



Australian Government

Department of Education, Employment and Workplace Relations

HLTMI302A Support the medical imaging professional

Release: 1

HLTMI302A Support the medical imaging professional

Modification History

Not Applicable

Unit Descriptor

Descriptor

This unit of competency describes the skills and knowledge required by the worker to conduct activities essential for the functioning of a medical imaging environment, including, specialist cleaning, stock maintenance and set-up requirements

These activities are relevant for medical imaging units in hospital or community based settings

Application of the Unit

Application

The skills and knowledge in this unit of competency are implemented under the *supervision* of a medical imaging professional, including radiographer, radiologist, sonographer, radiology registrar or medical imaging nurse

The skills and knowledge of this unit of competency are implemented to assist the medical imaging professional and do not equip a worker to perform medical imaging

This function is undertaken in accordance with all relevant legislation, regulations, government policy and industry guidelines and is carried out according to organisation protocols and quality requirements

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills

This unit contains Employability Skills

Elements and Performance Criteria Pre-Content

Elements define the essential outcomes of a unit of competency.

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. Terms in *italics* are elaborated in the Range Statement.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1. Contribute to set-up for medical imaging

- 1.1 Assist with examination room preparation and tidiness
- 1.2 Refill medical imaging paper printer and film printer
- 1.3 Assist with the maintenance of hard copy film processor, as directed
- 1.4 Safely transport mobile X-ray and ultrasound equipment, where required
- 1.5 Identify and report perceived equipment issues to the appropriate person

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 2. Clean medical imaging equipment and environment within scope of responsibility | <ul style="list-style-type: none">2.1 Clean <i>medical imaging equipment</i> using appropriate materials and according to manufacturer's requirements when requested and according to instructions from a medical imaging professional2.2 Clean examination rooms as required2.3 Contribute to the maintenance of a tidy and clean medical imaging environment2.4 Conduct cleaning according to <i>infection control requirements</i>2.5 Document cleaning processes according to organisation protocols2.6 Use and dispose of cleaning materials and other waste according to manufacturer and organisation guidelines |
| 3. Maintain medical imaging stock | <ul style="list-style-type: none">3.1 Maintain levels of disposable stock according to <i>organisation protocols</i>3.2 Monitor <i>medical imaging supplies</i> and order where required3.3 Maintain adequate stocks of clean linen3.4 Monitor oxygen cylinders and order when required |
| 4. Provide client support for the imaging process | <ul style="list-style-type: none">4.1 Assist the medical imaging professional with client transfers and movement in a manner consistent with safety requirements, medical imaging requirements, relevant lifting policies and infection control requirements according to instructions from a medical imaging professional4.2 Where required, assist with <i>other client and process needs</i> (as identified in the Range Statement) during the medical imaging process under the direction of the medical imaging professional4.3 Ensure own actions do not compromise sterile field |

ELEMENT**PERFORMANCE CRITERIA****5. Work safely in a medical radiation environment**

- 5.1 Work in a manner consistent with *radiation protection principles*
- 5.2 Comply with organisation's radiation management plan
- 5.3 Use required *personal protective equipment* and personal monitoring in the medical imaging environment
- 5.4 Comply with all safety signs in the medical imaging environment
- 5.5 Report any concerns about radiation safety according to organisation protocols

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Essential knowledge:

The candidate must be able to demonstrate essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the identified work role

This includes knowledge of:

- Client confidentiality and privacy requirements
- Infection control requirements for specialist cleaning in a medical imaging environment
- Knowledge required to provide a description of a range of medical imaging processes, what they are used for, the procedure and length of time to undertake the procedure and the images produced by each procedure, including:
 - general radiography
 - mammography
 - fluoroscopy
 - CT scanning
 - MRI scanning
 - ultrasound
 - angiography
 - bone densitometry
- Own work role and responsibilities
- Personal radiation safety requirements in the medical imaging environment, including:
 - radiation protection principles
 - awareness of the hierarchy of control measures
 - responsibilities of employees and employers under relevant regulations and codes
 - emergency procedures
 - use and care of personal protective equipment and monitoring equipment safety signs and their meaning
- Occupational health and safety (OHS) requirements within the medical imaging environment, including personal safety requirements in an MRI environment and hierarchy of MRI field control measures
- Quality requirements associated with the maintenance of a medical imaging environment

REQUIRED SKILLS AND KNOWLEDGE

- Relevant policies and protocols of the organisation in relation to aspects of medical imaging in own work role, including:
 - stock maintenance
 - specialist cleaning
 - set-up
- Stock requirements for medical imaging
- Set-up requirements in a medical imaging environment

Essential skills:

It is critical that the candidate demonstrate the ability to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the identified work role

This includes the ability to:

