



**Australian Government**

# **HLTDET015 Construct complete removable acrylic dentures and appliances**

**Release: 1**

# HLTDET015 Construct complete removable acrylic dentures and appliances

## Modification History

| Release   | Comments                                                                                                                                                                                                                                                                                                                                                                       |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Release 1 | <p>This version was released in <i>HLT Health Training Package release 3.0</i> and meets the requirements of the 2012 Standards for Training Packages.</p> <p>Minimal changes to the elements and performance criteria. New evidence requirements for assessment including volume and frequency requirements.</p> <p>Removal of pre-requisites</p> <p>Supersedes HLTDT519C</p> |

## Application

This unit of competency describes the skills and knowledge required to construct a trial prosthesis suitable for insertion in the mouth, convert it to clinically acceptable materials and finish according to laboratory standards.

This unit applies to work in dental technology.

*The skills in this unit must be applied in accordance with Commonwealth and State/Territory legislation, Australian/New Zealand Standards and industry codes of practice.*

## Elements and Performance Criteria

### ELEMENT

### PERFORMANCE CRITERIA

Elements define the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element.

1. Articulate by means of face-bow

1.1 Receive face-bow with completed bite registration.  
1.2 Read and interpret work order  
1.3 Articulate on an industry specific articulator in accordance with clinician requirements

2. Prepare case for setting of teeth

2.1 Select artificial teeth in accordance with work order  
2.2 Modify bases and rims as required for positioning

**ELEMENT****PERFORMANCE CRITERIA**

Elements define the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element.

teeth

3. Arrange artificial teeth

3.1 Follow work order to position and attach the prescribed artificial teeth

3.2 Shape and contour the supportive wax and contour to gingival outline

4. Wax up denture for try-in

4.1 Contour facial and lingual aspects

4.2 Locate and relieve muscle attachments

4.3 Smooth and round peripheral extensions

4.4 Confirm distal extensions

4.5 Decontaminate the trial prosthesis according to infection control guidelines

4.6 Dry the trial prosthesis and place in a sealed container for dispatch

5. Check and modify the returned trial prosthesis

5.1 Decontaminate the returned prosthesis and identify any modifications that are required

5.2 Check the returned trial prosthesis for loosening or movement of teeth and make necessary adjustments

5.3 Fit the returned trial prosthesis to the model if it needs to be modified, articulate and make necessary modifications

6. Wax case for finish consistent with work order

6.1 Evaluate the work order, models and denture design and decide whether or not to use a duplicate model for processing the final prosthesis

6.2 Apply wax as required by work order

6.3 Contour facial and lingual aspects

**ELEMENT****PERFORMANCE CRITERIA**

Elements define the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element.

7. Select and prepare materials and processing technique

- 7.1 Identify the appropriate polymer system for case
- 7.2 Identify the appropriate investment technique
- 7.3 Identify the appropriate processing cycle
- 7.4 Select polymeric material to construct the prosthesis
- 7.5 Prepare system components in accordance with manufacturers' instructions
- 7.6 Allow materials to reach application stage

8. Process denture

- 8.1 Apply appropriate investment techniques
- 8.2 Apply material to mould
- 8.3 Process the polymeric material for the correct length of time at the correct temperature
- 8.4 Devest model and remove the processed prosthesis without causing damage to it
- 8.5 Trim excess material and remount on articulator

9. Finish denture

- 9.1 Select methods, materials and equipment for trimming, finishing and polishing the prosthesis appropriate to the appliance and the materials used in its construction
- 9.2 Reposition models on the articulator where possible
- 9.3 Assess the articulated prosthesis and confirm that articulation is appropriate to the work order
- 9.4 Make any necessary adjustments to maintain original vertical dimension
- 9.5 Remove any processing irregularities and sharp edges
- 9.6 Polish the non-fitting surfaces of the prosthesis to create smooth, polished surfaces
- 9.7 Evaluate the finished prosthesis
- 9.8 Decontaminate the dentures according to infection control guidelines
- 9.9 Place in a sealed container for dispatch

## Foundation Skills

*The Foundation Skills describe those required skills (language, literacy, numeracy and employment skills) that are essential to performance.*

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Unit Mapping Information

No Equivalent Unit

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

# Assessment Requirements for HLTDET015 Construct complete removable acrylic dentures and appliances

## Modification History

| Release   | Comments                                                                                                                                                                                                                                                                                                                                                                       |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Release 1 | <p>This version was released in <i>HLT Health Training Package release 3.0</i> and meets the requirements of the 2012 Standards for Training Packages.</p> <p>Minimal changes to the elements and performance criteria. New evidence requirements for assessment including volume and frequency requirements.</p> <p>Removal of pre-requisites</p> <p>Supersedes HLTDT519C</p> |

## Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the job role. There must be evidence that the candidate has:

- read and correctly interpreted 2 work orders, arranged artificial teeth, and used standard precautions and safe work practices to wax, process and finish 1 maxillary and 1 mandibular complete acrylic prosthesis to a standard suitable for insertion in the mouth
- critically evaluated the 2 complete acrylic prostheses produced to meet technical laboratory and patient requirements, including confirming that each acrylic prosthesis:
  - is compliant with the work order
  - is free from defects
  - is functionally effective in line with the design and occlusion and is suitable for insertion in the mouth.

## Knowledge Evidence

The candidate must demonstrate essential knowledge required to effectively complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the work role. This includes knowledge of:

- Australian/New Zealand Standards, workplace health and safety (WHS) policies, Dental Board of Australia guidelines on infection control, Commonwealth and State/Territory legislation and organisation policies relating to dental laboratory work
- fundamental oral anatomy including:
  - 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
- articulation procedures
- properties of a range of dental materials used in the construction of removable acrylic prostheses including:
  - atomic structure
  - chemical bonding and reactions
  - classification of materials
  - classification of matter
  - properties of materials
- knowledge of dental polymers including:
  - acrylic and modified acrylic prosthetic teeth
  - acrylic plastics as soft liners
  - acrylic plastics for denture bases including composition and properties
  - acrylic-metal combinations
  - acrylics for construction of custom trays
  - modified acrylic denture base plastics including manipulation and processing
  - the polymerisation process including cross-linked polymers, copolymers, modified polymers and vinyl plastics
- mechanical devices:
  - articulators
  - face-bows
- recording techniques and devices
- relevant material science for carrying out procedures.

## Assessment Conditions

Skills must have been demonstrated in a dental laboratory workplace or in a simulated dental laboratory environment that reflects workplace laboratory conditions. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources including:
  - access to work order
  - Dental Board of Australia guidelines on infection control on which the candidate bases the planning process
  - laboratory safety manuals and standard operating procedures in line with relevant Commonwealth and State/Territory legislation
  - WHS policies on which the candidate bases the planning process.

Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors.

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>