Post Graduate Training Curriculum for Medical Oncology

Oncology Postgraduate Training Committee
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Malta

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Introduction

Medical oncologists are responsible for overseeing the systemic anti-cancer treatment of patients with cancer. This involves discussing therapeutic options, supervising systemic treatments and supporting patients through their care. Patients are living longer with more complex treatments and therefore the specialty is one of the fastest growing. Medical Oncologists are also at the forefront of Acute Oncology, thus allowing specialist input and advice to acutely unwell patients

Improving the survival of patients with cancer is a key role for medical oncologists and therefore patients will be on novel treatments and clinical trials. This makes clinical research an important feature and a significant proportion of trainees therefore undertake higher degrees. This can take many forms – including lab, translational or clinical trial-based research. As a result, medical oncology is a dynamic and challenging speciality, which brings with it much variety

Training in medical oncology involves rotating through and learning about the management of all the major types of cancer. This includes becoming competent in the supervision of systemic treatments, which incorporates chemotherapy, endocrine therapy and newer biological agents (such as antibodies and immunotherapy). Furthermore, with the multi-disciplinary approach of cancer care trainees learn the complex care pathways and multi-modality nature of treatments

Medical oncologists will have the scientific understanding which underpins radiation-based cancer treatments. They will gain knowledge of radiotherapy planning and delivery. This will enable them to coordinate the care of cancer patients with the wider multidisciplinary team, managing patients throughout a multimodality treatment pathway. However medical oncology trainees will not be expected to independently plan or deliver radiation-based cancer treatments

Purpose of the curriculum

There is a need for more specialist oncologists to meet the anticipated increase in demand for non-surgical oncology services:

• Cancer is predominantly a disease of the elderly and as population life expectancy increases, so will the incidence and prevalence of malignant disease. Elderly patients often have other comorbidities and social complexities, which will greatly increase the support required to safely deliver all treatment modalities

• With the commitment to facilitate the earlier diagnosis of cancer, there will be an increase in the number of patients presenting with localised disease, needing more combined modality therapy to achieve cure

• More than half of those diagnosed with cancer will now survive their cancer for at least 10 years, placing an increased emphasis on survivorship, care in the community and the long-term management of the effects of cancer and its treatments

• The development of acute oncology services (AOS) for the emergency management of patients presenting with problems directly related to treatment toxicities, disease progression or new diagnoses of malignant disease is ongoing. This development will ensure the most effective route to diagnosis and suitable treatment, including end of life care. This will lead to better support of, and a reduction in pressure on, more general acute medical services

• The evidence-base and development pipeline for systemic anti-cancer therapies (SACT) will continue to evolve at a rapid pace. The increase in SACT options means that more patients can be treated, and more lines of treatment offered to individual patients

• Advances in radiotherapy techniques and artificial intelligence (AI) have also progressed rapidly over the past few years and will continue to do so requiring service development including quality assurance

• Recent technological advances in cancer genomics and molecular diagnostics will drive personalised medicine with treatments being used increasingly more selectively for the specific patients most likely to benefit. The implementation of personalised medicine will place further demand on the oncologist workforce both in its requirement for a more in-depth understanding of the scientific basis of cancer and its treatments, the ability to communicate this to patients, carers and relatives, and in ensuring that all patients have access to the appropriate therapeutic options

• Driving research across all disciplines will remain a key component of the medical oncology workforce both to improve patient outcomes (in terms of survival and quality of life) and to maximise resource utilisation. This requires specialist training in research methodology as well as the time and resources to implement clinical trials

Training Pathway

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

Core training is completed in the Medical Basic Specialist Training (BST) programme. The full curriculum for specialty training in medical oncology therefore consists of the curriculum for BST plus this specialty training curriculum for medical oncology. The current BST curriculum can be seen on Foundation Programme website and on:

https://deputyprimeminister.gov.mt/en/regcounc/msac/Documents/application%20form%20for%20the%20issue%20of%20the%20CCBST%20General%20Internal%20Medicine%20and%20requirement.pdf

Entrants to specialty training in medical oncology must, therefore, have obtained the Certificate of Completion of Basic Specialist Training in General Medicine. Their first year of medical oncology training will be known as year HST1. All trainees entering medical oncology training must have acquired the full MRCP (UK) diploma or equivalent, as this is a requirement for successful completion of the Medical BST programme

Duration of training

Although this curriculum is competency-based, the duration of higher specialist training must meet the European minimum for full-time specialty training (EC Directive 2005/36/EC). At the time of writing this is four years full-time or part-time equivalent

