

**Radiotherapy and Oncology**

**Multi-disciplinary placements**



**Introduction**

Throughout a Cancer patients journey they will meet a variety of disciplines that have a very important role in the patient’s progress. It is important that you as a practitioner have an appreciation of other roles and develop your own skills in aspects of patient care. Throughout your MDT placements you will meet a variety of professionals who will aid you in your learning. Your placements throughout the course will include; clinic, radiology, nuclear medicine, chemotherapy, ward and MDT meetings. The following package will allow you to gather evidence from this learning experience for your clinical webfolio.

Good luck and have fun!

**Radiology Placement**

During this placement you should gain experience to allow you to answer the following learning outcomes;

1. demonstrate an insight into the role of the diagnostic radiographer and how this compares and contrasts with your own discipline;
2. describe the essential differences in terms of radiation protection between diagnostic imaging and radiotherapy departments;
3. demonstrate a working knowledge of the investigations which may be employed for patients with malignant disease;
4. explain the applications of ultrasound, computerised axial tomography, magnetic resonance imaging and mammography in the management of patients with malignant disease;
5. describe the role of contrast agents in diagnostic imaging;

You are to provide evidence of achievement of the above learning outcomes to aid your clinical knowledge. This may be through a reflective report and by presentation of any additional material that demonstrates learning from the placement.

**REFLECTIVE REPORT: DIAGNOSTIC IMAGING**

|  |  |
| --- | --- |
| **Placement/Visit** | **Diagnostic Imaging Departments** |
| **Supervisor & Signature** |  |
| **Date** |  |
| **Duration of Visit****Briefly describe the role of main X-ray, CT, MRI and ultrasound imaging modalities. List the types of investigations undertaken in each department and explain why the imaging procedure is appropriate for the investigation.** |  |

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| Describe the role of contrast agents in diagnostic imaging? Give examples of contrast agents. For each contrast agent, identify the imaging procedure in which it is used and any precautions required. |

# **Briefly describe the radiation protection measures within the diagnostic imaging departments.**

**Briefly describe the role of diagnostic imaging in the diagnosis and management of patients with malignant disease.**

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| --- |
| **What did you find most interesting and why? What did you find least interesting and why?** |

**What did you learn?**

**How will you use this learning in your clinical practice/work?**

**Areas/points to follow up.**

**Nuclear Medicine**

During this placement you should gain experience to allow you to answer the following learning outcomes;

1. demonstrate a knowledge of the properties and the clinical applications of unsealed radio nuclides and assess their contribution to health care;
2. assess the importance of infection control and radiation protection in the preparation of dispensing of unsealed radio nuclides;
3. actively participate in a range of diagnostic and therapeutic procedures using unsealed radio nuclides;
4. appreciate the role of the nuclear medicine technician within the health care team and the extent to which this contributes to the management of patients with malignant disease

**Relevant material might include:**

* documenting the special precautions taken to ensure that staff and general public do not become contaminated with radioactive materials
* outlining the activities that occur within the department
* outlining the role of the nuclear medicine department in the management of cancer patients
* identifying the procedure for the preparation of radio-isotopes
* identifying procedures for dealing with radioactive waste
* outlining the principles of the gamma camera with the use of a diagram
* making notes on the different procedures (e.g. bone scan, thyroid uptake scan etc). The pro-forma overleaf may be used for these
* including examples of scans indicating what they demonstrate

**Nuclear Medicine report**

**Type of scan: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Clinical indications for scan:**

**Patient preparation:**

**Isotope and labelled material used (indicate half-life):**

**Reason for choice of isotope:**

**Dose:**

**Method of detection:**

**Precautions required:**

**Chemotherapy**

During this placement you should gain experience to allow you to answer the following learning outcomes;

1. observe and understand the principles of cytotoxic drug administration;
2. demonstrate a knowledge of the adverse effects of cytotoxic agents;
3. appreciate the importance of good liaison with the radiotherapy department;
4. evaluate the patient information delivered to patients;

You are to provide evidence of achievement of the above learning outcomes to aid your clinical knowledge. This may be through a reflective report and by presentation of any additional material that demonstrates learning from the placement.

**Ward**

During this placement you should gain experience to allow you to answer the following learning outcomes;

1. demonstrate the development of observation and listening skills;
2. observe and understand the principles of drug administration;
3. appreciate the importance of good liaison with the radiotherapy department;
4. translate theory into practice regarding protocols of hygiene and disposal of clinical waste;
5. appreciate the ward's local rules on protection of staff and patients with regards Radio-iodine
6. appreciate the needs of family and close associates of patients with malignant disease

You are to provide evidence of achievement of the above learning outcomes to aid your clinical knowledge. This may be through a reflective report and by presentation of any additional material that demonstrates learning from the placement.

