



**Australian Government**

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

# **HLTART409B Construct, adapt and install pressure management systems**

**Release: 1**

## **HLTART409B Construct, adapt and install pressure management systems**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Descriptor**

This unit of competency describes the skills and knowledge required in technical support of selection and to install and construct support surfaces for the management of soft tissue integrity

### **Application of the Unit**

#### **Application**

This unit applies to workers within the rehabilitative environment involving the application of solutions to effectively provide a support surface for clients so as to allow minimal compromise to tissue integrity

### **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. Determine support surface requirements

1.1 Consider *equipment prescription or instructions* from *relevant health professionals* and confirm that all required technical information has been provided

1.2 Discuss and agree upon requirements with client and relevant health professional

2. Select an appropriate support surface

2.1 Select custom support system to meet client requirements in consultation with *relevant health professionals*

2.2 Consider technical aspects of the seating system in terms of applicability for effectiveness of pressure management and compliance with applicable guidelines

2.3 Document specifications for construction and selection in accordance with organisation policies and procedures

3. Manufacture support system

3.1 Select appropriate materials

3.2 *Manufacture* and/or *modify* support system in accordance with OHS requirements, relevant standards and organisation procedures

**ELEMENT****PERFORMANCE CRITERIA**

- |   |  |
|---|--|
| 4. Install pressure cushion and/or pressure management components in a wheelchair | 4.1 Install seating system in accordance with OHS requirements, relevant standards and organisation procedures                     |
|   | 4.2 Assist with instructing clients and relevant others in the correct servicing and maintenance of the pressure management system |
| 5. Evaluate pressure management support systems                                   | 5.1 Measure soft tissue interface pressures at <i>support surfaces</i>   |
|   | 5.2 Establish, maintain and store client files in accordance with organisation policies and procedures                             |

## 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:

- Awareness of foam polymer characteristics
- Awareness of problems related to interface pressure measurement
- Awareness of the biomechanics of pressure management
- Awareness of the clinical management of pressure sores
- Awareness of workplace procedures including:
  - appropriate practices to ensure efficient use of resources
  - codes of practice
  - health funds/policies
  - recording/documentation processes/techniques
  - regulatory requirements

## REQUIRED SKILLS AND KNOWLEDGE

- relevant OHS standards/legislation
- Awareness of the range and characteristics of commercially available support services and how they can be used to meet specified client requirements
- Awareness of relative clinical, practical and other advantages/disadvantages of commercially available support surfaces
- Awareness of terminology related to pressure management
- Awareness of the effect of the client's soft tissue management on their health status
- Awareness of the musculo-skeletal system
- Basic awareness of aetiology of pressure sores
- Organisation policies in relation to the scope of the role of the assistive technology technician

### *Essential skills:*

It is critical that the candidate demonstrate the ability to:

- Advise on technical aspects of support surfaces and/or support surface materials including cushion covers to meet client requirements
- Communicate effectively with clients and others in order to provide clear and precise information about the proper use, maintenance and function of the seating system and/or its modifications
- Evaluate, problem solve and address a variety of typical pressure management problems
- Identify problems and bring them to the attention of the appropriate person
- Maintain accurate records
- Maintain, use and follow manufactures calibration procedures for interface pressure management tools
- Make support surface repairs, modifications and adjustments
- Measure interface pressure using single and multi sensor systems
- Mount the support surface and/or components to a mobility device or seating system
- Select appropriate materials and techniques for construction of support surfaces
- Use design skills in the appropriate selection of materials for seating system manufacture, repair and/or modification
- Use hand tools and machinery to undertake adjustments and modifications as required

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 procedures and processes including reporting requirements
- Communicate with work colleagues, associates and clients including:
  - teamwork

## REQUIRED SKILLS AND KNOWLEDGE

- client confidentiality
- interpersonal skills
- Manage time and workload
- Use literacy skills required to fulfil job role in a safe manner
- Use numeracy skills required to fulfil job role

## 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

## 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 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
- Context of and specific resources for assessment:*
- Assessment should replicate workplace conditions as far as possible
  - Simulations may be used to represent workplace conditions as closely as possible
  - 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
  - Resources essential for assessment include:
    - access to appropriate workplace where assessment can take place
    - access to relevant health professionals
- Method of assessment*
- Observation in the work place
  - Written assignments/projects
  - Case study and scenario as a basis for discussion of issues and strategies to contribute to best practice.
  - Questioning
  - Role play simulation

## EVIDENCE GUIDE

*Related units:*

This unit should be assessed in conjunction with the following related competency unit:

- HLTART401B Work effectively in the rehabilitation environment

## 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.

*Support surface may include:*

- Commercially available wheelchair pressure cushions, backrests and postural control devices
- Custom made wheelchair pressure cushions, backrests and postural control devices
- Commercially available mattresses
- Custom made mattresses
- Commercially available positioning systems
- Custom made positioning systems

*Relevant health professionals include:*

- Rehabilitation engineer
- Medical practitioner
- Occupational therapist
- Physiotherapist
- Nurse
- Orthotist



## RANGE STATEMENT

*Equipment prescription or instructions may include:*

- Technical history of previous devices
- Technical assessments
- Technical requirements to meet assessed therapy goals
- Basic measurements of seating system components

*Technical advice may include:*

- Selection of materials for incontinence
- Support characteristics
- Support cover characteristics
- Tolerance for error in manufacture
- Service life of the support system
- Support system cost benefit
- Available manufacturing resources
- Support system availability
- Cost of custom modifications considered

*Assessment may include:*

- Measurement of interface pressures
- Measurement of pressure distribution
- Discussion with relevant health professionals
- Dimensional requirements for support surfaces

*Manufacture may include:*

- Adaptation of commercially available therapeutic components for use as support surfaces
- Design and manufacture of unique components or systems for support surfaces to maintain soft tissue integrity and/or devices for use on the wheelchair, positioning system or other support surface
- Fabrication of foam polymer support surfaces
- Vacuum forming expanded thermoplastic elastomers
- Application of incontinence proofing barriers

## RANGE STATEMENT

*Modification processes may include:*

- Use of hand tools, power tools and machinery
- Sewing
- Electric knife
- Electric or pneumatic grinder
- Grinding/shaping foam
- Fabrication of covers by sewing or heat sealing

*Support surfaces may include:*

- Postural support components attached to a wheelchair, wheelchair seat or backrest including:
  - lateral thoracic supports,
  - hip blocks
  - thigh adductor blocks
  - pommels
  - lumbar supports
  - head supports
- Seat cushions and backrests including:
  - alternating pressure
  - low air loss
  - foam polymer
  - air
  - gel
- Positioning systems
- Positional seating components
- Mattresses including:
  - alternating pressure
  - low air loss
  - foam
- Head supports

## Unit Sector(s)

Not Applicable