clinical and clerical duties to optimise patient care and makes appropriate decisions to optimise the effectiveness of the clinical team.

| Knowledge | Assessment Methods | GMP |
|--|---|-----|
| Illustrates the need to prioritise work according to urgency and importance | CbD | 1 |
| Illustrates the roles, competences and capabilities of other professionals and support workers | CbD | 1,3 |
| Outlines techniques for improving time management | CbD | 1 |
| Demonstrates the importance of prompt investigation, diagnosis and treatment in patient management | CbD, mini-CEX | 1,2 |
| Skills | | |
| Maintains focus on individual patient needs whilst balancing competing pressures | CbD | 1 |
| Organises and manages workload effectively and flexibly. | CbD, mini- CEX | 1 |
| Makes appropriate use of other professionals and support workers | CbD, mini-CEX | 1,3 |
| Behaviours | | |
| Works flexibly and deals with tasks in an effective and efficient fashion | CbD, MSF | 1,3 |
| Recognises when you or others are falling behind and take steps to rectify the situation | CbD, MSF | 2,3 |
| Communicates changes in priority to others | DORPS, DOST, MSF | 1,3 |
| Remains calm in stressful or high pressure situations and adopt a timely, rational approach | MSF | 1 |
| Appropriately recognises and handles uncertainty within the consultation | mini-CEX, MSF | 1 |
| Level Descriptors | | |
| | Completes work in a timely fashion Organises own work efficiently and supervises work of others | |
| Intermediate | Recognises the most important tasks and responds appropriately Anticipates when priorities should be changed Starting to lead and direct the clinical team in effective fashion Supports others who are falling behind Requires minimal organisational supervision | |
| Advanced | Automatically prioritises, reprioritises and manages workload efficiently Takes responsibility for organising the clinical team Manages, supervises or guides the work of more than one team, e.g. out patient and ward teams Provides calm leadership in stressful situations | |

1.3 Decision making and clinical reasoning

To develop the ability to formulate a diagnostic and therapeutic plan for a patient according to the clinical information available

To develop the ability to prioritise the diagnostic and therapeutic plan

To be able to communicate a diagnostic and therapeutic plan appropriately

| Knowledge | Assessment Methods | GMP |
|---|---|-------|
| Recognises the psychological component of disease and illness presentation | CbD, mini-CEX | 1 |
| Recognises how to use expert advice, clinical guidelines and algorithms | CbD, mini-CEX | 1 |
| Recognises and appropriately responds to sources of information accessed by patients | CbD, mini-CEX | 1 |
| Skills | | |
| Incorporates an understanding of the psychological and social elements of clinical scenarios into decision making through clinical reasoning | CbD, mini-CEX | 1 |
| Comprehends the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort | CbD, mini-CEX | 1 |
| Constructs an appropriate management plan in conjunction with the patient, carers and other members of the clinical team and communicates this effectively to the patient and carers where relevant | CbD, mini-CEX | 1,3,4 |
| Applies the relevance of an estimated risk of a future event to an individual patient | CbD, mini-CEX | 1,2 |
| Searches and comprehends medical literature to guide reasoning | Audit Assessment, CbD | 1 |
| Behaviours | | |
| Recognises the difficulties in predicting occurrence of future events | CbD, mini-CEX | 1 |
| Shows willingness to facilitate patient choice | CbD, mini-CEX | 3 |
| Shows willingness to search for evidence to support clinical decision making | CbD, mini-CEX | 1,4 |
| Level Descriptors | | |
| Intermediate | Develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence Institutes an appropriate investigative plan Institutes an appropriate therapeutic plan Seeks appropriate support from others Takes account of the patients wishes and records them accurately and succinctly | |

1.4 The patient as central focus of care

| To prioritise the patient's wishes encompassing their beliefs, concerns expectations and needs | | |
|---|---|-------|
| Knowledge | Assessment Methods | GMP |
| Outlines health needs of particular populations, e.g. ethnic minorities, and recognises the impact of health beliefs, culture and ethnicity on presentations of physical and psychological conditions | CbD | 1,3 |
| Describes sources of information and support for patients | MSF Patient Survey | 3 |
| Skills | | |
| Gives adequate time for patients and carers to express their beliefs ideas, concerns and expectations | mini-CEX | 1,3,4 |
| Ascertains the desire of the patient for information | mini-CEX, MSF Patient survey | 3 |
| Tailors the discussion and written information to the patients' requirements | mini-CEX, MSF Patient Survey | 1,3 |
| Supports patients and carers where relevant to comply with management plans | mini-CEX, MSF, Patient Survey | 1,3 |
| Encourages patients to voice their preferences and personal choices about their care | mini-CEX, Patient Survey | 3 |
| Behaviours | | |
| Responds to questions honestly and seeks advice if unable to answer | CbD, mini-CEX | 3 |
| Recognises the duty of the medical professional to act as patient advocate | CbD, mini-CEX, MSF, Patient Survey | 3,4 |
| Treats patients with respect and without discrimination, is polite, considerate and honest, shows respect for dignity and privacy. | mini-CEX, MSF, Patient Survey | 3,4 |
| Treats patients fairly and as individuals | mini-CEX, MSF, Patient Survey | 3,4 |
| Encourages patients to take an interest in their health and take action to improve and maintain it | mini-CEX, MSF, Patient Survey | 1,3 |
| Level Descriptors | | |
| Intermediate | Is sensitive to patients' cultural concerns and norms. Explains diagnoses and treatments in ways that enable patients to understand and make decisions about their own health care. | |
| Advanced | Discusses complex questions and uncertainties with patients and enables them to make decisions about difficult aspects of their health, e.g. to opt for no treatment or to make end of life decisions | |

1.5 Patient safety

| To prioritise patient safety throughout all clinical practice. | | |
|--|--|-----|
| Knowledge | Assessment Methods | GMP |
| Outlines the conditions required to maintain a safe working environment | CbD | 1 |
| Describes the toxicities of systemic therapies and safe handling of cytotoxic drugs | First FRCR, CbD | 1 |
| Describes the principles of radiation protection, including statutory frameworks and local rules | First FRCR | 1 |
| Skills | | |
| Works with colleagues in the healthcare team to ensure that patient care is organised in a way that ensures patient safety | CbD | 1 |
| Recognises and responds to a patient's deterioration or lack of response to therapy | CbD, mini-CEX, MSF | 1,2 |
| Improves patients' and colleagues understanding of the risks associated with treatment | CbD, mini-CEX | 1,3 |
| Ensures that procedures for safe practice are followed | CbD, mini-CEX | 1 |
| Behaviours | | |
| Maintains a high level of safety awareness at all times | CbD, mini-CEX | 2 |
| Takes appropriate action when concerns are raised about own performance or that of colleagues | CbD, mini-CEX, MSF | 2,3 |
| Continues to be aware of own limitations and operates within these | CbD, mini-CEX | 1 |
| Level descriptors | | |
| Intermediate | Assesses the risks across the system of care and works with colleagues from different department or sectors to ensure safety across the health care system. Involves the whole clinical team in discussions about patient safety Shows support for junior colleagues who are involved in untoward events. | |
| Advanced | Is fastidious about following safety protocols and ensures that junior colleagues do the same. Is able to explain the rationale for protocols. Demonstrates ability to lead an investigation of a serious untoward incident or near miss and synthesise an analysis of the issues and plan for resolution or adaptation | |

1.6 Team Working

To develop the ability to work well in a variety of different teams

To develop leadership skills required to lead a team to be more effective and able to deliver better patient care

| Knowledge | Assessment Methods | GMP |
|---|--|-------|
| Describes the roles and responsibilities of members of the healthcare team | CbD | 1,3 |
| Outlines factors adversely affecting a doctor's and team performance and methods to rectify these | CbD | 1,3 |
| Skills | | |
| Practises with attention to providing good continuity of care | CbD, mini-CEX | 1,3,4 |
| Creates accurate attributable patient notes, including appropriate use of electronic clinical record systems | CbD, mini-CEX | 1,3 |
| Delivers detailed hand over between shifts and areas of care | CbD, mini-CEX , MSF | 1,3 |
| Demonstrates leadership and management in the following areas: <ul style="list-style-type: none"> Coordinates and leads a team based approach to patient care Providing education and training for junior colleagues and other members of the healthcare team Dealing with deteriorating performance of colleague (e.g. stress, fatigue) Delivering high quality care | CbD, mini-CEX, MSF | 1,2,3 |
| Leads and participates in multi disciplinary team meetings | CbD, mini-CEX | 3 |
| Delegates appropriately whilst providing appropriate supervision to less experienced colleagues | CbD, MSF | 3 |
| Behaviours | | |
| Encourages an open environment to foster and explores concerns and issues about the functioning and safety of team working | CbD, MSF | 3 |
| Recognises limits of own professional competence and only practise within these | CbD, MSF | 3 |
| Demonstrates assertiveness when appropriate | CbD, MSF | 3 |
| Recognises and respects the request for a second opinion | CbD, MSF | 3 |
| Recognises the importance of induction for new members of a team | CbD, MSF | 3 |
| Recognises the importance of prompt and accurate information sharing with the multi disciplinary and Primary Care teams following hospital discharge | CbD, mini-CEX , MSF | 3 |
| Level descriptors | | |
| Intermediate | <p>Develops the leadership skills necessary to lead teams so that they are more effective and able to deliver better safer care</p> <p>Comprehends need for optimal team dynamics and promotes conflict resolution</p> <p>Demonstrates ability to convey to patients after a handover of care that although there is a different team, the care is continuous</p> <p>Leads multi-disciplinary team meetings allowing all voices to be heard and considered</p> <p>Fosters an atmosphere of collaboration</p> | |
| Advanced | <p>Comprehends situations in which others are better equipped to lead or where delegation is appropriate</p> <p>Ensures that team functioning is maintained at all times</p> <p>Promotes rapid conflict resolution</p> | |

1.7 Principles of quality and safety improvement

To recognise the desirability of monitoring performance, learning from mistakes and adopting no blame culture in order to ensure high standards of care and optimise patient safety

| Knowledge | Assessment Methods | GMP |
|--|---|---------|
| Describes local and national significant event reporting systems (NCEPOD, IRMER, morbidity and mortality, etc) and how this is dealt with within clinical oncology departments | CbD, mini-CEX | 1,2 |
| Outlines local health and safety protocols (fire, radiation protection, etc) | CbD | 1,2 |
| Understands risks associated with radiation, chemotherapy and biological therapies and mechanisms to reduce risk | CbD, First Part FRCR | 1 |
| Outlines potential Quality Improvement and Service Improvement tools such as Plan Do Study Act (PDSA), capacity and demand measurement, root cause analysis and audit | CbD | 1,2 |
| Demonstrates knowledge of sources of further support such as the NHS Institute for Innovation and Improvement and the Institute for Health Improvement | CbD | 1,2 |
| Skills | | |
| Adopts strategies to reduce risk | CbD | 1,2 |
| Recognises that governance safeguards high standards of care and facilitates the development of improved clinical services | CbD | 1,2 |
| Recognise importance of evidence-based practice in relation to clinical effectiveness | CbD | 1 |
| Reflects regularly on own standards of medical practice in accordance with GMC guidance on licensing and revalidation | CbD | 1,2,3,4 |
| Behaviours | | |
| Demonstrates a willingness to adhere to departmental protocols | CbD, MSF | 3 |
| Develops reflection in order to achieve insight into own professional practice | CbD, MSF | 2,3 |
| Demonstrates personal commitment to improve own performance in the light of feedback and assessment | CbD | 2 |
| Demonstrates a willingness to participate in, contribute to, respond positively to outcomes of safety and quality improvement strategies, e.g. <ul style="list-style-type: none"> • reporting adverse clinical incidents and taking part in the subsequent investigation in serious incidents • Audit of personal and departmental and directorate performance • Errors / discrepancy meetings • Critical incident and near miss reporting • Unit morbidity and mortality meetings • Local and national databases • Quality Improvement Project | CbD, Audit Assessment/Quality Improvement Project | 1,2,3 |
| Engages with an open no blame culture | CbD, MSF | 3 |

Level Descriptor

| | |
|--------------|---|
| Intermediate | Engages in quality improvement projects and audit and understands the importance of continuous improvement in quality and safety. Demonstrates personal and service improvement in performance Designs quality improvement projects including audits and demonstrates the role of medical leadership in effecting change |
|--------------|---|