You may want to include comment on the following:

Ward rounds

Taking and recording of observations

Simple sterile dressings

Biopsies

Catheterisation

Urine measurement and testing

Attention to pressure areas

Care of following patients:

sedated/ unconscious

with a tracheostomy

with a stoma

with an IV infusion

**Outpatient clinic (year 1)**

1. communicate effectively with patients and colleagues in a professional manner
2. observe and participate in a range of routine clinical procedures undertaken in the clinic environment
3. read and understand the importance of patient notes observe and understand the rationale behind the choice of treatment option(s) for different malignancies
4. observe the reactions of radiation on normal tissue and note any medications/topical applications that may be utilised for the relief of symptoms
5. appreciate the need for continuous patient monitoring throughout and following cancer treatments
6. Observe and demonstrate you knowledge on blood levels and the important in cancer management
7. appreciate the need for a multi-disciplinary approach in the management of patients with malignant disease

You are to provide evidence of achievement of the above learning outcomes to aid your clinical knowledge. This may be through a reflective report and by presentation of any additional material that demonstrates learning from the placement.

**Induction into clinic**

On occasions it may be necessary for you to complete one of the following tasks. It is therefore important that you are aware of how to execute the following investigations;

|  |  |  |  |
| --- | --- | --- | --- |
| **Investigation** | **Observed** | **Demonstrated** | **Competent** |
| Height and Weight |  |  |  |
| MSU/ CSU |  |  |  |
| Request for bloods |  |  |  |
| Blood sugars |  |  |  |
| Blood pressure |  |  |  |
| Temperatures |  |  |  |
| Respiration |  |  |  |
| Pulse |  |  |  |

Why is it important that we have an accurate height and weight for the patient?

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What are the normal limits of a;

Blood count

Temperature

Blood pressure

Blood sugar

Why would you complete a urinalysis?..........................................................................................................................................................................................................................................................................................................................................................................................................................................................

It is important that this information is documented on the early warning card? If a patient is indicating an alert what do you do?

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**Treatment Reactions and Management Summary Sheet**

|  |  |
| --- | --- |
| Treatment region |  |
| Radical/Palliative Radiotherapy(Include does and fractionation) |  |
| Technique/beam arrangement |  |
| Potential acute reactions |  |
| Advice given routinely including dietary advice |  |
| Additional patient support eg. Dietician referral |  |
| Possible long term side effects |  |
| Medication prescribed (including information, dose and advice) |  |

**Outpatient clinic (final year)**

1. demonstrate excellent communicate skills with patients, colleagues and the MDT team
2. participate in and understand a range of routine clinical procedures undertaken in the clinic environment
3. demonstrate your understanding of the reactions of radiation on normal tissue and understand the correct medications/topical applications that may be utilised for the relief of symptoms
4. demonstrate your understanding of the need for continuous patient monitoring throughout chemo/radio regimes
5. demonstrate your knowledge of the current chemo/ radio regimes currently used in the department

You are to provide evidence of achievement of the above learning outcomes to aid your clinical knowledge. This may be through a reflective report and by presentation of any additional material that demonstrates learning from the placement.

**Treatment Reactions and Management Summary Sheet**

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**Research**

1. Describe the current trials which are underway in radiotherapy
2. Identify the legal and ethical issues around patient information and consent
3. Identify the role and function of the Research Radiographer

You are to provide evidence of achievement of the above learning outcomes to aid your clinical knowledge. This may be through a reflective report and by presentation of any additional material that demonstrates learning from the placement.

**Patient information and support**

1. Identify the community services available to patients, carers and families and how these may be assessed
2. Identify the grants and benefits available to patients and who can access them
3. Identify the use of complimentary therapies

You are to provide evidence of achievement of the above learning outcomes to aid your clinical knowledge. This may be through a reflective report and by presentation of any additional material that demonstrates learning from the placement.

**Lymphoedema placement**

1. Demonstrate your understanding on lymphoedema
2. Evidence the different methods of lymphoedema treatment
3. What quality of life issues arise from a diagnosis of lymphoedema

You are to provide evidence of achievement of the above learning outcomes to aid your clinical knowledge. This may be through a reflective report and by presentation of any additional material that demonstrates learning from the placement.

**Quality assurance**

1. Involvement in the routine run-up and run down of a CT, a Linear accelerators and/or Therapax. Including dose calibration and interlock tests
2. Show knowledge of recording and the reporting procedure relating to faults and routine equipment checks
3. Checking of beam profiling
4. Testing of safety devices and interlocks

This is not an exhaustive list and other procedures observed should be included as evidence.

|  |
| --- |
| Title of procedure: |
| Description of procedure |
|  |
| Evaluation of procedure |
|  |
| I certify that this student has actively participated in this procedure;Signed………………………………………………..Date………………… |

**There may be a crossover of the learning outcomes in this pack which you will experience over the course. Please try to ensure you use every learning opportunity to develop and extend your skills.**