- Adhere to own work role and responsibilities
- Apply appropriate and accurate medical and radiology terminology to medical imaging processes and in communication with clients and colleagues
- Apply communication skills required to:
 - provide easily understood information about equipment issues
 - understand instructions and ask questions as required
- Apply literacy skills required to:
 - complete checklists or forms with regard to cleaning processes
 - read and interpret manufacturer requirements and organisational procedures
- Apply teamwork skills
- Follow organisation policies and protocols
- Liaise and report to appropriate person
- Operate within infection control and OHS requirements, including personal safety requirements in an MRI environment and hierarchy of MRI field control measures
- Operate within personal radiation safety requirements, including:
 - following required radiation protection and safety procedures
 - complying with radiation safety signs
 - seeking advice and further direction when faced with unexpected situations
 - using and caring for personal protective equipment and personal monitoring equipment
- Set up equipment according to scope of responsibility
- Undertake safe cleaning of medical imaging equipment according to manufacturer's requirements, infection control requirements and other OHS requirements
- Undertake maintenance of stock and stock levels in medical imaging

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate this competency unit:

- The individual being assessed must provide evidence of specified essential knowledge as well as skills
- This unit will be most appropriately assessed in the workplace or in a simulated workplace and under the normal range of workplace conditions
- Radiation and magnetic field safety requirements must be demonstrated in the workplace
- It is recommended that assessment or information for assessment will be conducted or gathered over a period of time and cover the normal range of workplace situations and settings
- Where, for reasons of safety, space, or access to equipment and resources, assessment takes place away from the workplace, the assessment environment should represent workplace conditions as closely as possible

EVIDENCE GUIDE

- Access and equity considerations:*
- All workers in the health industry should be aware of access and equity issues in relation to their own area of work
 - All workers should develop their ability to work in a culturally diverse environment
 - In recognition of particular health issues facing Aboriginal and Torres Strait Islander communities, workers should be aware of cultural, historical and current issues impacting on the health of Aboriginal and Torres Strait Islander people
 - Assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on the health of Aboriginal and/or Torres Strait Islander clients and communities
- Context of and specific resources for assessment:*
- This unit can be assessed independently, however holistic assessment practice with other health service units of competency is encouraged
 - Resources required for assessment include:
 - access to appropriate workplace where assessment can take place
 - simulation of realistic workplace setting for assessment
 - relevant organisation policy, protocols and procedures
- Method of assessment may include:*
- Observation in the workplace
 - Written assignments/projects
 - Case study and scenario analysis
 - Questioning
 - Role play simulation

Range Statement

RANGE STATEMENT

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Supervision refers to:

- Instructing, advising, and monitoring another person in order to ensure safe and effective performance in carrying out the duties of their position
- The nature of supervision is flexible, underpinned by organisation protocols and may be conducted by various means, including:
 - in person
 - through use of electronic communications media, such as telephone or video conferencing, where appropriate and the task allows
- Nature of supervision will be determined by factors, such as:
 - the task maturity of the person being supervised
 - issues related to client condition
 - the need to correct and develop non-clinical aspects, such as time management, organisation requirements, communication skills, complexity of the task at hand and other factors supporting the provision of services and working within a team

A person under supervision may not require direct (immediate) and continuous personal interaction, but the method and frequency of supervision will be determined by the designated supervisor in the light of factors outlined above

RANGE STATEMENT

Medical imaging equipment may include:

- Equipment required for the following procedures:
 - general radiography
 - mammography
 - fluoroscopy
 - CT scanning
 - MRI scanning
 - ultrasound
 - angiography
 - bone densitometry
- Darkroom facilities
- Work stations and digitisers

Infection control requirements may include:

- Use of appropriate cleaning chemicals
- Use of appropriate personal protective equipment
- Appropriate handling of sharps
- Appropriate handling of body products
- Effective personal protection, such as hand washing

Organisation protocols may include:

- Stock requisition protocols
- Stock rotation protocols
- Nature of stock appropriate for handling by medical imaging assistants, e.g. general supplies rather than interventional radiology supplies

Medical imaging supplies may include:

- Film supplies
- Chemistry supplies
- Radiographic stocks

Other client and process needs may include:

- Awareness of drainage lines during transfer and movement
- Awareness of intravenous lines during transfer and movement
- Dealing with sharps
- Dealing with biological waste

RANGE STATEMENT

Radiation protection principles may include

- A hierarchy of measures, including:
 - avoidance of exposure, where practicable
 - adoption of safe work practices (e.g. closing doors)
 - and where other means of controlling exposure are not practicable, the use of personal protective equipment
- Awareness of 'controlled' or 'supervised' areas with appropriate working rules

Personal protective equipment in a medical imaging environment may include:

- Personal radiation monitor and dosimeter
- Lead/rubber apron
- Lead thyroid collars
- Lead gloves
- Face shielding
- Gloves and gowns

Unit Sector(s)

Not Applicable