



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **HLTAN507D Provide assistance in anaesthetic related procedures**

**Release: 1**

## HLTAN507D Provide assistance in anaesthetic related procedures

### Modification History

HLT07 Version 4	HLT07 Version 5	Comments
HLTAN507C Provide assistance in anaesthetic related procedures	HLTAN507D - Provide assistance in anaesthetic related procedures	Unit updated in V5. ISC upgrade changes to remove references to old OHS legislation and replace with references to new WHS legislation. No change to competency outcome.

## Unit Descriptor

### Descriptor

This unit of competency describes the skills and knowledge required to provide assistance to the anaesthetist in anaesthetic related procedures

## Application of the Unit

### Application

Work is performed under the direction of the anaesthetist and requires broad knowledge, a range of well developed skills and the ability to develop and apply solutions to a range of predictable and unpredictable problems. Individuals use discretion and judgement and take responsibility for the quality of their outputs

Clients' dignity and confidentiality is maintained, and reassurance provided throughout the anaesthetic related procedure, where appropriate. Equipment and materials required for the procedures are selected and made accessible and monitored for correct functioning, and changes to client condition are observed for abnormalities

Work may be performed in various locations within the hospital environment e.g. operating theatres, emergency departments, intensive care units, radiology department, endoscopy units, psychiatric units, MRI units and Sterilising departments

All activities are carried out in accordance with Australian and New Zealand College of Anaesthetists Policy Documents, organisation policies, procedures, Occupational Health and Safety and infection control guidelines

## 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

- |  |  |
|--|--|
| <p>1. Prepare <i>client</i> and equipment for <i>anaesthetic related procedure</i></p> | <p>1.1 Check <i>anaesthetist's requirements</i></p> <p>1.2 Select <i>equipment and materials</i> and prepare correctly and safely in accordance with infection control and other relevant guidelines</p> <p>1.3 Document anaesthetic accountable items</p> <p>1.4 Check <i>individual needs</i> of the client and complete action to meet those needs</p> <p>1.5 Provide assistance to the anaesthetist as directed to position the client for the procedure</p> <p>1.6 Take all necessary precautions to prevent cross-infection and avoid adverse events</p> <p>1.7 Check surgical requirements that may impact on the anaesthetic procedure</p> |
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**ELEMENT****PERFORMANCE CRITERIA**

2. Monitor the performance of *equipment and materials* used
  - 2.1 Ensure equipment is in working order and service records are current
  - 2.2 Ensure warning devices are switched on, tested and are registering that the equipment is safe
  - 2.3 Observe equipment and materials whilst in use and take immediate action if fault develops to avoid danger to equipment, clients and staff
  - 2.4 Follow established procedures to rectify faulty equipment and materials
  - 2.5 Check sterility of equipment and materials
  - 2.6 Maintain standby presence
  
3. Provide assistance to the anaesthetist to complete the anaesthetic related procedures
  - 3.1 Provide assistance to the anaesthetist as required throughout the procedure
  - 3.2 Check client's *physiological parameters* when required or as directed by anaesthetist
  - 3.3 Identify, validate and report deviations from acceptable limits of the client's physiological parameters to the medical practitioner
  - 3.4 Report signs of client discomfort, distress or adverse reaction to the anaesthetist in line with consistent practice and procedures
  - 3.5 Provide assistance to dress and *secure invasive device* into position in line with consistent practice and procedure
  - 3.6 Utilise *personal protective equipment* in accordance with standard precautions
  - 3.7 Correctly position and calibrate transducers