1.8 Audit

| To be able to undertake a clinical audit and complete an audit cycle. | | |
|--|--|------|
| Knowledge | Assessment Methods | GMP |
| Defines the difference between audit and research | Audit assessment tool, CbD | 1 |
| Discusses the nature of the audit cycle, including the steps involved in the audit cycle and its role in improving patient care and services | Audit assessment tool | 1 |
| Identifies appropriate data collection, statistical and analytical methods for use in auditing practice | Audit assessment tool | 1 |
| Discusses change management and the importance of reducing resistance to change | Audit assessment tool, CbD | 1 |
| Describes the working and use of national and local databases for audit, e.g. cancer registries, cancer minimum dataset, cancer waiting times, NCEPOD | Audit Assessment tool, CbD | 1 |
| Skills | | |
| Designs, implements and completes audit cycles, including: <ul style="list-style-type: none"> Identifying an appropriate subject for audit Identifying suitable guidelines to audit against Designing a form for collection of relevant data Interpreting the data extracted and comparing this with the guidelines and reaching conclusions using appropriate statistical and analysis methods Developing an action plan Presenting the data, conclusions and possible action plan to an audit meeting Identifying the change in outcomes required Identifying the change in processes required to achieve those outcomes Negotiating with the individuals who can deliver those changes | Audit assessment tool | 1,2 |
| Contributes to local and national audit projects appropriately, e.g. NCEPOD | Audit assessment tool, CbD | 1,2 |
| Supports audit within the MDT | Audit assessment tool, CbD | 1,2 |
| Behaviours | | |
| Recognise the need for audit in clinical practice to promote standard setting and quality assurance | Audit Assessment tool, CbD | 1, 2 |
| Shows willingness to support changes identified as necessary by audits | Audit Assessment tool, CbD | 1,2 |
| Level Descriptors | | |
| Intermediate | Organises or leads a departmental audit Compares the results of an audit with criteria and standards to reach conclusions Uses the findings of an audit to develop and implement change Understands the links between audit and quality improvement | |
| Advanced | Leads a complete clinical audit cycle including development of conclusions, the changes needed for improvement, implementation of findings and re-audit to assess the effectiveness of the change Organises or leads a departmental audit meeting | |

1.9 Complaints and medical error

| To recognise the causes of error and to learn from them | | |
|--|---|-------|
| To realise the importance of honesty and effective apology | | |
| To take a leadership role in the handling of complaints | | |
| Knowledge | Assessment Methods | GMP |
| Describes the local complaints procedure | CbD, MSF | 1 |
| Recognises factors likely to lead to complaints (poor communication, dishonesty, clinical errors, adverse clinical outcomes etc) | CbD, MSF | 1 |
| Outlines the principles of an effective apology | CbD, MSF | 1 |
| Identifies sources of help and support for patients and self when a complaint is made about self or a colleague | CbD, MSF | 1 |
| Skills | | |
| Contributes to processes whereby complaints are reviewed and learned from | CbD, MSF | 1 |
| Recognises when something has gone wrong and identifies appropriate staff to communicate with | CbD, MSF | 1 |
| Delivers an appropriate apology and explanation (either of error or for process of investigation of potential error and reporting of the same) | CbD, MSF | 1,3,4 |
| Distinguishes between system and individual errors (personal and organisational) | CbD, MSF | 1 |
| Shows an ability to learn from previous error | CbD, MSF | 1 |
| Behaviours | | |
| Adopts behaviour likely to prevent causes for complaints | CbD, mini-CEX, MSF | 1, 3 |
| Deals appropriately with concerned or dissatisfied patients or relatives | CbD, mini-CEX, MSF | 1,3 |
| Acts with honesty and sensitivity in a non-confrontational manner | CbD, mini-CEX, MSF | 1,3,4 |
| Recognises the impact of complaints and medical error on staff, patients, and the National Health Service | CbD, MSF | 1,3 |
| Contributes to a fair and transparent culture around complaints and errors | CbD, MSF | 1,3,4 |
| Recognises the rights of patients, family members and carers to make a complaint | CbD, MSF | 1,4 |
| Recognises the impact of a complaint upon self and seeks appropriate help and support | CbD, MSF | 1,2,4 |
| Level Descriptors | | |
| Intermediate | Manages conflict without confrontation | |
| Advanced | Comprehends and responds to the difference between system failure and individual error | |
| | Comprehends and manages the effects of any complaint within members of the team | |
| | Takes active role in responding to complaints and provides timely accurate written response when required | |

1.10 Communication with colleagues and cooperation

To recognise and accept the responsibilities and role of the doctor in relation to other healthcare professionals

To communicate succinctly and effectively with other professionals as appropriate.

| Knowledge | | Assessment Methods | GMP |
|--|--|---------------------------------|-----|
| Demonstrates an understanding of the section in "Good Medical Practice" on Working with Colleagues, in particular: <ul style="list-style-type: none"> The roles played by all members of a multi-disciplinary team The principles of effective inter-professional collaboration to optimise patient care | | CbD, MSF | 1 |
| Describes the principles of confidentiality that provide boundaries to communicate | | CbD | 1 |
| Outlines techniques to manage anger and aggression in self and colleagues | | CbD | 1 |
| Describes responsibility of the doctor in the management of physical and/or mental ill health in self and colleagues. | | CbD | 1 |
| Skills | | | |
| Communicates accurately, clearly, promptly and comprehensively with relevant colleagues in a timely manner | | CbD, mini-CEX | 1,3 |
| Outlines procedures for seeking patient consent for disclosure of information and situations where consent while desirable is not obligatory | | CbD, mini-CEX | 1,3 |
| Employs behavioural management skills with colleagues to prevent and resolve conflict and enhance collaboration | | CbD, mini-CEX, MSF | 1,3 |
| Behaviours | | | |
| Shows awareness of the importance of multi-disciplinary teamwork, including adoption of a leadership role when appropriate but also recognising where others are better equipped to lead | | CbD, DORPS, DOST, mini-CEX, MSF | 3 |
| Fosters a supportive and respectful environment where there is open and transparent communication between all team members | | CbD, mini-CEX, MSF | 1,3 |
| Ensures appropriate confidentiality is maintained during communication with any member of the team | | CbD, mini-CEX, MSF | 1,3 |
| Recognises the need for a healthy work/life balance for the whole team | | CbD, mini-CEX, MSF | 1,3 |
| Accepts additional duties in situations of unavoidable and unpredictable absence of colleagues ensuring that the best interests of the patient are paramount | | CbD, MSF | 1 |
| Level Descriptors | | | |
| Intermediate | Fully comprehends the role of and communicates appropriately with all relevant potential team members (individual and corporate) | | |
| Advanced | Takes a leadership role as appropriate, fully respecting the skills, responsibilities and viewpoints of all team members | | |

1.11 Medical ethics and confidentiality

To know, understand and apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality

| Knowledge | | Assessment Methods | GMP |
|--|---|-------------------------------|-------|
| Outlines and follows the guidance given by the GMC on confidentiality | | CbD, mini-CEX | 1 |
| Defines the principles of Information Governance | | CbD, mini-CEX | 1 |
| Skills | | | |
| Uses and shares information with the highest regard for confidentiality, and encourages such behaviour in other members of the team | | CbD, mini-CEX, MSF | 1,2,3 |
| Recognise the problems posed by disclosure in the public interest, without patient's consent | | CbD, mini-CEX, MSF | 1,3,4 |
| Uses and promotes strategies to ensure confidentiality is maintained e.g. anonymisation | | CbD | 1,3 |
| Counsels patients on the need for information distribution within members of the immediate healthcare team | | CbD, MSF | 1, 3 |
| Counsels patients, family, carers and advocates tactfully and effectively when making decisions about resuscitation status, and withholding or withdrawing treatment | | CbD, mini-CEX, Patient Survey | 1,3 |
| Behaviours | | | |
| Encourages informed ethical reflection in others | | CbD, MSF | 1,3 |
| Shows willingness to seek advice of peers, legal bodies and the GMC where there are ethical dilemmas regarding confidentiality and information sharing | | CbD, mini-CEX, MSF | 1,4 |
| Respects patients' requests for information not to be shared, unless this puts the patient, or others, at risk of harm | | CbD, mini-CEX, Patient Survey | 1,4 |
| Shows willingness to share information with patients about their care, unless they have expressed a wish not to receive such information | | CbD, mini-CEX | 1,3 |
| Level descriptor | | | |
| Intermediate | Considers the need for ethical approval when patient information is to be used for anything other than the individual's care. Differentiates between confidentiality and anonymity | | |

1.12 Medical ethics and conflict of duty

| To know, understand and apply appropriately the principles and guidance regarding conflicts between different ethical duties | | |
|--|---|-------|
| Knowledge | Assessment Methods | GMP |
| Discusses the conflict between ethical duties both to the individual and between the individual patient and broader notions of justice | CBD, Final FRCR | 1,3,4 |
| Skills | | |
| Recognises the complexity of decision making where conflicting duties are at stake and justifies a decision on ethical grounds | CbD, Final FRCR | 1,4 |
| Explains to patients and their relatives concerns about treatments that are not normally funded | CbD, Final FRCR | 3,4 |
| Recognise the factors influencing ethical decision making, including religion, personal and moral beliefs, cultural practices | CbD, mini-CEX, MSF | 1,4 |
| Behaviours | | |
| Shows willingness to seek the opinion of others when making decisions about ethical issues | CbD, mini-CEX, MSF | 1,3 |
| Respects opinions of others, including patients, when making decisions about ethical issues | CbD, mini-CEX, MSF | 3,4 |
| Level descriptor | | |
| Intermediate | Balances conflicting issues to deliver optimal patient care | |

1.13 Medical ethics and autonomy and capacity

To know, understand and apply appropriately the principles and guidance regarding the concepts of autonomy and capacity.

| Knowledge | Assessment Methods | GMP |
|--|--|------------|
| Discusses the value and limitations of promotion of autonomy in medicine. | CbD, Final FRCR | 1,4 |
| Describes the components necessary for informed consent | CbD, Final FRCR | 1,3,4 |
| Describes the tests for Assessing Capacity | CbD, Final FRCR | 1,3,4 |
| Accepts the need to respect competent refusal | CbD, Final FRCR | 1,3,4 |
| Discusses the principles and implications of the Mental Capacity Act, advanced refusals, enduring power of attorney, independent mental capacity advocates | CbD, mini-CEX Final FRCR | 1 |
| Skills | | |
| Communicates honestly with patients and their relatives about their disease, benefits and side-effects of treatment and their prognosis | CbD, Final FRCR | 3,4 |
| Negotiates with relatives to avoid collusion with them to deny the patient information about their illness | CbD, Final FRCR | 3,4 |
| Assesses capacity and understands the legal and moral implications of its presence and absence. | CbD, Final FRCR | 3,4 |
| Behaviours | | |
| Treats patients with respect and without discrimination, is polite, considerate and honest, and shows respect for dignity and privacy. | CbD, mini-CEX, MSF | 3,4 |
| Treats patients fairly and as individuals | CbD, mini-CEX, MSF | 3,4 |
| Level descriptor | | |
| Intermediate | Shows ability to support decision making on behalf of those not competent to make decisions about their own care | |

1.14 Medical ethics and end of life issues

To understand the ethical and legal issues at the end of life and the concepts of acts, omissions and double effect.

| Knowledge | Assessment Methods | GMP |
|---|---|------|
| Defines the standards of practice defined by the GMC when deciding to withhold or withdraw life-prolonging treatment | CbD, mini-CEX | 1 |
| Appreciates that both acts and omissions carry moral and legal culpability but that whilst allowing patients to die may be defensible, killing them is not. | CbD, Final FRCR | 1 |
| Accepts that omissions are not legitimate where there is a clear duty to act | CbD, Final FRCR | 1 |
| Defines the doctrine of double effect | CBD, Final FRCR | 1 |
| Discusses the current guidance on DNAR orders and controversies about these | CBD, Final FRCR | 1 |
| Discusses the arguments for and against euthanasia and describes the legal position | CBD, Final FRCR | 1 |
| Identifies sources of advice for complex ethical/legal issues | CBD, Final FRCR | 1 |
| Skills | | |
| Applies clear and logical thinking around legal and ethical issues at the end of life | CBD, Final FRCR | 1 |
| Documents the issues and views that have been considered, the decisions reached and the reasoning behind those decisions in complex end of life decisions. | CBD, Final FRCR | 1,3 |
| Seeks, listens to and values other people's opinions in complex end of life decisions | CBD, Final FRCR | 1,3 |
| Behaviours | | |
| Show willingness to seek the opinion of others when making decisions about resuscitation status, and withholding or withdrawing treatment | CbD, mini-CEX, MSF | 1, 3 |
| Values consensus in complex end-of-life decision making | CBD, Final FRCR | 1,3 |
| Level descriptor | | |
| Intermediate | Supports the decision making around end of life issues, including those who are not competent to make decisions about their own care. | |

