



Australian Government

Department of Education, Employment and Workplace Relations

HLTCA403C Perform stress testing

Release: 1

HLTCA403C Perform stress testing

Modification History

Not Applicable

Unit Descriptor

Descriptor

This unit of competency describes the skills and knowledge required to prepare client and assist medical officer during a stress test

Application of the Unit

Application

Work will be performed within a prescribed range of functions involving routine and non-routine methods and procedures which require the exercise of some discretion and judgement. Stress tests are commonly conducted in medical centres, hospitals and cardiologists' rooms

All procedures are carried out in accordance with organisation policies and procedures, occupational health and safety policies and procedures, current infection control guidelines and Australian and New Zealand Standards for maintaining infection control

All tasks are carried out in accordance with State or Territory legislative requirements

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Pre-requisite unit

This unit must be assessed after successful achievement of pre-requisite:

- HLTCA401C Perform electrocardiography (ECG)

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.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

- | | |
|------------------------------|--|
| 1. Prepare equipment for use | 1.1 <i>Check equipment</i> for good working order |
| | 1.2 Check <i>materials</i> for availability and supply |

ELEMENT**PERFORMANCE CRITERIA****2. Prepare *client* for stress testing**

- 2.1 Receive and process the *request* for Holter monitor in accordance with organisation procedures
- 2.2 Identify the client correctly following the organisation's guidelines for preventing client misidentification
- 2.3 Reassure and provide *information* to the client regarding the stress testing procedure appropriately and completely
- 2.4 Involve the client fully in discussions about their treatment using language they can understand
- 2.5 Provide the client with the opportunity to ask questions and discuss areas of concern
- 2.6 Record *client information* electronically
- 2.7 Review client medical history and address pre-existing conditions
- 2.8 Obtain and document consent following ethical and legal requirements

3. Attach electrodes for stress test

- 3.1 Maintain the client's privacy and dignity throughout procedure
- 3.2 Complete preparation of client's skin for electrode placement as required
- 3.3 Position the client correctly and comfortably and place electrodes in accordance with client's needs and current standards
- 3.4 Attach blood pressure cuff correctly to the client

ELEMENT**PERFORMANCE CRITERIA**

4. Assist with stress test

- 4.1 Record blood pressure and 12 lead ECG whilst client is *supine* and standing
- 4.2 Ensure supervising medical officer is present prior to commencement of test
- 4.3 Provide assistance to the medical officer during the stress test
- 4.4 Record and monitor 12 lead ECG and blood pressure throughout exercise and post exercise in accordance with policies and procedures
- 4.5 Identify and report signs of client discomfort, distress or *adverse reaction* to the medical officer in attendance and check equipment for true reading
- 4.6 Suspend or stop the test in response to adverse client reaction
- 4.7 Inform and reassure client, as appropriate, throughout the procedure
- 4.8 Maintain communication with the client at all times throughout the procedure

5. Complete stress test

- 5.1 Remove stress test leads and electrodes from client
- 5.2 Store stress test leads in accordance with manufacturer's guidelines
- 5.3 Dispose of disposable stress test electrodes and other materials in accordance with waste management procedures
- 5.4 Provide client with *assistance* as required, on completion of the procedure
- 5.5 Complete, print and present *report* to cardiologist for review

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:

- Anatomy and physiology relevant for performance of stress test
- Basic pharmacology related to cardiac function relevant for performance of stress test
- Cardiac rhythm disturbance
- Causes of the common trace interference and the appropriate remedies
- Complications and contraindications for clients undergoing stress testing
- Confidentiality and privacy requirements of client information
- Electrical safety requirements
- Principles of function, usage, indications, limitations and care of equipment relevant for performance of a stress test
- Protocols for stress testing
- Purpose of stress tests eg: diagnostic, prognostic
- Routine maintenance policy and procedures for equipment

Essential skills:

It is critical that the candidate demonstrate the ability to:

- Communicate effectively with clients in relation to the procedure and manage clients' anxiety level
- Comply with organisation policies and procedures including those of OHS and infection control.
- Identify and manage all forms of interference with ECG trace
- Identify and respond to contraindications before and during test
- Identify steps that must be taken to ensure equipment is safe for use
- Identify the equipment requirements and prepare a range of equipment for performance of stress testing

REQUIRED SKILLS AND KNOWLEDGE

- Produce a diagnostic stress test result
- Recognise boundaries of responsibilities and refer problems to supervisor or other appropriate health professional

continued ...