**ELEMENT****PERFORMANCE CRITERIA**

4. Restore equipment and environment at completion of procedure
- 4.1 Clean, disinfect or sterilise equipment in accordance with infection control guidelines and manufacturer's instructions
  - 4.2 Manage faulty equipment in accordance with organisation policies and procedures and manufacturer's guidelines.
  - 4.3 Dispose of disposable items in accordance with waste management policies
  - 4.4 Handle soiled linen in accordance with infection control guidelines
  - 4.5 Restock consumables
  - 4.6 Clean and restore the environment
  - 4.7 Dispose of waste safely and in accordance with infection control policy or organisation policies and procedures.
5. Assist with connection/disconnection of client to/from ventilation equipment
- 5.1 Select *ventilation equipment* and materials and prepare correctly and safely and in accordance with infection control and other relevant guidelines
  - 5.2 Set *ventilation modes and parameters* and ensure warning devices are switched on, tested and are registering that the equipment is safe.
  - 5.3 Observe equipment whilst in use and take action immediately if fault develops to avoid danger to equipment, clients and staff
  - 5.4 Follow established procedures to rectify faulty equipment
  - 5.5 Check client's *physiological parameters* when required or as directed by anaesthetist
  - 5.6 Identify, validate and report deviations from acceptable limits of physiological parameters to the medical practitioner
  - 5.7 Signs of client discomfort, distress or adverse reaction are reported to the Anaesthetist in line with consistent practice and procedure

## 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:

- Anaesthetic related procedures
- Anatomy and physiology, relevant to providing assistance in anaesthetic related procedures
- Fluid and electrolyte balance relevant to providing assistance in anaesthetic related procedures
- Manual handling and client positioning techniques relevant to providing assistance in anaesthetic related procedures
- Medical terminology relevant to providing assistance in anaesthetic related procedures
- Medico-legal requirements
- Monitoring of physiological parameters relevant to providing assistance in anaesthetic related procedures
- Normal physiological parameters for a range of physiological functions relevant to providing assistance in anaesthetic related procedures
- Occupational health and safety and infection control procedures/regulations
- Pre-medications and their effects relevant to providing assistance in anaesthetic related procedures
- Range of equipment in current use for anaesthetic related procedures, knowledge of manufacturers' operating guidelines and criteria for withdrawal of faulty equipment
- Types and functions of anaesthetic equipment, their indications and limitations for use
- Types of equipment utilised in anaesthetic related procedures its' indication for use and hazards and limitations associated with usage

#### *Essential skills:*

It is critical that the candidate demonstrate the ability to:

- Establish and maintain a client's airway manually
- Identify and manage faults in anaesthetic and monitoring equipment
- Prepare and operate anaesthetic and monitoring equipment for use
- Prepare client sites correctly to interface with equipment

## REQUIRED SKILLS AND KNOWLEDGE

- Secure invasive devices

In addition, the candidate must be able 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:

- Comply with organisation policies and procedures including those of WHS and infection control, and current standards
- Deal with conflict
- Display empathy with client and relatives
- Monitor range of physiological parameters with reference to standard values of normal physiological function for each clients' usual parameters relevant to providing assistance in anaesthetic related procedures
- Recognise the signs and symptoms, validity, causes and remedial actions in the event of adverse reactions to anaesthetic related procedures
- Take into account opportunities to address waste minimisation, environmental responsibility and sustainable practice issues
- Use basic computer skills
- Use numeracy skills including the ability to complete basic arithmetic calculations, recording stock levels and statistical information
- Use oral communication skills-language competence required to fulfil job roles in a safe manner and as specified by the organisation. Assessors should look for skills in asking questions, providing clear information, listening to and understanding workplace instructions, and clarifying workplace instructions when necessary. Effective verbal and non verbal communication skills with a range of personnel within and outside of the organisation are essential. An ability to recognise and manage barriers to effective communication is also essential. Organisation may require competence in English or a community language, depending on client group
- Use problem solving skills required, including an ability to use available resources
- Use reading and writing skills-literacy competence required to fulfil job roles in a safe manner and as specified by the organisation. The level of skill required involves reading and documenting clinical information and understanding complex policy and procedure manuals.
- Work with others

## Evidence Guide

### 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
- Observation of workplace performance is essential for assessment of this unit
- Consistency of performance should be demonstrated over the required range of situations relevant to the workplace
- 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