1.15 Valid consent

| To obtain valid consent from the patient | | |
|---|--|-------|
| Knowledge | Assessment Methods | GMP |
| Outlines the GMC guidance on consent | CbD, DOST, MSF | 1 |
| Skills | | |
| Gives the patient and his/her carers the information and time required to make an informed decision | CbD, DOST, mini-CEX, Patient Survey | 1,3 |
| Provides a balanced honest view of treatment options | CbD, DOST, mini-CEX, Patient Survey | 1,3,4 |
| Behaviours | | |
| Respects the patient's rights to autonomy | CbD, DOST, mini-CEX, Patient Survey | 1,3,4 |
| Shows willingness to seek advice or offer the patient a second opinion where appropriate | CbD, mini-CEX, MSF | 1,3,4 |
| Only obtains consent for procedures which they are not competent to perform, in accordance with GMC/regulatory guidance | CbD, mini-CEX | 1, 3 |
| Level Descriptor | | |
| Intermediate | Supports patients in decision making and obtains valid consent, including those not competent to make decisions about their own care | |

1.16 Legal framework for practice

To understand the legal framework within which healthcare is provided in the UK and/or devolved administrations in order to ensure that personal clinical practice is always provided in line with this legal framework

| Knowledge | Assessment Methods | GMP |
|---|--------------------|------|
| Illustrates that all decisions and actions must be in the best interests of the patient | CbD, mini-CEX | 1 |
| Describes the legislative framework within which healthcare is provided in the UK and/or devolved administrations, including: <ul style="list-style-type: none"> • death certification and the role of the Coroner/Procurator Fiscal • child protection legislation • mental health legislation (including powers to detain a patient and giving emergency treatment against a patient's will under common law); • advanced directives and living Wills • withdrawing and withholding treatment • decisions regarding resuscitation of patients • medical risk and driving • Data Protection and Freedom of Information Acts • IRMER | CbD, mini-CEX | 1, 2 |
| Outlines sources of medical legal information | CbD, mini-CEX | 1 |
| Describes disciplinary processes in relation to medical malpractice | CbD, mini-CEX, MSF | 1 |
| Outlines the role the medical practitioner in relation to personal health and substance misuse, including understanding the procedure to be followed when such abuse is suspected. | CbD, mini-CEX, MSF | 1 |
| Skills | | |
| Cooperates with other agencies with regard to legal requirements | CbD, mini-CEX | 1, 3 |
| Prepares appropriate medical legal statements for submission to the Coroner's Court, Procurator Fiscal and other legal proceedings and is prepared to present such material in court | CbD, MSF | 1 |
| Practices and promotes accurate documentation within clinical practice | CbD, mini-CEX | 1, 3 |
| Behaviour | | |
| Show willingness to seek advice from the employer, appropriate legal bodies (including defence societies), and the GMC on medico-legal matters | CbD, mini-CEX, MSF | 1 |
| Incorporates legal principles into day to day practice | CbD, mini-CEX | 1 |
| Demonstrates that all decisions and actions must be in the best interests of the patient | CbD, mini-CEX, MSF | 1, 3 |

Level Descriptors

| | |
|--------------|---|
| | Actively promotes discussion on medical legal aspects of cases within the clinical environment. |
| Intermediate | Participates in decision making with regard to resuscitation decisions and around decisions related to driving discussing the issues openly but sensitively with patients and relatives |
| | Works with external strategy bodies around cases that should be reported to them, collaborating with them on complex cases providing full medical legal statements as required and present material in Court where necessary |
| Advanced | Leads the clinical team in ensuring that medico- legal factors are considered openly and consistently wherever appropriate in the care and best interests of the patient, ensuring that patients and relatives are involved openly in all such decisions. |

1.17 Ethical research

| To ensure that research is undertaken using relevant ethical guidelines | | |
|--|-----------------------|-----|
| Knowledge | Assessment Methods | GMP |
| Outlines the GMC guidance on good practice in research | CbD | 1 |
| Describes the components of GCP | CbD | 1 |
| Describes the background behind ethical codes for scientific research (Nuremberg, Helsinki etc) | CbD | 1 |
| Defines the difference between audit and research | CbD, Audit assessment | 1 |
| Demonstrates a knowledge of research principles | CbD, First FRCR | 1 |
| Outlines the principles of formulating a research question and designing a project | CbD, mini-CEX | 1 |
| Comprehends principal qualitative, quantitative, bio-statistical and epidemiological research methods | CbD, First FRCR | 1 |
| Describes the mechanism of ethical approval for research studies | CbD | |
| Outlines sources of research funding | CbD | 1 |
| Discusses the ethical rationale and values the importance of scientific research | CbD | 1 |
| Discusses the potential for conflicting ethical values between patient care and scientific research and how these are resolved | CbD | 1 |
| Skills | | |
| Uses critical appraisal skills and applies these when reading literature | CbD, First FCR | 1 |
| Demonstrates the ability to write a scientific paper | CbD | 1 |
| Applies for appropriate ethical research approval | CbD | 1 |
| Understands the difference between population-based assessment and unit-based studies and be able to evaluate outcomes for epidemiological work | CbD, First FCR | 1 |
| Assesses research against the criteria to determine whether it is ethical, including: <ul style="list-style-type: none"> • Social/ Scientific value • Scientific validity • Fair subject selection • Favourable risk/ benefit ratio • Independent review • Informed consent • Respect for potential and enrolled subjects | CbD | 1 |
| Behaviour | | |
| Follows guidelines on ethical conduct in research and consent for research | CbD | 1 |
| Shows willingness to encourage and take part in research | CbD | 1 |

Level Descriptors

| | |
|--------------|--|
| Intermediate | Demonstrates critical appraisal skills and demonstrates ability to critically appraise a published paper |
| | Demonstrates knowledge of research organisation and funding sources |
| | Demonstrates ability to write a scientific paper |
| Advanced | Demonstrates ability to apply for appropriate ethical research approval if appropriate |
| | Provides leadership in research when relevant |
| | Promotes research activity |

1.18 Evidence and guidelines

To make the optimal use of current best evidence in making decisions about the care of patients
To develop the ability to construct evidence based guidelines and protocols in relation to medical practise

| Knowledge | | Assessment Methods | GMP |
|---|---|--------------------|-------|
| Outlines the principles of critical appraisal | | CbD, First FRCR | 1 |
| Describes the advantages and disadvantages of different study methodologies (quantitative and qualitative) for different types of questions | | CbD, First FRCR | 1 |
| Outlines levels of evidence and quality of evidence | | CbD, First FRCR | 1 |
| Demonstrates how to apply statistics in scientific medical practice | | CbD, First FRCR | 1 |
| Distinguishes between the use and differences between the basic measures of risk and uncertainty | | CbD, First FRCR | 1 |
| Describes the role and limitations of evidence in the development of clinical guidelines and protocols | | CbD, First FRCR | 1 |
| Describes how guidelines and protocols are developed (e.g. NICE and SIGN) | | CbD | 1 |
| Skills | | | |
| Searches the medical literature including use of PubMed, Medline, Cochrane reviews and the internet | | CbD | 1 |
| Appraises retrieved evidence to address a clinical question | | CbD | 1 |
| Applies conclusions from critical appraisal into patient care | | CbD | 1 |
| Contributes to the construction, review and updating of local (and national) guidelines of good practice | | CbD | 1 |
| Behaviours | | | |
| Aims for best clinical practice (clinical effectiveness) at all times, as informed by evidence based medicine | | CbD, mini-CEX | 1 |
| Recognises knowledge gaps and seeks to address them | | CbD, MSF | 1 |
| Keeps up to date with national reviews, key new relevant research, and guidelines of practice (e.g. NICE and SIGN) | | CbD | 1 |
| Recognises the need to practise outside clinical guidelines at times | | CbD, mini-CEX | 1 |
| Communicates information about risk and risk-benefit trade-offs, in ways appropriate for the individual patient | | CbD, mini-CEX | 1,3,4 |
| Encourages discussion amongst colleagues on evidence-based practice | | CbD, mini-CEX, MSF | 1,3 |
| Level Descriptors | | | |
| Intermediate | Undertakes a literature review in relation to a clinical problem or topic and present the same | | |
| | Explains the evidence base of clinical care to patients and to other members of the clinical team | | |
| Advanced | Produces a review on a clinical topic, having reviewed and appraised the relevant literature | | |
| | Collaborates in a systematic review of the medical literature | | |
| | Contributes to the development of local or national clinical guidelines and protocols | | |

1.19 Continuing professional development

| To be able to take responsibility for personal learning and continuing professional development. | | |
|--|---|-------|
| Knowledge | Assessment Methods | GMP |
| Describes how adults learn and how principles relate to personal development | CbD | 1 |
| Outlines the structure of an effective appraisal interview | CbD | 1 |
| Differentiates between appraisal and assessment and performance review | CbD | 1 |
| Discusses who to refer to if problems are identified during training | CbD | 1 |
| Skills | | |
| Develops personal development plan and portfolio to ensure continuing personal development | MSF | 1 |
| Uses workplace-based assessments and appraisals as an opportunity for personal development | CbD, MSF | 1 |
| Uses different learning methods effectively to develop personal skills and knowledge | MSF | 1 |
| Behaviours | | |
| Shows willingness to seek and learn from feedback | MSF | 1,2,3 |
| Show willingness to undertake workplace-based assessments | CbD, MSF | 1 |
| Encourages discussions colleagues with colleagues to share knowledge and understanding | CbD, MSF | 1,3 |
| Maintains honesty and objectivity during appraisal and assessment | CbD, MSF | 1,4 |
| Recognises the importance of personal development in guiding good professional behaviour | CbD, MSF | 1,2 |
| Demonstrates a willingness to advance own educational capability through continuous learning | CbD, MSF | 1 |
| Level Descriptors | | |
| Intermediate | Takes responsibility for learning and personal development planning | |

1.20 Teaching

| To be able to deliver teaching in a variety settings | | |
|--|--------------------------------|-----|
| Knowledge | Assessment Methods | GMP |
| Describes how adults learning principles relate to medical education | CbD, Teaching observation | 1 |
| Demonstrates knowledge of relevant developments and challenges in medical education | CbD, Teaching observation | 1 |
| Describes the assessment system and its place in relation to formative and summative assessment | CbD, Teaching observation | 1 |
| Demonstrates an understanding of the place of workplace based assessments | CbD, Teaching observation | 1 |
| Skills | | |
| Identifies learning needs of others and self and varies teaching format appropriately | CbD, MSF, Teaching observation | 1 |
| Structures and delivers clinical teaching sessions effectively, including: <ul style="list-style-type: none"> • Small group teaching • Presentations • Lectures • Bed side teaching sessions • Appropriate design and use of audiovisual aids • Allowing active audience participation | MSF, Teaching observation | 1 |
| Communicates feedback effectively and appropriately | MSF | 1 |
| Undertakes supervision, workplace-based assessments, appraisal, mentoring as appropriate | MSF | 1 |
| Recognises the trainee in difficulty and take appropriate action, including where relevant referral to other services | CbD, MSF | 1 |
| Leads departmental teaching programmes including journal clubs | CbD, Teaching observation | 1 |
| Participates in strategies aimed at improving patient education, e.g. talking at support group meetings | CbD, MSF | 1 |

| Behaviours | | |
|---|---|-------|
| Maintains dignity and safety of patients at all times when discharging educational duties | CbD, MSF, Teaching observation | 1,3,4 |
| Shows willingness to seek and learn from feedback | MSF, Teaching observation | 1,2,3 |
| Demonstrates willingness to teach trainees and other health and social workers in a variety of settings | CbD, MSF, Teaching observation | 1,3 |
| Demonstrates consideration for learners, including their emotional, physical and psychological well being with their development needs. | CbD, MSF, Teaching observation | 1,3 |
| Acts to ensure equality of opportunity for students, trainees, staff and professional colleagues | CbD, MSF, Teaching observation | 1,3 |
| Shows willingness to undertake assessment of workplace-based assessments | CbD, MSF | 1,3 |
| Maintains honesty and objectivity during appraisal and assessment | CbD, MSF | 1,3 |
| Recognises the importance of personal development in guiding trainees in aspects of good professional behaviour | CbD, MSF | 1,3 |
| Level Descriptors | | |
| | Delivers teaching to different staff groups in a variety of formats | |
| Intermediate | Performs workplace-based assessments, giving effective and appropriate feedback Acts as a mentor for junior colleagues | |
| Advanced | Plans and organises a teaching programme within the oncology department | |

