HLTDT518D Repair and modify dentures and appliances
### Modification History

<table>
<thead>
<tr>
<th>HLTDT518C Repair and modify dentures and appliances</th>
<th>HLTDT518D - Repair and modify dentures and appliances</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLT07 Version 4</td>
<td>HLT07 Version 5</td>
<td>ISC upgrade changes to remove references to old OHS legislation and replace with references to new WHS legislation. Minor changes to Essential Skills and Knowledge.</td>
</tr>
</tbody>
</table>

### Unit Descriptor

**Descriptor**

This unit of competency describes the skills and knowledge required to reline, rebase, repair and modify removable prostheses.

All procedures are carried out in accordance with work health and safety (WHS) policies and procedures, current infection control guidelines, Australian and New Zealand Standards, state/territory legislative requirements and organisation policy.

### Application of the Unit

**Application**

This unit applies to work in dental technology.

### Licensing/Regulatory Information

Not Applicable.
**Pre-Requisites**

**Pre-requisite units**

- This unit must be assessed after successful achievement of pre-requisites:
  - HLTDT301D Construct models
  - HLTDT304D Articulate models and transfer records
  - HLTDT519C Construct simple complete removable acrylic dentures and appliances
  - HLTIN301C Comply with infection control policies and procedures
  - HLTWHS300A Contribute to WHS processes

**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

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| **1. Prepare case** | 1.1 Apply *standard precautions when receiving, handling and working on dentures and appliances*  
1.2 *Decontaminate dentures and appliances* according to infection control guidelines  
1.3 Read and interpret prescription  
1.4 Examine fractured components for defects  
1.5 Realign, position and secure fractured components in their correct relationship |
| **2. Prepare model** | 2.1 Construct model  
2.2 Construct articulation key if required |
| **3. Repair denture or appliance** | 3.1 Prepare and shape denture surfaces to allow for bonding with the new material  
3.2 Relocate components  
3.3 Select and prepare materials and processing equipment  
3.4 Apply repair material using the correct technique to the required shape and thickness  
3.5 Process material to manufacturer's instructions |
| **4. Modify denture or appliance, where required** | 4.1 Decontaminate impressions according to infection control guidelines  
4.2 Pour the model material into the impression in accordance with accepted techniques  
4.3 Articulate case and transfer records or construct articulation key as required  
4.4 Prepare denture or appliance surfaces appropriately for the *modification* to be made  
4.5 Reline, re-base or modify the denture in accordance with prescription |
<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 5. Trim, shape and finish denture or appliance | 5.1 Trim denture or appliance to relevant anatomical outline or required extension of the base  
5.2 Examine the tissue fitting surface and remove any processing anomalies and sharp surfaces  
5.3 Refine and polish surfaces and produce required contours  
5.4 *Evaluate the finished prosthesis*  
5.5 Decontaminate the appliance according to infection control guidelines  
5.6 Place the appliance in a sealed container for dispatch |
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:

- Applied oral anatomy
  - dentition - arrangement of the teeth, naming and coding of teeth
  - structures of the oral cavity - hard and soft palate, lateral and posterior borders of the oral cavity, tongue and floor of the mouth
  - teeth - form and function
- Constructional faults that cause fractures of denture base including:
  - absence of balanced occlusion
  - inadequate polymerisation times and temperatures
  - incorrect dough consistency when packing
  - incorrect positioning of upper posterior teeth
  - insufficient thickness of acrylic resin in the anterior palatal region of the denture
  - rapid cooling after processing
- Constructional faults that cause broken teeth
- Denture base materials
- Denture decontamination procedures when modifying acrylic
- Infection control guidelines for the decontamination of dentures and appliances that have already been inserted into the mouth
- Methods for modifying, repairing and maintaining removable prostheses

Essential skills:
It is critical that the candidate demonstrate the ability to

- Consistently design and manufacture oral splints using a range of materials, for a range of jaw relations and malocclusions
- Consistently use a range of articulators
REQUIRED SKILLS AND KNOWLEDGE

- Consistently trim, polish, finish and evaluate oral splints for suitability for insertion in the mouth
- Consistently comply with current infection control guidelines, Australian Standards and legislative requirements as they relate to the dental technician's specific job role
- Consistently comply with work health and safety policies and procedures as they relate to the dental technician's specific job role

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:

- Consistently follow sequenced written instructions and manufacturer specifications for the preparation of materials
- Select materials, techniques and equipment to reline, rebase, repair and modify removable prostheses
- Take into account opportunities to address waste minimisation, environmental responsibility and sustainable practice issues, including efficient use of power and other resources
- Use safe work practices to minimise the risk of transmission of infection including:
  - consistently following the procedure for washing and drying hands
  - consistently putting into practice clean techniques
  - consistently using personal protective equipment
  - consistently limiting contamination
  - consistently maintaining clean receiving and work areas
- Use literacy skills to read and follow directions, policies and procedures including:
  - work health and safety policies and procedures
  - infection control policies and procedures
  - material safety data sheets
  - laboratory policies and procedures

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.
EVIDENCE GUIDE

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
- Consistency of performance should be demonstrated over the required range of workplace situations

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

Method of assessment:

- Evidence of essential knowledge and understanding may be provided by:
  - traditional or online (computer-based) assessment
  - written assignments/projects
  - Case study and scenario as a basis for discussion of issues and strategies to contribute to best practice
  - Questioning
  - Staff and/or client feedback
  - Supporting statement of supervisor
  - Authenticated evidence of relevant work experience and/or formal/informal learning
  - Role play simulation
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

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.
RANGE STATEMENT

Standard precautions may include but are not limited to:

- A dedicated clean area to receive incoming cases
- Appropriate personal protection:
  - disposable gloves
  - apron
  - eye protection
  - mask where there is a risk of airborne transmission of infection
- Cleaning reusable containers with detergent followed by disinfection
- Decontamination of dentures and appliances
- Disposal of all packaging materials in accordance with the waste regulations of State/Territory health and environmental authorities
- Excluding all food and drink from the work area
- Washing hands before leaving the work area

Decontamination of dentures and appliances may include but is not limited to:

- Cleaning in a mild detergent solution until all traces of blood and body fluids are removed, followed by rinsing
- Cleaning in an ultrasonic cleaner
- Rinsing denture or appliance in clean running water

Preparation of materials may include:

- Selection of materials appropriate to the removable prosthesis that is to be repaired
- The correct quantities necessary for the repair

Modifications to a prosthesis may include:

- Adding new artificial teeth
- Adding new metallic components
- Modifying existing metallic components
- Modifying the denture base
- Replacing existing artificial teeth
RANGE STATEMENT

Evaluation of the finished prosthesis may include but is not limited to

- Checking the prosthesis for:
  - compliance with the prescription
  - quality and freedom from defects
  - functional effectiveness of the design
  - accurate fit to the cast

Unit Sector(s)

Not Applicable