*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 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 health of Aboriginal and/or Torres Strait Islander clients and communities

## EVIDENCE GUIDE

- Context of and specific resources for assessment:*
- Resources essential for assessment include:
    - access to appropriate workplace where assessment can take place
    - simulation of realistic workplace setting for assessment
    - relevant organisation policy, guidelines, procedures and protocols
- Method of assessment*
- Observation in the work place
  - Evidence gathered from clinical work environment
  - Written assignments/projects or questioning should be used to assess knowledge
  - Case study and scenario as a basis for discussion of issues and strategies to contribute to best practice.
  - Questioning - verbal and written
  - Role play/simulation
  - Clinical skills involving direct client care are to be assessed initially in a simulated clinical setting (laboratory). If successful, a second assessment is to be conducted during workplace application under direct supervision
- Related units:*
- This unit can be assessed independently, however holistic assessment practice with other health services units of competency is encouraged

## 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.

*Clients must include:*

- Neonates
- Infants
- Children
- Adolescents
- Adults
- Elderly
- Pregnant women
- Impaired
- Traumatised
- Unconscious
- Immuno-compromised
- Ventilated

## RANGE STATEMENT

*Anaesthetic related procedures must include:*

- Vascular 'Cut Downs'
- Blood patch
- Pain Management procedures
- 12 Lead ECG
- Spinal Cord Monitoring
- Peripheral Ultrasonic Devices
- Transoesophageal Echocardiograph (TOE)
- Cell Salvage (including Autologous Growth Factor (AGF) and Platelet Sequestration)
- Autotransfusion
- Balloon Pump
- Intracranial Pressure Monitoring
- Ventilation Changes
- External Pacing

*Anaesthetist's requirements may include:*

- Client details e.g. age, weight, gender, health status, problems anticipated
- Procedure to be undertaken
- Equipment and materials for procedure

## RANGE STATEMENT

*Equipment and materials must include:*

- Relevant drugs
- Antiseptic solution
- Tapes and dressing materials
- Trolleys
- Chairs
- Sandbags
- Linen protectors and bundles
- Ventilators/breathing equipment
- Specialist Sterile procedure pack
- Specialty/procedural disposable packs
- Sterile field setup
- Machines/equipment relevant to procedures
- Sutures
- Swabs
- Needles
- Syringes
- Electrodes and Gel
- Transducers
- Tourniquets
- Catheters
- Fluid
- Suction consumables
- Infusion sets
- Underwater drain

*Equipment must include:*

- Monitoring equipment
- Infusion equipment
- Ventilator

## RANGE STATEMENT

### *Physiological parameters*

- Temperature
- Circulation
- Respiration
- Oxygenation
- Neuro-muscular function
- Level of consciousness
- Arterial blood gases
- Haemoglobin levels
- Coagulation times

### *Personal protective equipment may include:*

- Gown
- Gloves
- Mask
- Protective eyewear
- Apron

### *Ventilation Equipment and Materials*

- Types of ventilators
- Invasive airway devices
- Breathing circuits, valves, masks and connectors
- Heat and moisture exchanger
- Humidifier
- Filter
- Water traps
- Temperature monitors
- Nebulisers
- Gas sampling lines
- Suction devices
- Gas blenders for specific gas therapy
- Bellows
- Scavenging
- CO<sub>2</sub> absorbant
- Vapourisers
- O<sub>2</sub> therapy equipment (including neonatal head box)
- Manual resuscitators

**RANGE STATEMENT**

*Ventilation modes and parameters*

- Pressure control ventilation
- Simultaneous intermittent ventilation
- Positive end expiratory pressure
- Continuous positive airway pressure
- Intermittent positive pressure ventilation
- Rate
- Volume
- Pressure
- Time cycles
- Alarm limits
- Spontaneous
- Percentage oxygen

**Unit Sector(s)**

Not Applicable