1.21 Management and NHS structure

To understand the structure of the NHS and the management of local healthcare systems in order to be able to participate fully in managing healthcare provision

| Knowledge | Assessment Methods | GMP |
|--|--------------------|-----|
| Outlines the guidance given on management and doctors by the GMC | CbD | 1 |
| Understands the local structure of NHS systems in your locality, recognising potential differences between the four countries of the UK | CbD | 1 |
| Evaluates major national reports on cancer care e.g. Cancer Reform Strategy, National Radiotherapy Advisory Group and National Chemotherapy Advisory Group reports | CbD | 1 |
| Evaluates possible future developments in the organisation of cancer services | CbD | 1 |
| Describes the local structure of NHS systems in the locality, including the department's management and committee structure recognising the potential differences between the four countries of the UK | CbD | 1 |
| Describes how cancer services are commissioned for patients | CbD | 1 |
| Understands the consistent debates and changes that occur in the NHS including the political, social, technical, economic, organisational and professional aspects that can impact on provision of service | CbD | 1 |
| Describes the principles of: <ul style="list-style-type: none"> • Clinical coding • European Working Time Regulations including rest provisions • NHS finance and budgeting • Consultant contract and the contracting process • Resource allocation • The role of the independent sector as providers of healthcare • Patient and public involvement processes and role • Recruitment and appointment procedures | CbD, mini-CEX | 1 |
| Skills | | |
| Participates in managerial meetings | MSF, CbD | 1 |
| Works with stakeholders to create and sustain a patient-centred service | CbD, mini-CEX | 1 |
| Analyses information and uses it appropriately to promote service developments | CbD, mini-CEX | 1 |
| Prioritises use of resources, including allocating beds and making best use of staffing resources, particularly when these are stretched by competing demands | MSF | |

| Behaviour | | |
|--|--|-------|
| Recognises the importance of equitable allocation of healthcare resources and of commissioning | CbD | 1,2 |
| Recognises the role of doctors as active participants in healthcare systems | CbD, mini-CEX | 1,2 |
| Responds appropriately to health service objectives and targets and take part in the development of services | CbD, mini-CEX | 1,2 |
| Recognises the role of patients and carers as active participants in healthcare systems and service planning | CbD, mini-CEX, Patient Survey | 1,2,3 |
| Takes an active role in promoting the best use of healthcare resources | CbD, mini-CEX, MSF | 1 |
| Shows willingness to improve leadership and managerial skills (e.g. management courses) and engage in leadership and management of the service (e.g. to be a member of departmental and cancer network committees) | CbD, MSF | 1 |
| Level Descriptors | | |
| Intermediate | <p>Discusses guidance from the relevant health regulatory agencies in relation to cancer care</p> <p>Describes the local structure for health services and how they relate to regional or devolved administration structures</p> | |
| Advanced | <p>Discusses funding allocation processes from central government in outline and how that might impact on the local health organisation</p> <p>Participates fully in clinical directorate meetings and other appropriate local management structures in planning and delivering healthcare within oncology</p> <p>Collaborates with other stake holders in the cancer community to ensure that their needs and views are considered in managing services</p> <p>Participates as appropriate in staff recruitment processes</p> | |

2 Introductory module

2.1 Authorising chemotherapy

To be able to review a patient receiving cytotoxic chemotherapy
To authorise the next cycle of previously-prescribed treatment, enabling treatment to proceed.

| Knowledge | Assessment Methods | GMP |
|--|---------------------------|------------|
| Describes safe handling of cytotoxic drugs | CbD | 1,2 |
| Describes the methods of calculating the correct dose of chemotherapy | CbD | 1 |
| Describes the possible side effects of treatment | CbD | 1 |
| Skills | | |
| Takes a focused history to ensure that patient's condition has not changed since treatment was prescribed | DOST | 1,3 |
| Identifies when the dose should be reduced or the cycle delayed | CbD, DOST | 1,2 |
| Behaviour | | |
| Elicits patient and carers concerns about treatment and ensures that they are addressed appropriately | DOST, MSF | 3,4 |
| Ensures that patient has all relevant written information regarding treatment, especially emergency contact instructions | DOST, MSF | 2,3,4 |
| Remains open to advice from other health professionals on chemotherapy issues | DOST, MSF | 1,3 |
| See sections 1.3, 1.4 and 1.5 | DOST, MSF | 3,4 |

2.2 Prescribing chemotherapy

To be able to prescribe cytotoxic chemotherapy within local guidelines, continuing a planned course of treatment (but not initiate first cycle of treatment).

| Knowledge | Assessment Methods | GMP |
|---|--------------------|-------|
| Describes the common side effects of chemotherapy in common use | CbD, DOST | 1,2 |
| Describes the use of supportive measures both pharmacological and non pharmacological to treat toxic effects of chemotherapy | CbD, DOST | 1,2 |
| Describes methods of assessing tumour response | CbD, DOST | 1 |
| Defines the effects of age, body size, organ dysfunction and concurrent illnesses on drug distribution and metabolism of cytotoxic drugs | CbD, DOST | 1,2 |
| Describes interactions between chemotherapy and other commonly prescribed drugs | CbD, DOST | 1,2 |
| Skills | | |
| Takes a focused history and performs a relevant examination to assess tumour response, side effects of treatment, patient's performance status and co-morbidities | DOST | 1,2,3 |
| Assesses toxicity of the previous cycle of chemotherapy | DOST | 1,2 |
| Modifies the dose of chemotherapy correctly in response to clinical findings and laboratory parameters | DOST | 1,2 |
| Ensures appropriate arrangements are in place for subsequent patient review | CbD, DOST | 1 |
| Uses electronic prescribing system where available to improve patient safety | DOST | 1,2 |
| Behaviour | | |
| Ensures treatment information is shared promptly and accurately with patient's GP and other specialties involved in supporting the patient | CbD, DOST | 1,3 |
| See sections 2.1, 1.3, 1.4 and 1.5 | | |

2.3 Safety in radiation treatment

To be aware of issues of patient and personal safety with regard to radiation treatment.

| Knowledge | Assessment Methods | GMP |
|--|--------------------|-----|
| Describes IRMER regulations and the procedures in place in the department to comply with these | CbD | 1,2 |
| Identifies the requirement for an ARSAC certificate | CbD | 1,2 |
| Skills | | |
| See Section 1.5 | | |
| Behaviour | | |
| See Section 1.5 | | |

2.4 Outpatient consultation

To be able to structure an outpatient consultation and to communicate with patients, and carers where appropriate, clearly and in an empathetic manner.

| Knowledge | Assessment Methods | GMP |
|--|-------------------------------|-------|
| Recognises that patients do not present a history in a structured fashion | mini-CEX | 1,3 |
| Recognises that patient's wishes and beliefs and the history should inform examination and investigations | mini-CEX | 1 |
| Discusses the need for targeted clinical examination | CbD, mini-CEX | 1 |
| Discusses the limitations of physical examination and the need for appropriate investigations to confirm a diagnosis | CbD, mini-CEX | 1 |
| Skills | | |
| Assesses and summarises the previous hospital notes | CbD, mini-CEX | 1 |
| Greets patient appropriately and establishes a rapport, overcoming barriers to communication | mini-CEX | 1,3 |
| Elicits patient's main concerns | mini-CEX | 1,3,4 |
| Performs focused history and examination | CbD, mini-CEX | 1,3 |
| Determines the level of information the patient wishes to receive | mini-CEX | 1,3,4 |
| Explains the current situation to the patient and if necessary breaks bad news | mini-CEX | 1,3,4 |
| Negotiates agreed outcomes with the patient | mini-CEX | 1,3,4 |
| Organises appropriate investigations, treatment and referrals to other professionals | CbD, mini-CEX | 1,3 |
| Communicates clearly in the notes and in the letter to the referring doctor and GP | mini-CEX, MSF | 3,4 |
| Behaviours | | |
| Treats patients with respect and without discrimination, is polite, considerate and honest, shows respect for dignity and privacy. | mini-CEX, MSF, Patient survey | 1,3,4 |
| Treats patients fairly and as individuals | mini-CEX, MSF | 1,3,4 |
| Shows empathy with the patient's situation and offers appropriate emotional support | mini-CEX, MSF, Patient survey | 3,4 |
| Ensures appropriate personal language and behaviour | mini-CEX, MSF, Patient survey | 1,3 |
| Shows willingness to provide the patient with a second opinion | mini-CEX, MSF | 1,3 |
| Uses different methods of ethical reasoning to come to a balanced decision where complex and conflicting issues are involved | CbD, mini-CEX, MSF | 1,3 |
| Behaves in accordance with Good Medical Practice | mini-CEX, MSF | 3,4 |

2.5 Breaking bad news

To be able to skilfully deliver bad news using appropriate strategies according to the needs of the patients.

| Knowledge | Assessment Methods | GMP |
|--|--------------------|-------|
| Describes models of breaking bad news | CbD, mini-CEX, | 1,3 |
| Discusses the range of likely reactions to bad news | CbD, mini-CEX | 1,3 |
| Discusses the different connotations of bad news depending on the context, individual, social and cultural circumstances | CbD, mini-CEX | 1 |
| Skills | | |
| Recognises the impact of bad news on the patient, carers, staff members and self | CbD, mini-CEX | 1,3 |
| Structures interview appropriately and ensures that patient has the necessary support during the interview | CbD, mini-CEX | 1,3 |
| Responds to verbal and non-verbal cues from patient and carers | CbD, mini-CEX | 1,3 |
| Elicits patient's main concerns | mini-CEX | 1,3,4 |
| Determines the level of information the patient wishes to receive | mini-CEX | 1,3,4 |
| Explains situation to the patient and carers using appropriate language | CbD, mini-CEX | 1,3,4 |
| Encourages questioning and ensures patient understands information given | CbD, mini-CEX | 1,3 |
| Ensures that appropriate on going support and follow up arrangements are in place | CbD, mini-CEX, MSF | 1,3,4 |
| Behaviours | | |
| Respects the different ways that patients react to bad news | CbD, MSF | 1 |
| Shows empathy with the patient's situation and offers appropriate emotional support | mini-CEX, MSF | 3,4 |
| Shows respect for the opinions of other team members regarding a patient's likely and on going response to bad news | CbD, MSF | 1,3 |
| Encourages team working to ensure that patients receiving bad news have appropriate support | CbD, MSF | 1,3 |

3 Oncology emergencies syllabus

To be completed by the end of ST3

3.1 Infections

| To be able to diagnose and manage infections, especially in immunocompromised patients. | | |
|---|--------------------|---------|
| Knowledge | Assessment Methods | GMP |
| Lists the infections that occur commonly in cancer patients undergoing treatment and describes how to diagnose them | CbD | 1,2 |
| Knows the antibiotic, antiviral and antifungal policies of the hospital | CbD | 1,2 |
| Skills | | |
| Takes a focused history and performs a focused examination | CbD, mini-CEX | 1,2,3,4 |
| Requests appropriate investigations and interprets imaging | CbD | 1 |
| Resuscitates patients and prescribes appropriate supportive care and antibiotics | CbD, mini-CEX | 1,2 |
| Evaluates the importance of prognosis in influencing escalation of treatment | CbD | 1,2 |
| Recognises when escalation of care to HDU/ITU is indicated and appropriate | CbD | 1,2 |
| Discusses treatment with patient and carers | mini-CEX | 3,4 |
| Behaviours | | |
| See Sections 1.2, 1.3, 1.4 1.5 and 1.15 | | |

3.2 Spinal cord compression

| To be able to diagnose and manage spinal cord compression. | | |
|--|--------------------|-------|
| Knowledge | Assessment Methods | GMP |
| Describes the symptoms and signs of spinal cord compression | CbD, | 1,2 |
| Identifies the appropriate radiological investigations | CbD | 1,2 |
| Describes the roles of steroids, surgery, radiotherapy and rehabilitation | CbD | 1,2 |
| Skills | | |
| Assesses the level of spinal cord compression clinically | mini-CEX | 1 |
| Interprets MRI imaging | CbD, DORPS | 1 |
| Discusses options with patient and colleagues and recommends most appropriate management | CbD, mini-CEX | 1,3,4 |
| Plans radiotherapy treatment under appropriate supervision | DORPS | 1,2 |
| Plans appropriate supportive care/rehabilitation | CbD | 1,3 |
| Behaviours | | |
| See Sections 1.2, 1.3, 1.4 and 1.6 | | |

3.3 Superior vena cava obstruction (SVCO)

To be able to diagnose and manage SVCO.

| Knowledge | Assessment Methods | GMP |
|--|--------------------|-------|
| Describes the symptoms and signs of SVCO | CbD | 1 |
| Lists the differential diagnosis | CbD | 1 |
| Describes the role of different treatment modalities | CbD | 1 |
| Skills | | |
| Performs a focussed history and examination and recognises the diagnosis clinically | CbD, mini-CEX | 1,3,4 |
| Interprets imaging | CbD | 1,2 |
| Discusses diagnostic and treatment options with patient and colleagues and recommends the most appropriate pathway | mini-CEX | 3,4 |
| Plans radiotherapy/chemotherapy treatment as appropriate, under supervision | DORPS, DOST | 1,2 |
| Behaviours | | |
| See Sections 1.3 and 1.4 | | |

3.4 Metabolic disorders

To be able to diagnose and manage metabolic disorders commonly associated with cancer, including hypercalcaemia, hyperuricaemia, tumour lysis syndrome, hypo/hyperglycaemia and hyperbilirubinaemia

| Knowledge | Assessment Methods | GMP |
|--|--------------------|-------|
| Describes the symptoms, signs and laboratory findings of metabolic disorders associated with cancer | CbD | 1 |
| Lists the differential diagnosis of the possible causes | CbD | 1 |
| Describes measures to reduce the risk of occurrence where appropriate | CbD | 1,2 |
| Skills | | |
| Determines the blood tests and imaging studies required to establish a diagnosis and interprets them | CbD | 1 |
| Determines and institutes clinical management and liaises with other specialities as appropriate | CbD | 1,2,3 |
| Behaviours | | |
| See Sections 1.3, 1.4 and 1.6 | | |

