

Orientation Booklet – Radiology Department

For student nurses on clinical placement in Radiology who are undertaking one of the following programmes:

- Bachelor of Science (Nursing) Children's & General Integrated
- Post Registration Children's Nursing Students (PRCNS)

Student Name:

Preceptor:



Philosophy of Care in Radiology Department

In the Radiology Department, we aim to work as a team, in all our areas, with children and their families, in order to meet their needs.

We recognise that all children are individuals and plan their care accordingly.

We believe in partnership of care, with children and their families, in providing our service.

We strive to provide evidence based quality care in a friendly environment.

STUDENTS PLACEMENT / DUTY ROSTER

(BSc Nursing: Children's & General and PRCNS students)

Allocated Placement dates/ Off Duty

- The hours & number of shifts you are required to complete for your placement will be clearly outlined in the Allocations Sheet emailed to you by Student Allocations Liaison Officer (SALO)
- The CNM2 & CNF in Radiology will also have a copy of your roster

Clinical Placements

Students will be rotated to each of the various areas within the Radiology Department as listed below during their placement:

- MRI
- CT
- Screening/Fluoroscopy
- Isotope Scanning Dept.
- General X-ray /Ultrasound areas

Points of Note

- When you report to the **CNM2 office in Radiology** ,you will be shown where the Radiology Locker Rooms are located
- Please bring your own padlock and store away any valuables
- We will provide Scrubs to be worn. Footwear must be uniform policy approved & used only for wear within the hospital (no outside wearing)

Pregnancy

If you think there is a chance that you may be pregnant, please make contact with your Student Allocations Liaison Officer (SALO), in advance of your placement, so that a pregnancy risk assessment may be performed.

Welcome to the Radiology Department

Staff

- CNM2 x 1 (bleep 8219)
- CNF x 1 (bleep 8289)
- Staff Nurses
- HCAs
- Radiology Service Manager
- Radiographers
- Porters
- Household Staff
- Each day there will also be a Consultant Radiologist and a Radiology Registrar assigned to each specific area of the Department.
- For all General Anaesthetic lists there will be a Consultant Anaesthetist and Anaesthetic Registrar assigned.

Emergency trolleys – one in the corridor outside MRI/CT, one in Screening Room and one in Nuclear Medicine.

Defibrillators – on emergency trolley - one in the corridor outside MRI/CT, one in Screening Room and Isotope Scanning share with St Anne's ward.

Radiology

Different types of imaging are necessary to help diagnose a condition and monitor treatment.

The department offers the following services:

1. General X-ray

An examination that uses small amounts of radiation to show structures inside the body such as the bones and lungs.

2. CT Scanning

A computer system, which uses X-rays to take more complex pictures of the internal structures of the body.

3. MRI Scanning

A scan using a magnetic field rather than X-ray to take pictures of the body.

4. Isotope Scanning

An imaging specialty that uses radionuclides (drugs or medicines that contain small doses of radioactivity) to study the structure and functions of the body. Examples of nuclear medicine scans include bone scans and DMSA Scans.

5. Ultrasound

A scan, which uses sound waves to take pictures of the body.

6. Screening/Fluoroscopy

Many procedures are performed in the Screening/Fluoroscopy suite of the Radiology Department. Here an imaging technique is performed that uses X-rays to obtain real-time moving images of the internal structures of the body. Specific types of fluoroscopy scans include gastro-intestinal studies, video-fluoroscopy studies, MCUG, lineograms, etc.

Specific types of contrast studies - for example barium swallows and barium enemas - are diagnostic tests where a contrast dye such as barium, which shows up on X-ray, is swallowed or given through a tube to help outline structures of the body on X-ray.

The nurse uses either an Aseptic Non-Touch Technique (ANTT) or sterile technique to prepare the relevant equipment as required; co-ordinates the list for the day, and carries out the procedure as part of a Multi-Disciplinary Team approach along with the radiologist, radiographer and Speech & Language Therapist as needed. The parent/guardian is involved where possible also.

Nurse-Led Sedation

A safety criteria checklist is carried out on an individual patient-by-patient basis to determine the suitability of nurse-led sedation as an aid to diagnostic imaging. Primarily used in CT/MRI/Isotope Scanning, where the patient is suitable it can mean avoiding the need for a general anaesthetic to perform these scans. Benefits to the patient include a less invasive procedure overall and in many cases a shorter recovery time. If for any reason the patient does not meet the criteria to have nurse-led sedation, they will be referred for a General Anaesthetic (GA) booking.

Check in Procedure for Patients Coming to Radiology Department for GA/Sedation:

- Patient's identification bracelet
- Appropriate consent form signed
- Adequate fasting status:
 - 6 hours for food and milk/formula
 - 4 hours for breast milk
 - 1 hour for clear fluids
- History of allergy
- Loose teeth, braces, caps, crowns present
- Seen by an anaesthetist and any pre-medication given
- Relevant past medical/surgical history
- Consent forms
- Medical history
- Addressograph labels
- Special instructions (medications, fluids, infection control status, etc.)
- Need for interpreter
- Appropriate attire
- Patient's property
- Patient's chart

Only one parent is allowed into the anaesthetic room to accompany the child.

Anaesthetic Room

Induction of anaesthesia is recognized as a critical and potentially hazardous period for the patient. A vital role for all nurses is to care for the patient's psychological well-being by being sensitive, supportive and trying to allay anxiety and fear as much as possible. There are toys, books and games available that can be given to the children to play with while waiting in the anaesthetic room or in the corridor.

The anaesthetist is ultimately responsible for checking that all equipment is present and in good working order. However, routine checking of equipment is carried out every morning by the Radiology nurses before start of list to ensure patient's safety.