Flexible (less than full time) training

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

• Part-time training shall meet the same requirements as full-time training, from which it will differ only in the possibility of limiting participation in medical activities to a period of at least half of that provided for full-time trainees

• The competent authorities shall ensure that the total duration and quality of part-time training of specialists are not less than those of full-time trainees. Out-of-hours duties will be discussed by the employer and decided on an individual basis

• Under normal circumstances the minimum percentage for part-time training should be 50%

• In exceptional individual circumstances, trainees may be allowed to undertake training at less than 50% of full time. These circumstances should be considered by the trainee's department and should have the support of the postgraduate training coordinator. A placement at less than 50% of full time should be subject to regular review to ensure appropriate career progression during the time

• No trainee should undertake a placement at less than 20% of full time

Maternity Leave

A period of up to thirteen weeks of maternity leave (in addition to the normal entitlement of leave) can be recognized as part of the entire training period. However, any longer period of maternity or parental leave will not be considered as training

Training Abroad

HSTs are required to spend a minimum period of one year in a recognised training programme abroad. This period abroad would contribute towards their four years of training within oncology. The aim of working and training abroad is to experience a different working environment with exposure to specific designated tumour sites decided amongst the educational supervisors in Malta, the recipient training programme and the HST

2.7 Research

Clinical research within SAMOC is limited as a dedicated research unit is not yet available. Throughout the rotation abroad, trainees will be exposed to clinical trials, including recruitment and monitoring

2.8 Resident Specialist

Following completion of the HST medical oncology training programme, HSTs will be eligible to apply for a Resident Specialist post in Medical Oncology and enter the Medical Oncology Specialist Register

Programme syllabus and objective

Completion of core training (BST) is essential prior to trainees entering medical oncology, because:

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

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

The Medical Oncology Curriculum is divided into 15 categories, which encompass the expected level of expertise, performance and behaviour to be achieved by the end of training. These categories include the following:

1. Professional behaviour and trust
    a. Able to function successfully within the Department of Health organisational and management systems
    b. Able to deal with ethical and legal issues related to clinical practice
2. Communication, team-working and leadership
    a. Communicates effectively and can share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement
3. Safety and quality
    a. Is focussed on patient safety and delivers effective quality improvement in patient care

4. Wider professional practice
    a. Carrying out research and managing data appropriately
    b. Acting as a clinical teacher and clinical supervisor
5. Applying knowledge and understanding of the scientific principles that underpin malignancy for the provision of high-quality and safe patient-centred cancer care
    a. Demonstrates knowledge of cancer biology at a molecular and cellular level and understands how this translates into targets for systemic anti-cancer treatments
    b. Demonstrates knowledge of radiation biology and understands how this translates into acute and late radiotherapy reactions to underpin their safe and effective management
    c. Demonstrates knowledge and understanding of the clinical pharmacology of systemic anti-cancer therapies to underpin their safe and effective use and the appropriate management of complications
    d. Demonstrates knowledge and understanding of the physics relevant to radiotherapy
    e. Demonstrates knowledge and understanding of the design and organization of clinical trials and the relevant statistical methodology to correctly interpret results and critically appraise the evidence base
    f. Demonstrates knowledge and understanding of causation and risk factors for developing cancer to be able to advise on appropriate strategies to reduce these
    g. Demonstrates knowledge and understanding of the principles underpinning cancer screening programmes to be able to counsel patients appropriately
6. Delivering the acute oncology take, managing oncological emergencies and providing oncology advice to other healthcare professionals as part of an Acute Oncology Service and managing the AOS team
    a. Safely assesses and manages the immediate and ongoing care of patients presenting acutely with complications of cancer and its treatment
    b. Manages targeted investigation and rapid triage of patients presenting with a possible new diagnosis of malignancy and carcinoma of unknown primary (CUP)
    c. Liaises effectively with other specialist services as appropriate, regarding ongoing management
    d. Assesses the appropriate ceiling of care taking the cancer context and the holistic patient assessment into account and sensitively discusses this with the patient and their advocates
    e. Participates effectively in decision-making about resuscitation, including decisions not to attempt cardiopulmonary resuscitation (CPR), and communicates sensitively with patients and their advocates regarding these decisions
    f. Ensures clear and adequate documentation of an acute event, appropriate follow up plans and clear and timely communication with community-based teams and the responsible specialist team