3.5 Organ failure

To be able to manage major organ failure: respiratory/cardiovascular failure, renal failure and hepatic failure.

| Knowledge | Assessment Methods | GMP |
|---|--------------------|-------|
| Describes the symptoms, signs, laboratory and imaging findings | CbD | 1 |
| Lists the differential diagnosis of the possible causes | CbD | 1 |
| Skills | | |
| Performs a focused history and examination and is able to develop a differential diagnosis clinically | CbD, mini-CEX | 1,3,4 |
| Determines the blood tests and imaging studies required and interprets them | CbD, mini-CEX | 1 |
| Evaluates the treatment options and how the patient's prognosis influences these | CbD, mini-CEX | 1 |
| Determines and institutes clinical management and liaises with other specialities as appropriate | CbD, mini-CEX | 1,2,3 |
| Behaviours | | |
| See Sections 1.2, 1.3, 1.4, 1.6, 1.9, 1.13 and 1.15 | | |

3.6 Reduced conscious level

To be able to manage patients with a reduction in their conscious level.

| Knowledge | Assessment Methods | GMP |
|--|--------------------|-------|
| Lists the differential diagnosis of the causes of reduced conscious level | CbD | 1 |
| Describes the legislation around 'loss of capacity' of a patient to make a decision | CbD | 1,2 |
| Skills | | |
| Performs a focussed clinical examination | CbD, mini-CEX | 1,3,4 |
| Determines the blood tests and imaging studies required and interprets them | CbD | 1,2 |
| Evaluates the treatment options and how the patient's prognosis influences these | CbD | 1 |
| Determines and institutes clinical management and liaises with other specialities as appropriate | CbD, mini-CEX | 1,2,3 |
| Behaviours | | |
| See Sections 1.2, 1.3, 1.4, 1.6, 1.9, 1.10, 1.11, 1.12 and 1.15 | | |

4 Site-specific learning outcomes

Each cancer site is placed in one of four groups:

- **Group A**
The common tumours where the majority of learning outcomes should be achieved by the end of ST4
- **Group B**
A group of tumours where the majority of learning outcomes should be achieved by the end of ST5
- **Group C**
A group of tumours where some learning outcomes should be achieved by the end of ST5 and the majority will be achieved by CCT
- **Group D**
A group of uncommon tumours and specialised techniques where a few learning outcomes should be achieved by ST5 and achieved by mainly CCT

For each group of tumours the stage of training by which the trainee should have achieved the learning outcomes is shown as:

- Core - completed by the end of ST4
- Intermediate - completed by the end of ST5
- Advanced - tumour-site specialisation undertaken post-FRCR and completed CCT

Table showing composition of each group

| Group | Site/type or treatment technique | Subsite/subtype |
|--|----------------------------------|------------------------------|
| Groups A: common subjects where the majority of learning outcomes achieved by the end of ST4 | Breast cancer | |
| | Lung cancer | Non-small cell Small cell |
| | Lower gastrointestinal cancer | Caecum Colon Rectum |
| | Urological cancer | Prostate |

| Group | Site/type or treatment technique | Subsite/subtype |
|---|---|---|
| Group B: where the majority of learning outcomes achieved by the end of ST5 | Thoracic cancer | Mesothelioma Thymic tumours Mediastinal germ cell |
| | Upper gastrointestinal cancer | Oesophagus Stomach Pancreas |
| | Lower gastrointestinal cancer | Anal canal and anal margin |
| | Head and neck cancer | Larynx Pharynx Oropharynx Oral cavity Paranasal sinuses Nasopharynx Salivary gland tumours Thyroid Middle ear |
| | Sarcoma | Soft tissue Gastrointestinal stromal tumours |
| | Gynaecological cancer | Cervix Body of Uterus Ovary |
| | Urological cancer | Bladder Kidney Penis Testicular tumours |
| | Central nervous system tumours | Gliomas Meningiomas Vestibular schwannomas Pituitary adenomas |
| | Skin cancer | Non-melanoma Melanoma |
| | Lymphoma/leukaemia/myeloma | Hodgkin lymphoma Non-Hodgkin lymphoma Plasmacytoma/myeloma |
| Unknown primary cancer | | |

| Group | Site/type or treatment technique | Subsite/subtype |
|---|--|--|
| Group C: where some learning outcomes achieved by the end of ST5 | Upper gastrointestinal cancer | Gall bladder and biliary tract Primary liver |
| | Head and neck cancer | Nasal passages Temporal bone tumours |
| | Sarcoma | Primary bone tumours Ewing's sarcoma of bone and soft tissue (adult) |
| | Gynaecological cancer | Fallopian tube Primary peritoneum Vulva and vagina |
| | Urological cancer | Ureter Urethra |
| | Central nervous system tumours | Craniopharyngioma Ependymoma Pineal lesions Primitive neuroectodermal tumours Primary cerebral lymphoma Medulloblastoma Skull base tumours |
| | Skin cancer | Cutaneous lymphoma |
| Group D: a few learning outcomes achieved by the end of ST5 but they will mainly be achieved by CCT | Paediatric and adolescent oncology including specific paediatric malignancies and specific issues arising when treating paediatric patients who have tumours which are found in adults | Central nervous system tumours Wilms' tumour Neuroblastoma Rhabdomyosarcoma Ewing's sarcoma Lymphoma Leukaemia |
| | Brachytherapy clinical experience | Gynaecological cancer Prostate cancer Head and neck cancer Other |
| | Proton and neutron therapy | |

Underpinning attitudes and behaviours

The site-specific learning outcomes in this section of the syllabus are underpinned by appropriate attitudes and behaviours which are drawn from Good Medical Practice (GMP). Since many of the learning outcomes for these attitudes and behaviours are already listed in the Common Competencies for Clinical Oncology (Appendix 1, Section 1), they are not repeated here; instead, where appropriate, reference is made to the relevant part of Section 1. In summary, each trainee must:

1. Display a willingness to make the care of the patient their first concern
2. Appreciate the need to protect and promote the health of patients and the public
3. Display a willingness to provide a good standard of practice and care by:
 - Keeping their professional knowledge and skills up to date
 - Recognising and working within the limits of their competence
 - Displaying a willingness to work with colleagues in the ways that best serve patients' interests:
 - Respecting their skills and contributions and treating them fairly
 - Communicating effectively with them
 - Supporting colleagues who have problems with performance, conduct or health while protecting patients from risk of harm
 - Avoiding malicious or unfounded criticisms of colleagues
 - Demonstrating effective handover procedures when going off duty
4. Demonstrate the need to treat patients as individuals and respect their dignity, by
 - Treating patients politely, considerately and honestly
 - Respecting patients' right to confidentiality
5. Display a willingness to work in partnership with patients:
 - Listening to patients and responding to their questions, concerns and preferences and keeping them informed about the progress of their care
 - Sharing with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties
 - Respecting patients' rights to reach decisions about their treatment and care
 - Supporting patients in caring for themselves to improve and maintaining their health
6. Display honesty and openness and act with integrity:
 - Acting without delay if they have good reason to believe that they or a colleague may be putting patients at risk
 - Never discriminating unfairly against patients or colleagues
 - Never abusing the patients' trust in him/her or the public's trust in the profession, by always displaying:
 - Honesty and trustworthiness when writing or signing any documents, reports or CVs
 - Honesty and integrity when undertaking research putting the protection of the participants' interests first
 - Honesty in financial dealings with employers and other organisations or individuals.

Underpinning scientific knowledge

The scientific knowledge of radiotherapy physics, tumour biology, radiobiology, clinical pharmacology and medical statistics that underpins clinical oncology training is common to all tumour groups. It is therefore essential that trainees acquire this knowledge by the end of core training (ST5). This knowledge is defined in Appendix 2 and is assessed in the First FRCR examination.

Tumour Site-Specific Learning Outcomes

4.1 Radiology

| To be able to relate clinical and radiological anatomy to diagnosis and therapy | | |
|--|------------------------|-----|
| Level | | |
| Group A – Core Group B – Intermediate Group C – Intermediate Group D – Advanced | | |
| Knowledge | Assessment Methods | GMP |
| Describes clinical and radiological anatomy | CbD, DORPS, Final FRCR | 1 |
| Skills | | |
| Identifies landmarks, key structures including vessels, lymph nodes on CT and MRI | CbD, DORPS, Final FRCR | 1 |
| Interprets X-ray, CT, MRI and PET imaging | CbD, DORPS, Final FRCR | 1 |

4.2 Diagnosis and staging

| To be able to diagnose and stage cancer. | | |
|--|-----------------------------|-----|
| Level | | |
| Group A – Core Group B – Intermediate Group C – Intermediate Group D – Advanced | | |
| Knowledge | Assessment Methods | GMP |
| Discusses the epidemiology and aetiology of the cancer, including: <ul style="list-style-type: none"> • the general principles of tumour biology • the genetics of normal and malignant cells • the causation of human cancers • the normal and aberrant mechanisms of cell growth control | First FRCR | 1 |
| Describes the indications for urgent referral by GP | CbD | 1,2 |
| Describes the staging and prognostic indices | CbD, Final FRCR | 1 |
| Describes the pathological techniques available and limitations of histology and immunohistochemistry and other specialist techniques, e.g. molecular biological techniques | First FRCR, CbD, Final FRCR | 1 |
| Skills | | |
| Performs a focussed history and examination | CbD, mini-CEX | 1,3 |
| Recommends appropriate diagnostic and staging investigations | CbD | 1,2 |

Behaviours

See Sections 1.2, 1.3 and 1.4

4.3 Prognosis

To be able to assess prognosis.

Level

Group A – Core Group B – Intermediate
Group C – Intermediate Group D – Advanced

Knowledge

Describes factors that influence prognosis

Assessment Methods

CbD, Final FRCR,
First FRCR

GMP

1

Skills

Assesses the effect of performance status, stage, age, co-morbidity, histological type and other prognostic factors on outcome

CbD, Final FRCR,
First FRCR

1

Behaviours

See Sections 1.3 and 1.4

4.4 Genetics

To be able to assess if there is a significant genetic basis for the cancer.

Level

Group A – Core Group B – Intermediate
Group C – Intermediate Group D – Advanced

Knowledge

Describes the principles of cancer genetics

Assessment Methods

First FRCR

GMP

1

Describes the features of the personal and family medical history that indicate a high risk of a genetic basis of the disease

CbD, First FRCR

1

Describes when referral for genetic counselling is appropriate

CbD, Final FRCR

1

Explains how a gene abnormality affects the patient's prognosis

CbD, Final FRCR

1

Recognises the impact that discovery of a genetic abnormality may have on the patient and his/her family

CbD, Final FRCR

1

Skills

Acquires an accurate family history

CbD, mini-CEX

1,3,4

Discusses the possibility of referral for genetic counselling with the patient

mini-CEX

1,3,4

Explains to the patient how the treatment options may be altered by a genetic abnormality

mini-CEX

1,3,4

Behaviours

See sections 1.3, 1.4, 1.5 and 1.10

Demonstrates willingness to facilitate patient choice regarding decision to undergo genetic testing

mini-CEX, MSF

3,4

4.5 Discussion of treatment options

| | | |
|--|---------------------------|------------|
| To be able to discuss treatment options in the light of understanding of the prognosis. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Predicts the effects of treatment on prognosis | CbD, Final FRCR | 1 |
| Recognises when radical and when palliative treatments are appropriate | CbD, Final FRCR | 1 |
| Skills | | |
| Informs patients of treatment options and discusses individual risk/benefit | CbD, Final FRCR, mini-CEX | 1,3,4 |
| Communicates appropriately with a wide variety of patients including: working with interpreters to deal with patients from diverse backgrounds communicating with patients with special educational needs and their carers | mini-CEX, MSF | 3,4 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5 and 1.11 | | |

4.6 Multi-disciplinary team (MDT) meetings

| | | |
|---|---------------------------|------------|
| To be able to take part in discussions in tumour-site specific MDT meetings. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the indications for treatment and the risks and benefits of different treatment options | CbD, Final FRCR | 1,2 |
| Describes the results of major randomised trials that have influenced present practice | CbD, Final FRCR | 1 |
| Describes major national guidelines | CbD, Final FRCR | 1 |
| Skills | | |
| Assesses potential risks and benefits of treatment options for the individual patient | CbD, Final FRCR | 1,2 |
| Discusses treatment options within the MDT meeting | CbD, Final FRCR | 1,3 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.6, 1.9, 1.10 and 1.17 | | |

4.7 Evaluating research

To be able to evaluate and synthesise research evidence to change practice.