Essential skills (contd):

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:

- Apply basic cardiopulmonary resuscitation in accordance with organisation policies and procedures and current standards
- Communicate with people from diverse cultural and linguistic backgrounds
- Correctly operate stress equipment
- Correctly prepare skin, place electrodes and anchor electrodes and leads
- Deal with conflict
- Identify a stress test result that is unsatisfactory for diagnostic purposes
- Manage the known common interferences in the production of a stress test trace
- Prepare and use equipment for performance of stress testing
- Produce a stress test trace satisfactory for diagnostic purposes
- Solve problems including the ability to use available resources
- Take measurement of blood pressure
- Take into account opportunities to address waste minimisation, environmental responsibility and sustainable practice issues
- Use effective verbal and non verbal communication skills with a range of internal and external persons are essential
Organisation may require competence in English or a community language, depending on client group
- Use numeracy skills ranging from the ability to complete basic arithmetic calculations, recording stock levels and statistical information
- Use oral communication skills required to fulfil job roles in a safe manner and as specified by the organisation, including skills in asking questions, providing clear information, listening to and understanding workplace instructions, and clarifying workplace instructions when necessary
- Use reading and writing skills 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 policy and procedure manuals
- Work with others and display empathy with client and relatives

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
- Where, for reasons of safety, access to equipment and resources and space, assessment takes place away from the workplace, simulations should be used to represent workplace conditions as closely as possible
- Consistency of performance should be demonstrated over the required range of workplace situations

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:

- Clinical risk assessment policies and procedures
- Emergency response procedures
- Infection control procedures
- Other organisation policies and procedures
- Relevant organisation policy, guidelines, procedures and protocols
- Relevant stress test equipment and leads
- Stress test procedure manual
- Workplace health and safety guidelines

Method of assessment

- Authenticated reports of experience in performing stress testing (Documentation associated with performance reviews, supervisor/coordinator evaluations of work performance)
- Authenticated transcripts of relevant education/training courses
- Case study and scenario as a basis for discussion of issues and strategies to contribute to best practice
- 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
- Discussion of physical and/or behavioural contingency scenarios involving duty of care
- e-learning can be used to assess knowledge
- Observation of simulation and/or role play when performing stress testing
- Observation of work activities when performing stress testing
- Recognition of relevant life/work experience
- Training records associated with first aid, occupational health and safety training, orientation/induction training, safe manual handling, universal infection control procedures
- Written assessments/projects, questioning,

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.

Equipment may include:

- Monitoring equipment
- Resuscitation equipment

Checking of equipment must include:

- Cleanliness
- New battery
- Calibration
- Settings appropriate for a 3 or 5 lead rhythm trace
- Maintenance in accordance with the relevant Australian Standard

Materials may include:

- Electrodes
- Battery
- Cassette tape
- Surgical tape
- Skin prep
- Tissues

Clients may include:

- Infants
- Children
- Adolescents
- Adults
- Elderly

Request may come from:

- Registered medical practitioner
- Registered nurse

RANGE STATEMENT

Information given to clients may include:

- Correct attire
- Expectation/safety of test
- Monitoring occurring throughout test

Client information may include:

- Client symptoms
- Date and time
- Medical history e.g. hypertension, hypercholesteraemia, recent myocardial infarction
- Medical record number
- Medications
- Name
- Predicted heart rate
- Weight

Action in response to client's medical history may include:

- Providing for client's special needs

Supine may be

- Lying
- Sitting

Adverse client reaction may include:

- Chest pain
- Client request
- Hyper/hypotension
- Ischaemic ECG changes
- Major cardiac arrhythmia
- Respiratory distress

Assistance for the client may include:

- Cleaning of gel from chest and limbs
- Re-arranging of clothing

RANGE STATEMENT

Report may include:

- Details of client recovery
- Details of client symptoms
- ECG changes
- Maximum heart rate and blood pressure
- Percentage of predicted maximum heart rate reached
- Reason for completion of test

Unit Sector(s)

Not Applicable