    g. Understands the function of the Acute Oncology Service and communicates effectively between the elements of the service, community-based services, specialist teams and patients
    h. Leads the Acute Oncology team when appropriate to monitor, maintain and develop a high-quality service
7. Providing continuity of care to oncology in-patients to include the effective management of disease and treatment-related complications, the acutely deteriorating patient and the palliative care/end-of-life needs of those with advanced cancer
    a. Ensures continuity of patient care through safe and effective handover to hospital and community-based teams
    b. Safely and effectively manages disease and treatment-related complications in oncology patients taking into consideration acute and chronic medical comorbidities and liaising with relevant specialty services when required
    c. Promptly identifies the acutely deteriorating patient, institutes the appropriate initial medical management and seeks appropriate advice, including from other specialties
    d. Knows the prognoses and treatment options of different cancers and considers these, together with individual patient factors and wishes, to decide on an appropriate ceiling of care, including escalation to ITU
    e. Understands current guidance regarding CPR orders, participates in shared decision-making and involves other relevant professionals in complex cases
    f. Communicates and works effectively with relevant multi-professional teams to provide appropriate holistic in-patient care and safe and timely hospital discharge
    g. Effectively manages the common physical symptoms in patients with advanced cancer, recognising the role for pain management, supportive medications, palliative radiotherapy and other approaches. Liaises with specialist palliative care teams when required
    h. Recognises when a patient is approaching the end of life, communicates effectively and compassionately with patients and carers regarding advanced care planning and individualised end of life care plans
8. Working effectively within and contributing expert opinion to the tumour site-specific multi-disciplinary team (MDT) meeting to inform evidence-based management plans individualised to the needs of each patient, leading discussions where appropriate
    a. Presents new cases to the MDT in a clear and concise manner highlighting the relevant points and questions to be answered
    b. Understands the indications for all treatment options available for different types and stages of cancer within the tumour site, applying relevant guidelines and the most up-to-date evidence base to give an informed oncology opinion
    c. Assesses the risks and benefits of treatment options for each patient considering disease stage, tumour biology and individual patient factors to formulate an appropriate personalised management plan
    d. Recognises the limitations of clinical guidelines in cases of uncertainty or complexity

    e. Communicates views and recommendations clearly, promptly and effectively to all members of the MDT
    f. Respects the expertise, viewpoints and responsibilities of all MDT members and helps foster a supportive and collaborative environment for open discussion
9. Assessing patients at all stages of the cancer pathway from diagnosis to end-of-life care, considering the holistic needs of individuals and the additional needs of vulnerable groups to formulate patient-centred management plans
    a. Formulates a holistic patient-centred diagnostic and management plan
    b. Determines when genetic testing and/or referral for genetic counselling is appropriate
    c. Correctly interprets the results of clinical, pathological, genomic and radiological investigations to accurately diagnose and stage cancer
    d. Accurately assesses the role of all treatment modalities relevant to the individual patient and ensures multidisciplinary team involvement
    e. Selects the most appropriate treatment regimen and associated supportive measures according to best available evidence, holistic patient assessment and patient preferences
    f. Applies evidence-based practice to management decisions
    g. Discusses prognosis and treatment aims with patients, giving due consideration to their values and priorities
    h. Understands and discusses the potential effects of treatment on fertility and pregnancy and where applicable refers for consideration of fertility preservation
    i. Ensures equitable patient access to relevant clinical trials
    j. Obtains informed consent, ensuring that patients have enough information and time to consider risks and benefits, including the possibility of no treatment
    k. Where patients lack capacity to give informed consent, make appropriate 'best interest' decisions, involving all relevant parties
    l. Recognises the psychological, financial and social impact of cancer on patients and their families and signpost to sources of ongoing support
    m. Recognises when further or continuing treatment is no longer appropriate and sensitively discusses this with patients and their advocates
    n. Recognises the need for tailored support for specific and/or vulnerable groups, showing sensitivity to issues of equality and diversity
    o. Recognises the limitations of clinical guidelines in certain complex situations
10. Safely and effectively delivering, and managing patients receiving, standard systemic anticancer therapies (SACT) in the curative, neo-adjuvant, adjuvant and palliative settings
    a. Selects the most appropriate SACT regimen and associated supportive measures for the clinical situation according to available evidence, MDT discussion and holistic patient assessment
    b. Modifies approach to address the specific needs of individual patients, including vulnerable groups

c. Clearly communicates the benefits and risks of available treatment options, including those available within clinical trials, to enable informed
d. Applies the knowledge of mechanisms of action and treatment toxicities to pre-empt, monitor and manage these in patients receiving SACT
e. Co-ordinates the appropriate investigations, procedures and logistic arrangements required for SACT delivery
f. Generates a SACT prescription that is safe and accurate
g. Evaluates toxicity and response during treatment and adapts SACT/supportive measures accordingly, balancing treatment goals with patient safety and priorities
h. Assesses and reports SACT toxicity according to regulatory and, where relevant, research governance processes
i. Collaborates effectively with members of the multi-disciplinary team when patients are receiving SACT as part of a multi-modality treatment pathway
j. Proactively liaises with the relevant teams when SACT is completed or discontinued to enable co-ordinated ongoing management