Level

Group A – Advanced

Group B – Advanced

Group C – Advanced

Group D – Advanced

Knowledge

Assessment Methods

GMP

Evaluates the published research evidence

CbD, Final FRCR,
Audit assessment

1

Evaluates ongoing trials of both radiotherapy and systemic therapy

CbD, Final FRCR
Audit assessment

1

Evaluates the national and international guidelines including NICE

CbD, Final FRCR
Audit assessment

1

Skills

Discusses evidence at MDT with regard to specific patients

CbD

1,2,3

Discusses involvement in clinical trials with colleagues

CbB

1,2,3

Revises or develops departmental, evidence based guidelines for the management of tumour sites

CbD, Audit
assessment

1,2,3

Formulates plans to introduce new treatments and techniques to a department

CbD, Audit
assessment

1,2,3

Behaviours

See sections 1.3, 1.7, 1.16, 1.17, 1.18 and 1.21

4.8 First line chemotherapy

To be able to assess patients for first line chemotherapy.

Level

Group A – Core Group B – Intermediate
Group C – Advanced Group D – Advanced

Knowledge

| | Assessment Methods | GMP |
|--|--|-------|
| Describes the mode of action of cytotoxic drugs and the principles of clinical use of systemic therapies | First FRCR | 1 |
| Discusses the principles of pharmacokinetics and pharmacodynamics | First FRCR | 1 |
| Describes drug protocols | DOST, mini-CEX, CbD, Final FRCR, | 1 |
| Evaluates the benefits and toxicity of chemotherapy | First FRCR, DOST, mini-CEX, CbD, Final FRCR, MSF | 1,2,4 |
| Decides which regimes are appropriate in the clinical situation | DOST, mini-CEX, CbD, Final FRCR, MSF | 1,2,4 |
| Describes tests, procedures or other arrangements required prior to therapy | DOST, mini-CEX, CbD, Final FRCR, MSF | 1,2 |

Skills

| | | |
|--|-----------------------------|---------|
| Elicits the patient's wishes with regard to the aims of treatment | DOST, mini-CEX, CbD, MSF | 1,2,3,4 |
| Performs an appropriate history & examination | DOST, mini-CEX, Final FRCR, | 1,2,4 |
| Assesses performance status and evaluates the information to inform the treatment plan | DOST, mini-CEX, Final FRCR, | 1,2,3,4 |

Behaviours

See sections 1.3, 1.4 and 1.5

4.9 Discussing treatment options

| | | |
|---|--|------------|
| To be able to discuss treatment options in the light of understanding of the prognosis. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the acute and long term risks of chemotherapy | DOST, CbD, mini-CEX, First FRCR, Final FRCR, | 1,2,3,4 |
| Describes the aims of treatment and the prognosis | DOST, CbD, mini-CEX, Final FRCR, | 1,3,4 |
| Skills | | |
| Explains these issues and the risk/benefit ratio to the patient | mini-CEX, DOST, PS | 1,2,3,4 |
| Completes the consent form accurately with the patient | mini-CEX, DOST | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5 and 1.11 | | |

4.10 Initiating chemotherapy

| | | |
|---|------------------------------------|------------|
| To be able to prescribe the first course of chemotherapy. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the acute and long term side effects of the chemotherapy | DOST, CbD, First FRCR, Final FRCR, | 1,2 |
| Describes the importance of biochemical, haematological and radiological parameters in determining dose of chemotherapy | DOST, CbD, First FRCR, Final FRCR, | 1,2 |
| Describes the supportive measures both pharmacological and non-pharmacological to treat toxic effects of chemotherapy | DOST, CbD, First FRCR, Final FRCR, | 1,2 |
| Skills | | |
| Generates an appropriate systemic therapy prescription which is safe, accurate and meets local and national standards | DOST, MSF | 1,2 |
| Behaviours | | |
| See sections 1.5 | | |

4.11 Managing patients receiving chemotherapy

To be able to manage patients undergoing radical and palliative chemotherapy treatment regimens.

Level

Group A – Core Group B – Intermediate
Group C – Advanced Group D – Advanced

Knowledge

| Knowledge | Assessment Methods | GMP |
|---|---------------------------------------|-----|
| Describes the physiology of haemopoiesis | First FRCR | 1 |
| Describes the clinical pharmacology and uses of steroids and anti-emetics | First FRCR | 1 |
| Describes the acute and long term side-effects of chemotherapy | DOST, CbD, First FRCR, Final FRCR, | 1,2 |
| Describes how to assess tumour response | DOST, CbD, First FRCR, Final FRCR, | 1 |

Skills

| | | |
|---|-------------------------------|---------|
| Develops a management plan for the patient during the chemotherapy including the management of side effects | DOST, CbD, Final FRCR | 1,2,3 |
| Prescribes supportive treatments | DOST, CbD, Final FRCR | 1,2 |
| Judges when to stop or continue treatment | DOST, CbD, Final FRCR, MSF | 1,2,3,4 |

Behaviours

See sections 1.3, 1.4 and 1.5

4.12 Initiating hormonal therapy

| To be able to assess patients for treatment and prescribe hormonal therapy | | | |
|---|------------------------|-----------------------------------|-------|
| Level | | | |
| Group A – Core | Group B – Intermediate | | |
| Knowledge | | Assessment Methods | GMP |
| Describes common drug protocols | | DOST, CbD, Final FRCR | 1 |
| Evaluates the benefits and toxicity of treatment | | DOST, CbD, First FRCR, Final FRCR | 1,2 |
| Decides which regimes are appropriate in the clinical situation | | DOST, CbD, Final FRCR | 1,2,3 |
| Describes the tests, procedures and other arrangements required prior to and during therapy | | DOST, CbD, Final FRCR | 1,2 |
| Skills | | | |
| Elicit the patient's wishes with regard to the aims of treatment | | DOST, mini-CEX, Final FRCR, PS | 3 |
| Performs an appropriate history and examination | | DOST, mini-CEX, Final FRCR | 1,3,4 |
| Assesses performance status | | DOST, mini-CEX, Final FRCR, CbD | 1,3 |
| Generates an appropriate systemic therapy prescription which is safe, accurate and meets local and national standards | | DOST, MSF | 1,2 |
| Behaviours | | | |
| See sections 1.3, 1.4 and 1.5 | | | |

4.13 Managing patients receiving hormonal therapy

| To be able to manage patients undergoing hormonal therapy | | |
|---|---------------------------------------|---------|
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Knowledge | Assessment Methods | GMP |
| Describes the acute and long term side-effects of hormonal therapy | DOST, CbD, First FRCR, Final FRCR, | 1,2 |
| Describes how to assess tumour response | DOST, CbD, First FRCR, Final FRCR, | 1 |
| Skills | | |
| Develops a management plan for the patient during hormonal therapy including the management of side effects | DOST, CbD, Final FRCR | 1,2,3 |
| Prescribes supportive treatments | DOST, CbD, Final FRCR | 1,2 |
| Judges when to stop or continue treatment | DOST, CbD, Final FRCR, MSF | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.4 and 1.5 | | |

4.14 Assessing patients for biological therapy

To be able to assess patients for treatment with monoclonal antibodies, tyrosine kinase inhibitors, interferons, interleukins.

Level

Group A – Core Group B – Intermediate
Group C – Advanced Group D – Advanced

| Knowledge | Assessment Methods | GMP |
|--|-----------------------|-------|
| Describes the principles of biological and novel therapies | First FRCR | 1 |
| Describes common drug protocols | DOST, CbD, Final FRCR | 1 |
| Evaluates the benefits and toxicity of treatment | DOST, CbD, Final FRCR | 1,2 |
| Decides which regimes are appropriate in the clinical situation | DOST, CbD, Final FRCR | 1,2,3 |
| Describes the tests, procedures and other arrangements required prior to therapy | DOST, CbD, Final FRCR | 1,2 |

Skills

| | | |
|---|---------------------------------|-------|
| Elicits the patient's wishes with regard to the aims of treatment | DOST, mini-CEX, Final FRCR, PS | 3 |
| Performs an appropriate history and examination | DOST, mini-CEX, Final FRCR | 1,3,4 |
| Assesses performance status | DOST, mini-CEX, Final FRCR, CbD | 1,3 |

Behaviours

See sections 1.3, 1.4 and 1.5

4.15 Consent for biological therapy

To be able to consent patients for treatment with monoclonal antibodies, tyrosine kinase inhibitors, interferons, interleukins.

Level

Group A – Intermediate Group B – Intermediate
Group C – Advanced Group D – Advanced

| Knowledge | Assessment Methods | GMP |
|--|-----------------------|-----|
| Describes the acute and long term risks of treatment with monoclonal antibodies, tyrosine kinase inhibitors, interferons, interleukins | DOST, CbD, Final FRCR | 1 |
| Describes the aims of treatment and the prognosis | DOST, CbD, Final FRCR | 1 |

Skills

| | | |
|---|--------------------------------|---------|
| Explains about these issues and the risk/benefit ratio to the patient | DOST, mini-CEX, Final FRCR, PS | 1,2,3,4 |
| Completes the consent form accurately with the patient | DOST, mini-CEX, PS | 1,2,3,4 |

Behaviours

See sections 1.3, 1.4, 1.5, 1.11 and 1.14

4.16 Initiating biological therapies

To be able to prescribe the first course of treatment with monoclonal antibodies, tyrosine kinase inhibitors, interferons and interleukins.

Level

Group A – Core Group B – Intermediate
Group C – Advanced Group D – Advanced

| Knowledge | Assessment Methods | GMP |
|--|---------------------------------------|-----|
| Describes the acute and long term side effects of the therapies | DOST, CbD | 1,2 |
| Describes the importance of biochemical, haematological and radiological parameters in determining whether the treatment can be safely given | First FRCR, Final FRCR, | 1,2 |
| Describes the supportive measures both pharmacological and non-pharmacological to treat toxic effects of therapy | DOST, CbD, First FRCR, Final FRCR, | 1,2 |

Skills

| | | |
|---|-----------|-----|
| Generates an appropriate systemic therapy prescription which is safe, accurate and meets local and national standards | DOST, MSF | 1,2 |
|---|-----------|-----|

Behaviours

See sections 1.3, 1.4 and 1.5

4.17 Managing patients receiving biological therapies

To be able to manage patients undergoing treatment with monoclonal antibodies, tyrosine kinase inhibitors, interferons and interleukins.

Level

Group A – Core Group B – Intermediate
Group C – Advanced Group D – Advanced

| Knowledge | Assessment Methods | GMP |
|---|---------------------------------------|-----|
| Describes the acute and long term side-effects of these therapies | DOST, CbD, First FRCR, Final FRCR, | 1,2 |
| Describes how to assess tumour response | DOST, CbD, First FRCR, Final FRCR, | 1 |

Skills

| | | |
|--|-------------------------------|---------|
| Develops a management plan for the patient during the administration of the therapy including the management of side effects | DOST, CbD, Final FRCR | 1,2,3 |
| Prescribes supportive treatments | DOST, CbD, Final FRCR | 1,2 |
| Judges when to stop or continue treatment | DOST, CbD, Final FRCR, MSF | 1,2,3,4 |

Behaviours

See sections 1.3, 1.4 and 1.5

4.18 Assessing patients for radiotherapy

| To be able to assess patients for radical and palliative radiotherapy. | | |
|---|-----------------------------------|-------|
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses basic physics relevant to radiotherapy, electromagnetic radiation and sub atomic particles and their interactions of with matter. | First FRCR | 1 |
| Discusses the indications for radiotherapy | DORPS, CbD, Final FRCR | 1 |
| Describes its side effects | DOST, CbD, First FRCR, Final FRCR | 1,2 |
| Evaluates the benefits and toxicity of treatment | DORPS, CbD, Final FRCR | 1,2,3 |
| Describes tests, procedures or other arrangements required prior to therapy | DORPS, CbD, Final FRCR | 1,2 |
| Skills | | |
| Elicit the patient's wishes with regard to the aims of treatment | DORPS, mini-CEX, Final FRCR, PS | 3 |
| Performs an appropriate history and examination | DORPS, mini-CEX, Final FRCR | 1,3,4 |
| Assess performance status and use the information to inform the treatment plan | DORPS, mini-CEX, Final FRCR, CbD | 1,3 |
| Behaviours | | |
| See sections 1.3, 1.4 and 1.5 | | |

4.19 Consent for radiotherapy

| To be able to obtain informed consent from patients for radiotherapy. | | |
|---|------------------------------------|---------|
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the acute and long term risks of radiotherapy | DORPS, CbD, First FRCR, Final FRCR | 1 |
| Discusses the aims of treatment and the prognosis | DORPS, CbD, Final FRCR | 1 |
| Skills | | |
| Explains these issues and the risk/benefit ratio with patients | DORPS, mini-CEX, Final FRCR, PS | 1,2,3,4 |
| Completes the informed consent form accurately with the patient | DORPS, mini-CEX, PS | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5, 1.11 and 1.14 | | |