During your placement in Radiology, you will learn and appreciate the importance of:

- airway management
- anaesthetic machine
- stethoscopes
- intravenous access for patient's undergoing general anaesthetic
- monitoring vital signs
- CO2 monitoring
- suction machine
- IV infusion pump
- arterial and CVP monitoring
- Bair Hugger
- Patient positioning

You will gain knowledge of anaesthetic techniques and common drugs used in anaesthesia.

The role of the Anaesthetic Nurse is to provide holistic care to all patients receiving anaesthesia along with maintaining privacy and dignity for the patient at all times. The anaesthetic nurse assists the anaesthetist in delivering general & regional anaesthesia.

Principles of Asepsis and Sterile Technique

Aseptic and sterile techniques are based on sound scientific principles and are carried out primarily to prevent the transmission of microorganisms that can cause infection. Asepsis literally means without infection, and it implies the absence of microorganisms that cause infection. The methods by which microbial contamination is prevented in the environment are referred to as aseptic techniques.

Sterile techniques refer to creating and working within the sterile field. To protect the patient during invasive procedures, microorganisms in the sterile field are kept to an irreducible minimum. Sterile items should be used to prevent the introduction of pathogens into the patient's body.

CT Guided Biopsies/Interventional Radiology Procedures

- Observing the various positions used in these procedures and participate in the safe positioning of the patient.
- Identifying the role of the scrub nurse.
- Understanding the importance of accurate documentation.
- Participating in the accurate count of swabs, needles, sutures and instruments and the correct disposal of sharps, soiled linen and waste materials.
- Learning and practicing good aseptic technique when scrubbing, donning a surgical gown and gloves as well as preparing instrument trolleys and maintaining the sterile field.
- Learning the correct method of observing universal precautions and extra precautions to be taken in known infected procedures.

Recovery Room:

Following the procedure or imaging, there is a “Recovery” period whereby the patient is cared for until the effects of anaesthesia have worn off. The role of the nurse is to facilitate the recovery process in the following areas:

- airway management
- monitoring of vital signs
- observing and identifying potential problems

Post-anaesthetic complications:

The following are some examples of post-anaesthetic complications:

Respiratory

- obstruction of airway
- respiratory arrest
- respiratory inadequacies
- laryngospasm

Gastro-intestinal

- nausea
- vomiting

- regurgitation

Circulatory

- hypertension
- hypotension
- cardiac arrhythmias/arrest

Temperature

- hypo or hyperthermia

Pain Management

In addition, while in the recovery room, you will gain knowledge in the safe handling/storage of controlled drugs and their usage in pain control.

You will also be able to have the opportunity to pass on relevant information about individual patients to the ward nurse and the completion of necessary documentation.

Hours of Placement (All Students)

You will be advised on how many days & weeks you must attend placement for (clinical shifts and reflective practice days) by the following:

- **Supernumerary Nursing students**: Student Allocations Liaison Officer (SALO)
- **PRCNS students**: PRCNS Co-Ordinator

Off Duty

- Your off duty will be decided by the Clinical Nurse Manager 2.
 - Changes to your off duty may be facilitated but this is dependent on ward skill mix.
 - Duty may be swapped between students only with prior agreement of Clinical Nurse Manager 2.
 - During your placement, you will be allocated a preceptor and a co-preceptor. We try as much as possible to facilitate students to work alongside your allocated preceptor so that your assessments are performed by nursing staff you have been closely linked with.
- **Reflective practice**: You will be facilitated to attend your mandatory reflective practice sessions in the CCNE (Children’s Centre for Nurse Education) or online. Reading & unstructured reflective practice will be accommodated but must be undertaken within the department.

Absence Reporting:

If you are absent for any reason you must follow the reporting structure below:

<u>Absence Reporting</u>	
Supernumerary Nursing Students (1 st , 2 nd , 3 rd & 4 th yrs.)	Rostered Student Nurses (PRCNS & Interns)
1. Ring the Clinical Area	1. Ring Nursing Admin
2. Email: student.absence@olchc.ie	2. Ring the Clinical Area
	3. Email: PRCNS Co-Ordinator (PRCNS) / Email: student.absence@olchc.ie (Interns)
Please refer to the full guideline for further information hours, absences and returning to placement:	
➤ <i>Supernumerary students Guidelines on Absenteeism and Duty, Supernumerary Nursing Students BSc Nursing Children’s and General -Nov. 2020</i>	➤ <i>CHI Crumlin Guideline on Duty Public Holiday Absenteeism for Rostered Stds 2021</i>

Clinical Learning and Student Support:

The Radiology Department aims to provide a quality learning environment. Nursing students have opportunities to work with all the staff nurses and the Clinical Nurse Facilitator, but your meetings will be facilitated by your individual preceptor. You will receive an orientation to the unit on your first day and the unit routines will be explained.

The Radiology learning outcomes are available from your preceptor. There are several education folders in the unit that will also provide information about the children in our care. If you have any specific learning needs, please discuss these with your preceptor, Clinical Nurse Facilitator or Clinical

Placement Coordinator. If appropriate, you may contact the unit or your CPC in advance to discuss any concerns. Finally, enjoy your placement in Radiology and be assured we are all available to help and support you throughout your placement.

While you are on clinical placement, you will be 'buddied' with your preceptor/co-preceptor/a registered nurse. If you have any information to feedback regarding your patient in the first instance report it to your 'buddy' nurse, if they are not available report it to the CNM/nurse in charge. Always handover your patient information before going on break or home to your 'buddy' nurse.

Student Signature: _____

Preceptor/ CNF Signature: _____