11. Acting as an advocate for health promotion and high-quality cancer survivorship, advising on cancer prevention, management of long-term treatment-related sequalae and patient self-management strategies
    a. Recognises the factors affecting cancer health inequalities and the social determinants of health, including physical, economic and cultural factors, which impact on cancer risks
    b. Can give personalised risk reduction advice to patients considering lifestyle, environmental and genetic factors
    c. Can formulate a patient-centred follow up plan for patients who have completed a course of cancer treatment
    d. Promotes survivorship following cancer treatment
    e. Pro-actively manages and educates patients about the long-term sequelae of cancer treatments, in conjunction with other health professionals where relevant
    f. Provides specialist advice to other health professionals regarding cancer risks and appropriate investigation of patients following cancer treatment
12. Safely and effectively deliver, and manage patients receiving, intensive complex systemic anti-cancer therapies
    a. Selects the most appropriate intensive SACT regimen and associated supportive measures for the clinical situation according to best available evidence, holistic patient assessment and patient preferences
    b. Clearly communicates the benefits and risks of available treatment options with patients and their advocates to enable informed consent
    c. Co-ordinates the appropriate investigations, procedures and logistic arrangements required for intensive SACT delivery
    d. Can safely deliver SACT in specific/ vulnerable patient groups
    e. Reviews patients at initiation of, and during SACT and identifies the role of SACT/ supportive measure modification, balancing treatment goals with patient safety and disease response according to updated holistic assessment

f. Recognises the importance of maintaining dose intensity in the context of intensive SACT and proactively employs supportive therapy strategies in order to facilitate this
g. Understands and discusses the potential effects of SACT on fertility and pregnancy, supporting the patient through fertility preservation options
h. Collaborates effectively with members of the multi-disciplinary team when patients are receiving SACT as part of a multi-modality treatment pathway
i. Generates a SACT prescription that is safe, accurate and meets local and national standards
j. Can recognize and manage pancytopenia and its sequelae related to intensive SACT, involving relevant specialist teams when required
k. Can apply the knowledge of mechanisms of action and drug toxicities to pre-empt, monitor and manage these in patients receiving intensive SACT regimens
l. Can apply knowledge of and pre-emptively manage the additional complications of stem cell transplant or other cellular therapies as part of an intensive SACT regimen
m. Recognises the need for prompt escalation of care and liaison with relevant teams when clinically indicated in patients receiving intensive SACT regimens
n. Recognises the social, financial and psychological effects of intensive SACT/prolonged hospital admission and involves appropriate teams to optimise patient care and support
o. Proactively liaises with the relevant teams when SACT is completed or discontinued to enable co-ordinated ongoing management

13. Developing guidelines and protocols to safely implement diagnostic and systemic anticancer therapeutic (SACT) approaches
    a. Understands the roles of regulatory agencies in the approval of novel therapeutic and diagnostic technologies for cancer treatment
    b. Can evaluate key clinical data and resource implications relevant to emerging SACT regimens and can use this information to design clear guidance for appropriate use of the treatment
    c. Able to collaborate and work effectively with other allied healthcare professionals, management teams and associated committee(s) to contribute to the development or renewal of guidelines and protocols
    d. Is familiar with the processes involved in the introduction and review of SACT approvals within their specific healthcare organization
    e. Ensures availability of clear and comprehensive resources for patients in relation to new SACT protocols
    f. Evaluates implemented SACT protocols using audit/quality improvement methodology and adapts in response to emerging data
14. Integrating biomarkers and genomic information to refine diagnosis and develop personalized treatment plans for cancer patients
    a. Understands the principles of precision oncology, stratified and personalised medicine

b. Understands the principles of whole genome sequencing, gene expression and regulation in the context of cancer risk including inherited cancer predisposition syndromes and screening
c. Applies knowledge of the multi-factorial basis of malignancy to discuss cancer risk with patients and their carers, considering ethical and confidentiality considerations
d. Understands of the role of genomics and biomarkers in the cancer diagnostic pathway
e. Understands the role of genomics and biomarkers in personalising therapeutic options and in the prediction and monitoring of response to SACT
f. Understands the ethical issues associated with whole genome sequencing and management of genomic data
g. Understands the basis for genomic profiling and biomarker utilisation in the design and delivery of clinical trials