4.20 Radiotherapy treatment strategy

| | | |
|--|---------------------------|------------|
| To be able to develop a radiotherapy treatment strategy. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the principles of radiation dosimetry, the physics of teletherapy beams (x-rays), electron beam physics and radiotherapy planning | First FRCR | 1 |
| Describes the patient position and immobilization technique | DORPS, Final FRCR | 1 |
| Describes the method of tumour localisation | DORPS, Final FRCR | 1 |
| Evaluates the benefits and risks of the possible radiotherapy delivery techniques including consideration of beam arrangements static and rotational IMRT and SABR | DORPS, Final FRCR | 1 |
| Describes the indications and aims of IGRT and evaluates the methods available | DORPS, Final FRCR | 1 |
| Skills | | |
| Communicate effectively to the planning radiographers the imaging and treatment strategy | DORPS, MSF | 1,2,3 |
| Records all aspects of the planning process clearly | DORPS,CbD | 1,2,3 |
| Behaviours | | |
| See sections 1.6, 1.7, and 1.9 | | |

4.21 Radiotherapy treatment volume

| | | |
|---|--------------------------------|------------|
| To be able to determine the gross tumour volume (GTV), clinical target volume (CTV), internal target volume (ITV), planning target volume (PTV), organs at risk (OAR) and planning organs at risk volume (PRV) as appropriate for radiotherapy. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Interprets diagnostic imaging (including CT, PET and MRI) | DORPS, Final FRCR | 1 |
| Describes the use of cross-sectional imaging in planning | DORPS, Final FRCR | 1 |
| Discusses the clinical and radiological parameters associated with planning 2-D, 3-D, 4-D conformal radiotherapy and IMRT | DORPS, Final FRCR | 1 |
| Specifies the dose and tissue constraint for the organs at risk. | DORPS,First FRCR Final FRCR | 1,2 |
| Skills | | |
| Defines GTV, CTV, ITV and PTV | DORPS, Final FRCR | 1 |
| Defines organs at risk, outlines them and defines planning organs at risk volume (PRV) | DORPS, Final FRCR | 1,2 |
| Defines DVH planning constraints | DORPS, Final FRCR | 1,2 |

| | | |
|--|-------------------|-----|
| Balances tumour control against potential damage to organs at risk | DORPS, Final FRCR | 1,2 |
| Explains changes in dose constraints depending on dose per fraction based on application of radiobiology and tolerance doses | DORPS, Final FRCR | 1,2 |
| Behaviours | | |
| See sections 1.5 and 1.6 | | |

4.22 Radiotherapy treatment plan

| | | |
|--|---------------------------|------------|
| To be able to evaluate a radiotherapy treatment plan. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the ICRU guidelines | DORPS, Final FRCR | 1 |
| Skills | | |
| Assesses critically the dose distribution within the treatment volume and organs at risk | DORPS, Final FRCR | 1,2 |
| Evaluates whether a treatment plan is adequate and develops ways of improving an inadequate plan | DORPS, Final FRCR | 1,2 |
| Behaviours | | |
| See sections 1.5 | | |

4.23 Prescribing palliative radiotherapy

| | | |
|--|---------------------------|------------|
| To be able to prescribe appropriate dose and fractionation schedule for palliative radiotherapy. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the general principles of radiobiology, including normal tissue and population radiobiology | First FRCR | 1 |
| Describes dose/fractionation schedules in common use. | DORPS, Final FRCR | 1 |
| Skills | | |
| Decides an appropriate treatment schedule according to stage of disease, performance status of patients and concomitant systemic therapy | DORPS, Final FRCR | 1,2 |
| Behaviours | | |
| See sections 1.3, 1.4,1.5 and 1.6 | | |

4.24 Prescribing radical radiotherapy

| | | | |
|--|--|---------------------------|------------|
| To be able to prescribe appropriate dose and fractionation schedule for radical radiotherapy. | | | |
| Level | | | |
| Group A – Intermediate | | Group B – Intermediate | |
| Group C – Advanced | | Group D – Advanced | |
| Knowledge | | Assessment Methods | GMP |
| Lists the parameters that should be included when writing a radiotherapy prescription | | First FRCR | 1 |
| Describes dose/fractionation schedules in common use. | | DORPS, Final FRCR | 1 |
| Skills | | | |
| Decides an appropriate treatment schedule according to stage of disease, performance status of patients and concomitant systemic therapy | | DORPS, Final FRCR | 1,2 |
| Behaviours | | | |
| See sections 1.3, 1.4,1.5 and 1.6 | | | |

4.25 Modifying radiotherapy for individual patients

| | | | |
|--|--|------------------------------------|------------|
| To be able to modify treatment plans according to patient's individual needs, pre-morbid conditions etc. | | | |
| Level | | | |
| Group A – Core | | Group B – Intermediate | |
| Group C – Advanced | | Group D – Advanced | |
| Knowledge | | Assessment Methods | GMP |
| Describes normal tissue morbidity and its impact on target volume definition. | | CbD, DORPS, First FRCR, Final FRCR | 1,2 |
| Describes risks of re-treatment with radiation based on normal tissue tolerance limits | | CbD, DORPS, First FRCR, Final FRCR | 1,2 |
| Skills | | | |
| Judges how to modify treatment plans based on patient's co-morbidity | | CbD, DORPS, Final FRCR | 1,2 |
| Assesses when re-treatment is acceptable and prescribes appropriate dose and fractionation | | CbD, DORPS, Final FRCR | 1,2 |
| Behaviours | | | |
| See sections 1.3, 1.4 and 1.5 | | | |

4.26 Verifying radiotherapy treatments

| | | |
|--|---------------------------|------------|
| To be able to verify a treatment plan. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the processes that may be used to ensure that the radiotherapy prescription is correctly implemented | First FRCR | 1,2 |
| Describes the use of digitally reconstructed radiographs | CbD, DORPS, Final FRCR | 1,2 |
| Describes the use of portal imaging | CbD, DORPS, Final FRCR | 1,2 |
| Discusses the quality assurance of IMRT plans | CbD, DORPS, Final FRCR | 1,2 |
| Describes the type of IGRT techniques (planar and volumetric) and the value of each approach | CbD, DORPS, Final FRCR | 1,2 |
| Skills | | |
| Assesses accuracy of patient set-up and recommends adjustments | CbD, DORPS, Final FRCR | 1,2 |
| Behaviours | | |
| See section 1.5 | | |

4.27 Principles of Proton Therapy

| | | |
|---|---------------------------|------------|
| To be aware of the principles and clinical implications of proton therapy | | |
| Level | | |
| Group A – Intermediate | Group B – Intermediate | |
| Group C – Intermediate | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the theoretical benefits and risks of proton therapy | CbD, DORPS, Final FRCR | 1 |
| Discusses the indications for proton therapy | CbD, DORPS, Final FRCR | 1,2 |

4.28 Clinical implications of brachytherapy

| | | |
|--|------------------------------------|------------|
| To be aware of the clinical implications of brachytherapy using sealed and unsealed sources. | | |
| Level | | |
| Group A – Intermediate | Group B – Intermediate | |
| Group C – Intermediate | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the principles of radiotherapy physics related brachytherapy | DORPS, First FCR | 1,2 |
| Discusses the indications for and aims of treatment | CbD, DORPS, First FRCR, Final FRCR | 1,2 |
| Describes the methods available | CbD, DORPS, First FRCR, Final FRCR | 1,2 |
| Describes the acute and long term toxicities and can discuss the organs at risk | CbD, DORPS, First FRCR, Final FRCR | 1,2 |
| Describes the principles of dose prescription | CbD, DORPS, First FRCR, Final FRCR | 1,2 |
| Describes the radiation protection issues | CbD, DORPS, First FRCR, Final FRCR | 1,2 |
| Recognises requirement for ARSAC certificate | CbD, DORPS, mini-CEX | 1,2 |
| Skills | | |
| Applies radiation protection principles when assessing patients receiving brachytherapy | CbD, DORPS, Final FRCR | 1,2 |
| Behaviours | | |
| See sections 1.3, 1.4,1.5 and 1.6 | | |

4.29 Performing a brachytherapy procedure

To be able to perform a brachytherapy procedure using sealed sources.

Level

Group A – Advanced Group B – Advanced
Group C – Advanced Group D – Advanced

Knowledge

| | Assessment Methods | GMP |
|--|----------------------|-----|
| Describes the relevant anatomy | CbD, DORPS, mini-CEX | 1,2 |
| Describes the appropriate investigations prior to and after treatment | CbD, DORPS, mini-CEX | 1,2 |
| Describes the patient position and any appropriate immobilisation techniques | CbD, DORPS, mini-CEX | 1,2 |
| Discusses the radiation protection issues. | CbD, DORPS, mini-CEX | 1,2 |
| Describes the concomitant therapies to reduce or treat toxicity | CbD, DORPS, mini-CEX | 1,2 |
| Recognises requirement for ARSAC certificate | CbD, DORPS, mini-CEX | 1,2 |

Skills

| | | |
|---|-------------------------------|---------|
| Assesses individual patients and balances the benefits against the risks | CbD, DORPS, mini-CEX | 1,2,3,4 |
| Elicit the patient's wishes with regard to the aims of treatment | CbD, DORPS, mini-CEX, PS | 1,2,3,4 |
| Explains the aims and risks to the patient and takes informed consent | CbD, DORPS, mini-CEX, PS | 1,2,3,4 |
| Communicate effectively with the radiographers, physicists, theatre staff, ward nurses with regards to the appropriate imaging and treatment strategy | CbD, DORPS, mini-CEX, MSF, PS | 1,2,3,4 |
| Records all aspects of the process clearly | CbD, mini-CEX, MSF | 1,2,3 |
| Performs the procedure correctly | CbD, mini-CEX, MSF | 1,2 |
| Prescribes the radiation dose balancing tumour control against potential damage to the organs at risk | CbD, DORPS, mini-CEX, MSF | 1,2 |
| Supports the patient through the treatment and side effects | CbD, mini-CEX, MSF, PS | 1,2,3,4 |
| Advises the patient, their relatives and staff with regard to radiation protection issues | CbD, DORPS, mini-CEX, MSF, PS | 1,2,3,4 |
| Liaises with the radiation protection advisor, including radiation protection supervisors and medical physics experts | CbD, DORPS, mini-CEX, MSF, | 1,2,3 |

Behaviours

See sections 1.3, 1.4,1.5, 1.6 and 1.9

4.30 Prescribing brachytherapy using an unsealed source

To be able to prescribe brachytherapy using an unsealed source.

Level

| | |
|--------------------|--------------------|
| Group A – Advanced | Group B – Advanced |
| Group C – Advanced | Group D – Advanced |

Knowledge

| | Assessment Methods | GMP |
|---|---------------------------|-----|
| Describes the appropriate investigations prior to and after treatment | CbD, DORPS, mini-CEX | 1,2 |
| Discusses the radiation protection issues | CbD, First FCR, mini-CEX | 1,2 |
| Describes the concomitant therapies to reduce or treat toxicity | CbD, DORPS, mini-CEX | 1,2 |
| Recognises the requirement for an ARSAC certificate | CbD, First FRCR, mini-CEX | 1,2 |

Skills

| | | |
|--|-------------------------------|---------|
| Assesses individual patients and balances the benefits against the risks | CbD, mini-CEX | 1,2,3,4 |
| Elicits the patient's wishes with regard to the aims of treatment | CbD, mini-CEX, PS | 1,2,3,4 |
| Explains the aims and risks to the patient and takes informed consent | CbD, mini-CEX, PS | 1,2,3,4 |
| Communicates effectively with the planning radiographers, physicists and ward nurses as appropriate the treatment strategy | CbD, DORPS, mini-CEX, MSF, PS | 1,2,3,4 |
| Records all aspects of the process clearly | CbD, DORPS, mini-CEX, MSF | 1,2,3 |
| Administers the isotope safely | CbD, mini-CEX, MSF | 1,2 |
| Prescribes the dose balancing tumour control against potential damage to the organs at risk | CbD, DORPS, mini-CEX, MSF | 1,2 |
| Supports the patient through the treatment and side effects | CbD, mini-CEX, MSF, PS | 1,2,3,4 |
| Advises the patient, their relatives and staff with regard to radiation protection issues | CbD, mini-CEX, MSF, PS | 1,2,3,4 |
| Liases with the radiation protection advisor, including radiation protection supervisors and medical physics experts | CbD, mini-CEX, MSF, | 1,2,3 |

Behaviours

See sections 1.3, 1.4,1.5, 1.6 and 1.9

4.31 Assessing and managing patients undergoing radiotherapy

| | | |
|---|---------------------------------------|------------|
| To be able to assess and manage patients undergoing radiotherapy. | | |
| Level | | |
| Group A – Core | Group B – Core | |
| Group C – Core | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes early reactions to radiotherapy and their management | CbD, First FRCR, Final FRCR, mini-CEX | 1,2 |
| Skills | | |
| Assesses and treats patients in an on-treatment clinic | CbD, Final FRCR, mini-CEX, PS | 1,2 |
| Behaviours | | |
| See sections 1.3, 1.4 and 1.5 | | |