15. Participation in clinical trials of systemic anticancer treatments for all phases
    a. Demonstrates knowledge of the ethical and legal issues related to clinical research applying Good Clinical Practice (GCP) principles
    b. Understands that patient safety is the overriding priority in the conduct of clinical trials
    c. Understands the key processes for setting up a clinical trial at a new site
    d. Understands the roles and responsibilities of Principal and Sub Investigators
    e. Able to participate in clinical research trials, including early phase trials (phase I/II), at Sub-Investigator level
    f. Understands appropriate delegation of trial-related duties and the need for training, supervision and oversight of the research team in carrying out trial activities
    g. Manages patients within a clinical trial from screening and eligibility assessment, through informed consent, to completion of trial related procedures
    h. Follows regulatory and research governance requirements with respect to safety reporting within a clinical trial
    i. Understands the regulatory issues regarding use of unlicensed agents within a clinical trial

The MRCPUK Specialty Certificate Examination in Medical Oncology, or equivalent, is a requirement to obtain the certificate of completion of medical oncology training

Tumour Sites to be covered throughout training:

1. Breast cancer
2. Colorectal and Anal cancer
3. Lung cancer and Thoracic malignancies
4. Upper GI cancer and Hepatobiliary (oesophagus, gastric, liver, biliary, pancreas and neuroendocrine tumours)
5. Complex intensive therapies taken from any combination of the following:
    a. Germ cell tumours
    b. Sarcoma (intensive therapies)
    c. Cellular therapies

6. Urological cancers (renal, bladder, prostate)
7. Gynaecological cancer
8. Melanoma/Skin
9. Central Nervous System malignancies
10. Neuroendocrine tumours

Learning and Teaching

The Training Programme

The organisation and delivery of postgraduate training is the statutory responsibility of Mater Dei Hospital (MDH), which in turn devolves responsibility for the local organisation and delivery of training to Sir Anthony Mamo Cancer Centre (SAMOC). Responsibility for the organisation and delivery of specialty training in medical oncology is the remit of the Oncology Post Graduate Training Co-ordinator

4.2 Teaching and learning methods

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

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

This section identifies the types of situations in which a trainee will learn. The content of work-based experiential learning is decided by the local faculty for education but includes active participation in:

• Outpatient clinics that should be under consultant supervision to allow the clinical findings and management plans to be presented to the training consultant and discussed. The trainee should gain experience of managing both new and follow-up patients. The degree of responsibility taken by the trainee will increase as his or her competency increases

• Chemotherapy clinics to gain experience in reviewing and managing systemic therapy, both chemotherapy and immunotherapy. As the trainee's competency increases, he or she should prescribe chemotherapy, initiate courses of chemotherapy and obtain patient consent. The trainee must gain experience in both inpatient and outpatient chemotherapy and the management of complications

• Radiotherapy planning sessions to gain experience in the clinical indications and mode of delivery of radiotherapy

• Radiotherapy treatment review clinics. Trainees will gain experience in the acute and long-term complications of radiotherapy

• Radioisotope treatment sessions to allow the trainee to gain experience of the therapeutic use of unsealed radioactive isotopes

• Consultant-led ward rounds. Trainees must have the opportunity to observe senior doctors assessing and communicating with patients and their relatives. Feedback should be given on the trainee's clinical and decision-making skills

• Personal ward rounds and provision of ongoing clinical care for oncology inpatients. Following patients through the course of their illness provides the trainee with learning opportunities in making both diagnostic and management decisions in partnership with patients and their relatives. This also allows trainees to practice, reflect on and improve their communication skills

• Specialty-specific on-call experience that allows the trainee to develop competences in the diagnosis and management of oncology emergencies. Trainees must gain experience of out-of-hours emergencies by participating in an on-call rota during at least part of their training. When on-call they must be supervised by a named consultant

• MDT (Multidisciplinary team) meetings where patients are discussed with doctors from other disciplines. These provide excellent opportunities for observation of clinical reasoning. It is compulsory for trainees to attend these meetings. Within MDH – SAMOC the following MDT meetings take place and trainees assigned to the relevant consultant oncologist will attend the designated MDTs throughout that rotation:

- Breast
- Upper and Lower Gastrointestinal
- Central Nervous System
- Hepatopancreaticobiliary
- Gynaecology
- Genitourinary
- Sarcoma
- Lung
- Skin
- Neuroendocrine Tumours
- Haematology
- Germ Cell
- Acute Oncology (throughout foreign rotation)

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

- Reading, including journals and web-based material, such as NICE guidelines, NCCN guidelines, and ESMO guidelines
- Maintenance of a personal portfolio
- Audit and quality improvement projects

Learning with peers. There are many opportunities for trainees to learn with their peers. Local postgraduate teaching opportunities allow trainees of varied levels of experience to come

together for small group sessions. Examination preparation encourages the formation of study groups

Formal postgraduate teaching. The content of these sessions is determined by the local faculty of medical education and will be based on the curriculum

Other opportunities for formal teaching include:

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

The degree of responsibility taken by the trainee will increase as his or her competency increases. There should be appropriate levels of clinical supervision throughout training with increasing clinical independence and responsibility as learning outcomes are achieved, as described in Section 6 (Supervision and Feedback)

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

Assessment

The assessment system

The purpose of the assessment system is to:

•Enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, measure their own performance and identify areas for development

• Drive learning and enhance the training process by making it clear what is required of trainees and by motivating them to ensure they receive suitable training and experience

• Provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme

• Ensure trainees are acquiring competencies within the domains of the curriculum

• Assess trainees' actual performance in the workplace

• Ensure that trainees possess the essential underlying knowledge required for their specialty

• Inform the Annual Review of Competence Progression (ARCP), identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme

• Identify trainees who should be advised to consider changes of career direction. The integrated assessment system comprises workplace-based assessments and knowledge- and skill-based assessments

Individual assessment methods are described in more detail below. The e-portfolio is available on:

https://myeportfolio.gov.mt

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

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

5.2 Assessment blueprint

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

5.3 Assessment methods

Examinations and certificates

- The complete MRCP(UK) Examination or equivalent is required for entry into the specialty
- SCE organised by the Joint Royal Colleges of Physicians Training Board (JRCPTB) or equivalent. - There are no entry requirements for the SCE in Medical Oncology, however, trainees would normally take the SCE in their penultimate year of higher specialty training

Workplace-based assessments (WpBAs)

- mini-Clinical Evaluation Exercise (mini-CEX)
- Direct Observation of Systemic Therapy (DOST)
- Multi-Source Feedback (MSF)
- Case-based Discussion (CbD)
- Audit Assessment Tool (AA)
- Teaching Observation (TO)

These methods are described briefly in this section. More information about these methods including guidance for trainees and assessors is available in the online Portfolio. WpBAs should be recorded in the trainee's Portfolio. The workplace-based assessment methods include feedback opportunities as an integral part of the assessment process. This is explained in the guidance notes provided for the techniques. These assessments may be undertaken by appropriately trained consultants, more senior oncology trainees and staff grades. During HST

1 and 2, a minimum of 50% of WpBA must be undertaken by consultant oncologists or RS and during HST 3 and 4 a minimum of 75% of WpBA must be undertaken by consultant oncologists or RS

Mini-Clinical Evaluation Exercise (mini-CEX)
This tool evaluates a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination and clinical reasoning. The trainee receives immediate feedback to aid learning. The mini-CEX can be used at any time and in any setting when there is a trainee and patient interaction and an assessor is available

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

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

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

Audit Assessment Tool (AA)
The AA is designed to assess a trainee's competence in completing an audit. The AA can be based on a review of audit documentation or a presentation of an audit at a meeting. If possible the trainee should be assessed on the same audit by more than one assessor

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

5.4 Decisions on progress

The Annual Review of Competence Progression (ARCP) is the formal method by which a trainee's progression through his or her training programme is monitored and recorded. The ARCP is not an assessment; it is a review of the evidence of training and assessment. The evidence to be reviewed by the ARCP panel should be collected in the trainee's portfolio
The WpBAs will be spread throughout each clinical attachment to ensure that progress is being made and to allow trainees' development needs to be identified. The required WpBAs will be reviewed with the trainee's Educational and Clinical Supervisor(s) at each appraisal meeting. As trainees progress through training, the complexity of the clinical problems addressed during WpBAs should increase

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

ARCP decision aid

Standards for satisfactory ARCP progression (Outcome 1)

The tables that follow (Tables 1-4) define the minimum requirement for progression for each year of training. It is anticipated that trainees will at times cover parts of the syllabus beyond the minimum defined, especially when acquiring tumour site-specific competencies. Trainees are expected to build year-on-year on the competencies previously acquired. Workplace-based assessments should sample across the entire curriculum and be conducted in a timely manner throughout each clinical attachment (i.e. generally spread evenly through training and not all completed in the final weeks of an attachment)

Table 1. The minimum requirements for progression from year HST 1 to HST 2

HST 1 to HST 2
• 3 CbD • 3 DOST • 3 mini-CEX • MSF • Audit Assessment Tool or evidence of quality improvement project • Teaching Observation

Table 2. The minimum requirements for progression from year HST 2 to HST 3

HST 2 to HST 3
• 3 CbD • 3 DOST • 3 mini-CEX

Table 3. The minimum requirements for progression from year HST 3 to HST 4

HST 3 to HST 4
• 3 CbD • 4 DOST • 3 mini-CEX • MSF

Table 4. The minimum requirements for progression from year HST 4 to CCT/RS

HST 4 to CCT/RS
• Specialty Certificate Examination • 3 CbD • 4 DOST • 3 mini-CEX • Audit Assessment Tool or Evidence of Quality Improvement Project • Teaching Observation

6.0 Supervision and Feedback

6.1 Supervision

All trainees will be provided with a local Educational Supervisor and Clinical Supervisor/s with each rotation

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

Definitions:

The Oncology Postgraduate Training Committee (OPTC). The OPTC is the body that shall determine, monitor and review the implementation of the Training Programme. The committee will establish strategy and policy development to ensure such implementation. The OPTC will include the Postgraduate Training Coordinator as chairperson, the Oncology Clinical Chairperson and a member of the Association of Physicians of Malta. The OPGT committee shall report to the Postgraduate Training Lead. Decisions shall be taken by consensus and only where this fails by majority vote. Each member present shall have the right to vote. In case of parity of votes, the chair shall have the right to add a casting vote. The functions of the OPTC shall be as follows:

- To coordinate the delivery of the Training Programme, including the selection, monitoring and evaluation of training attachment
- To ensure regular assessment and appraisal of trainees
- To recommend trainees for specialist accreditation to the Specialist Accreditation Committee at the end of training
- To deal with any other matter relating to postgraduate oncology training

Post-Graduate Training Coordinator (PGTC). The PGTC is recruited for a term of three years after an open application process. The PGTC has the responsibility for the organisation and smooth running of the training programme, co-ordinated through the postgraduate training committee and supported and supervised by the Director General Health Care Services (MHEC Circular 26/2008). The PGTC has the following roles:

- To set up and chair the OPTC
- To manage and administer the Postgraduate Training Programme in Oncology
- Co-ordinate appraisal and assessment of trainees as part of the process leading to the award of the Certificate of Specialist Training
- Work with the appropriate authorities on manpower planning relating to trainee numbers and appropriate rotation of trainees to achieve a quality standard of post-graduate training
- Work with trainers within Oncology and trainers from other relevant specialities in the organisation and / or delivery of regular training for specialist trainees

- Work in close collaboration with the Lead Training Co-ordinator in the organisation and / or delivery of regular training for trainers
- Ensure and supervise assignment of trainees to trainers
- Establish appropriate mechanisms to ensure quality assurance of the training programme
- Prepare an annual report on the workings of the training programme and budget for subsequent year
- Perform the role of, or delegate an educational supervisor for every trainee in the training scheme

Deputy postgraduate training coordinator: At present, there is no official post of deputy postgraduate training coordinator for Oncology

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

Roles and responsibilities of the Educational Supervisor

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

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

The responsibilities of the Educational Supervisor are to:

- Have overall educational responsibility for an individual trainee for a period of training
- Ensure that the trainee is making the necessary clinical and educational progress
- Ensure that the trainee is meeting with his or her Clinical Supervisor(s) on a regular basis and that an appropriate learning and development plan is in place for each clinical attachment in compliance with the curriculum for medical oncology
- Help the trainee to develop his or her learning educational objectives, and ensure that these are documented and can be used as a point of reference for future appraisal and review
- Ensure that the trainee's Clinical Supervisor(s) understand(s) the trainee's educational needs