4.32 Modifying a course of radiotherapy

| | | |
|--|------------------------------------|------------|
| To be able to modify a course of radiotherapy treatment for individual patients according to severity of reactions including adjustment for gaps in treatment. | | |
| Level | | |
| Group A – Intermediate | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses how radiobiological principles impact on radical radiotherapy | CbD, DORPS, First FRCR, Final FRCR | 1,2 |
| Lists possible strategies for dealing with treatment gaps | CbD, DORPS, First FRCR, Final FRCR | 1,2 |
| Skills | | |
| Judges how to modify a course of radiotherapy treatment depending on acute toxicity and unplanned gaps in treatment | CbD, DORPS, Final FRCR, | 1,2 |
| Behaviours | | |
| See sections 1.3, 1.4 and 1.5 | | |

4.33 Assessing patients for combined modality therapy

| | | |
|---|--|------------|
| To be able to assess patients for combined modality therapy. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses the interaction between chemotherapy and radiotherapy (before, during or following radiation) | CbD, DORPS, First FRCR | 1,2 |
| Discusses the circumstances in which combined modality therapy might be considered | CbD, DORPS, First FRCR, Final FRCR, mini-CEX | 1,2 |
| Skills | | |
| Elicits the patient's wishes with regard to the aims of treatment | CbD, DORPS, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Discusses the side effects and risk/benefit ratio with patients | CbD, DORPS, Final FRCR, mini-CEX | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.4,1.5, 1.6 and 1.17 | | |

4.34 Emerging techniques

| | | |
|---|---------------------------|------------|
| To be able to discuss treatment with protons or neutrons | | |
| Level | | |
| Group A – Advanced | Group B – Advanced | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses the reasons why treatment with protons or neutrons treatments are sometimes desirable | CbD, mini-CEX | 1 |
| Discusses the clinical indications for proton and neutron treatments | CbD, mini-CEX | 1 |

4.35 Obtaining informed consent for clinical trials and maintaining research records

| | | |
|---|---------------------------|------------|
| To be able to consent patients for Phase II and Phase III trials and maintain appropriate research records. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses research ethics | CbD, mini-CEX | 1,2,3 |
| Describes Good Clinical Practice | CbD, mini-CEX | 1,2,3 |
| Skills | | |
| Discusses option of entering a clinical trial with the patient | CbD, mini-CEX | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.14 and 1.16 | | |

4.36 Diagnosing relapse

| | | |
|---|---------------------------------------|------------|
| To be able to diagnose relapse. | | |
| Level | | |
| Group A – Core Group B – Intermediate Group C – Intermediate Group D – Advanced | | |
| Knowledge | Assessment Methods | GMP |
| Describes the signs and symptoms, changes in tumours markers and imaging findings that may be associated with relapse | CbD, First FRCR, Final FRCR, mini-CEX | 1,2 |
| Skills | | |
| Performs an appropriate history and examination | CbD, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Decides on appropriate investigations for patients suspected of having relapsed | CbD, Final FRCR, mini-CEX, PS | 1,2 |
| Interprets imaging (X-rays, CT, MRI, PET) | CbD, Final FRCR, mini-CEX, | 1,2 |
| Behaviours | | |
| See sections 1.2, 1.3, 1.4 and 1.5 | | |

4.37 Developing a management plan for patients whose disease has relapsed

| | | |
|---|---------------------------|------------|
| To be able to develop a management plan for patients whose disease has relapsed. | | |
| Level | | |
| Group A – Core Group B – Intermediate Group C – Advanced Group D – Advanced | | |
| Knowledge | Assessment Methods | GMP |
| Discusses the roles of surgery, interventional radiology, radiotherapy, chemotherapy, monoclonal antibodies, tyrosine kinase inhibitors, interferons, interleukins, symptom control and palliative care in patients with relapsed disease | CbD, Final FRCR, mini-CEX | 1,2 |
| Skills | | |
| Elicits the patient's wishes with regard to the aims of treatment | CbD, Final FRCR, mini-CEX | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5, 1.6 and 1.11 | | |

4.38 Assessing patients for second and further lines of systemic anticancer therapy

| | | |
|---|---|------------|
| To be able to assess patients for appropriate second and further lines of chemotherapy, monoclonal antibodies, tyrosine kinase inhibitors, interferons or interleukins. | | |
| Level | | |
| Group A – Intermediate Group B – Intermediate Group C – Advanced Group D – Advanced | | |
| Knowledge | Assessment Methods | GMP |
| Describes the molecular biology of chemotherapy drug resistance | DOST, First FCR | |
| Discusses the role of 2 nd and further lines of chemotherapy and monoclonal antibodies, tyrosine kinase inhibitors, interferons, interleukins | CbD, First FRCR, Final FRCR, mini-CEX | 1,2 |
| Discusses different patient motives (coping, survival enhancement, improvement of quality of life) | CbD, First FRCR, Final FRCR, mini-CEX, PS | 1,2 |
| Skills | | |
| Assesses patient's fitness for treatments e.g., by performance status | CbD, DOST, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Prescribes common therapeutic regimes | CbD, DOST, Final FRCR, mini-CEX, PS | 1,2 |
| Assesses whether the outcomes of the therapy are meeting the patient's needs and discusses this with them | CbD, DOST, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5, 1.6 and 1.11 | | |

4.39 Adjusting a chemotherapy regimen according to patient fitness

| | | |
|---|---------------------------------|------------|
| To be able to adjust choice of second and further lines of chemotherapy regimen according to patient fitness. | | |
| Level | | |
| Group A – Intermediate Group B – Intermediate Group C – Advanced Group D – Advanced | | |
| Knowledge | Assessment Methods | GMP |
| Discusses the problems associated with treatment regimens in pre-treated patients, the elderly, those with comorbidity and patients with lower performance status | CbD, DOST, Final FRCR, mini-CEX | 1,2,3 |
| Skills | | |
| Modifies treatment plan appropriately for individual patients | CbD, DOST, Final FRCR | 1,2 |
| Judges when to continue or stop treatment | CbD, DOST, Final FRCR | 1,2 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5, 1.6 and 1.11 | | |

4.40 Assessing response to second and subsequent lines of chemotherapy

| | | |
|---|---------------------------|------------|
| To be able to assess response to second and subsequent lines of chemotherapy. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses the aims of treatment | CbD, DOST, Final FRCR | 1,2 |
| Skills | | |
| Assesses response according to RECIST criteria | CbD, DOST, Final FRCR | 1,2 |
| Behaviours | | |
| See sections 1.3, 1.4 and 1.5 | | |

4.41 Recognising when further chemotherapy is inappropriate

| | | |
|--|-------------------------------------|------------|
| To be able to recognise when further or continuing chemotherapy is inappropriate. | | |
| Level | | |
| Group A – Intermediate | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses the palliative options available to a patient who is not responding to /tolerating treatment | CbD, Final FRCR, mini-CEX | 1,2 |
| Skills | | |
| Communicates bad news to the patient and their relatives | CbD, DOST, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Negotiates stopping treatment with the patient and their relatives | CbD, DOST, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Organises palliative supportive care | CbD, DOST, Final FRCR, mini-CEX | 1,2 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5, 1.6 and 1.11 | | |

4.42 Assessing patients with relapsed cancer for palliative radiotherapy

| | | |
|---|--|------------|
| To be able to assess patients with relapsed cancer for palliative radiotherapy. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses the radiobiological consequences of retreatment if appropriate | CbD, DORPS, First FRCR, Final FRCR, mini-CEX | 1,2 |
| Skills | | |
| Elicits the patient's wishes with regard to the aims of treatment | CbD, DORPS, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Discusses the role of radiotherapy and risk/benefit with individual patients | CbD, DORPS, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5 and 1.11 | | |

4.43 Identifying when patients with relapsed disease require referral to another specialty

| | | |
|--|-------------------------------|------------|
| To be able to identify when patients with relapsed disease require referral to another speciality. | | |
| Level | | |
| Group A – Core | Group B – Intermediate | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Describes the indications for surgical, radiological intervention and high dose chemotherapy with autologous or allogeneic transplantation | CbD, Final FRCR, | 1,2 |
| Skills | | |
| Elicits the patient's wishes with regard to the aims of treatment | CbD, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Develops an appropriate treatment plan for individual patients | CbD, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5, 1.6 and 1.9 | | |

4.44 Managing physical symptoms of patients with relapsed cancer

To be able to manage the physical symptoms of patients with relapsed cancer.

Level

| | |
|----------------|--------------------|
| Group A – Core | Group B – Core |
| Group C – Core | Group D – Advanced |

Knowledge

Outlines the clinical pharmacology of analgesics, steroids and anti-emetics.

Assessment Methods

GMP

CbD, First FRCR

1,2

Discusses the differential diagnosis of symptoms in patients with relapsed cancer both due to metastatic and the non-metastatic manifestations of malignancy

CbD, Final FRCR, mini-CEX

1,2

Describes the appropriate investigations

CbD, Final FRCR, mini-CEX

1,2

Describes the treatment options available

CbD, Final FRCR, mini-CEX

1,2

Skills

Performs a focused history and examination

CbD, Final FRCR, mini-CEX, PS

1,2,3,4

Discusses the options with the patient

CbD, Final FRCR, mini-CEX, PS

1,2,3,4

Advises the patient as to the management plan most likely to improve their symptoms

CbD, Final FRCR, mini-CEX, PS

1,2,3,4

Prescribes drugs for palliation of symptoms including in the last few days of life

CbD, Final FRCR, mini-CEX

1,2,3,4

Behaviours

See sections 1.3, 1.4, 1.5, 1.6, 1.9 and 1.11

4.45 Providing psychological support for patients with relapsed cancer and their families

| | | |
|---|------------------------------------|------------|
| To be able to provide psychological support for patients with relapsed cancer and their families. | | |
| Level | | |
| Group A – Core | Group B – Core | |
| Group C – Core | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses the process of accepting a terminal prognosis, grieving and bereavement | CbD, Final FRCR, mini-CEX | 1,2 |
| Discusses the role of the family, primary care, hospice, support groups palliative care teams, psychologist | CbD, Final FRCR, mini-CEX | 1,2,3 |
| Describes the indications for and side effects of antidepressants and psychotropic medication | CbD, Final FRCR, mini-CEX | 1,2 |
| Describes cultural variation in ways of dealing with bereavement | CbD, Final FRCR, mini-CEX | 1,2 |
| Skills | | |
| Supports patient and family to discuss the impact of the prognosis and to cope with denial, anger, and emotional distress | CbD, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Negotiates satisfactory outcome to requests by relatives for collusion to hide the prognosis from the patient | CbD, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Liases with other professionals to develop a management plan | CbD, Final FRCR, mini-CEX, MSF, PS | 1,2,3,4 |
| Prescribes appropriate medication | CbD, Final FRCR, mini-CEX | 1,2 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5, 1.6, 1.9, 1.11, 1.12 and 1.13 | | |

4.46 Co-ordinating social/financial support

| | | |
|--|-------------------------------|------------|
| To be able to co-ordinate social/financial support for patients with relapsed cancer. | | |
| Level | | |
| Group A – Core | Group B – Core | |
| Group C – Core | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses the roles of other professional groups – social workers, occupational therapists, physiotherapists, GPs, district nurses, MacMillan nurses | CbD, Final FRCR, mini-CEX | 1,2,3 |
| Describes how to access financial support – attendance allowance under special rules | CbD, Final FRCR, mini-CEX | 1,2,3 |
| Skills | | |
| Negotiates with the patient, family and other professional groups to develop an agreed package of care | CbD, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5, 1.6, 1.9 and 1.11 | | |

4.47 Making clinical decisions in situations of uncertainty

| | | |
|---|-------------------------------|------------|
| To be able to make clinical decisions in situations of uncertainty. | | |
| Level | | |
| Group A – Advanced | Group B – Advanced | |
| Group C – Advanced | Group D – Advanced | |
| Knowledge | Assessment Methods | GMP |
| Discusses the evidence base | CbD, Final FRCR, mini-CEX | 1,2 |
| Identifies the areas of uncertainty and methods of decreasing this | CbD, Final FRCR, mini-CEX | 1,2 |
| Skills | | |
| Evaluates the possible treatment options | CbD, Final FRCR, mini-CEX | 1,2 |
| Discusses options with patient and advises on the predicted benefits and side effects | CbD, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Supports the patient to make a decision | CbD, Final FRCR, mini-CEX, PS | 1,2,3,4 |
| Behaviours | | |
| See sections 1.3, 1.4, 1.5, 1.6, 1.11, 1.12 and 1.13 | | |