- Appraise the trainee as a minimum at the beginning, middle and end of each year of training
- Review the trainee's progress by:
  - Reviewing the trainee's portfolio
  - Ensuring that appropriate work-place based assessments have been undertaken.
  - Liaising with the trainee's Clinical Supervisor(s)
- Meet with the trainee at the beginning of each year of training to:
  - Review the outcome of the ARCP
  - Help the trainee to formulate his or her personal learning and development plan to meet the requirements of the medical oncology curriculum, including:
    - Clinical attachments to be undertaken
    - Appropriate audit/quality improvement, teaching and management experience
  - Develop a learning agreement and set educational objectives with the trainee which are mutually agreed and are the point of reference for future appraisal for the coming year
- Meet with the trainee prior to the ARCP to:
  - Ensure that the trainee has made the necessary clinical and educational progress through the previous year, considering:
    - Workplace-based assessment outcomes
    - Examination results if appropriate
    - Clinical Supervisors' reports
    - Audits, quality improvement projects, research projects undertaken, teaching and management experience
    - The trainee's learning and development plan
  - Discuss the content of the ARCP report
- Ensure that the Educational Supervisor's Structured Report to inform the ARCP of the trainee's progress is returned within the necessary timescales. This includes:
  - A detailed review and synopsis of the trainee's learning portfolio
  - The outcome of examinations
  - A summary of feedback from Clinical Supervisors
- Meet with the trainee if concerns arise about the trainee's performance
- Contact the employer should the level of performance of a trainee gives rise for concern
- Provide advice and support to the trainee as requested
- Help the trainee to access career management advice
- Document clearly any responsibilities that have been delegated to the trainee's Clinical Supervisor

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

Roles and responsibilities of the Clinical Supervisor

The Clinical Supervisor is responsible for supervising the trainee during a clinical attachment. There must be a named Clinical Supervisor for each tumour site-specific aspect of a clinical attachment. Where a trainee is working with more than one consultant covering the same tumour site, only one of these consultants will act as the Clinical Supervisor. In contrast, where a trainee is working with consultants covering different tumour sites both consultants should act as Clinical Supervisor for each specific tumour site

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

The Clinical Supervisor's responsibilities are to:

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

<u>Appraisal and Feedback</u>

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

<u>Annual Induction Appraisal</u>

The trainee and Educational Supervisor should have an appraisal meeting at the

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

End-of-year Appraisal

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

Clinical Supervisor' meetings

The trainee and Clinical Supervisor should have a meeting at the beginning of each rotational attachment to review the trainee's progress so far, agree learning objectives for the attachment ahead and identify the learning opportunities presented by the attachment. The PDP and the learning objectives for the year should be reviewed. The Clinical Supervisor should also add learning objectives which are relevant to that rotational attachment. A Mid-point Review is not mandatory, but is encouraged, particularly if either the trainee or Clinical Supervisor has training concerns. At this meeting, trainees should review their PDP with their supervisor using evidence from the portfolio. Workplace-based assessments and progress through the curriculum can be reviewed to ensure trainees are proceeding satisfactorily, and attendance at educational events should also be reviewed. The PDP can be amended at this review. At the end of the rotational attachment, trainees should review both the PDP and their curriculum progress with their Clinical Supervisor using evidence from the portfolio. Specific concerns may be highlighted from this appraisal. The End of Attachment Appraisal form should record the areas where further work is required to overcome any shortcomings. Further evidence of competence in certain areas may be needed, such as planned workplace-based assessments, and these should be recorded. If there are significant concerns following the End of Attachment Appraisal then the Educational Supervisor and Training Co-ordinator should be informed

Managing Curriculum Implementation

Intended use of curriculum by trainers and trainees

This curriculum is a web-based document, which is available from

https://myeportfolio.gov.mt

HST1 is equivalent to ST3 on the e-portfolio, HST2 = ST4, HST3 = ST5 and HST4 = ST6

Both trainers and trainees are expected to have a good knowledge of the curriculum and they should use it as a guide for their training programme

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

Recording progress

Once doctors enter the Medical Oncology HST program they will be given access to the portfolio for medical oncology. The portfolio allows evidence to be built up to inform decisions on a trainee's progress, and it provides tools to support trainees' education and development

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

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

All appraisal meetings, personal development plans and workplace based assessments (including MSF) should be recorded in the portfolio

Assessments and other ePortfolio content should be linked to curriculum competencies in order to provide evidence towards acquisition of those competencies

References

- Malta Clinical Oncology Postgraduate Training Committee - Radiology Postgraduate Training Document 2019
- JRCPTB Medical Oncology Curriculum Draft 2021