



Australian Government

Department of Education, Employment and Workplace Relations

LMTMF6007A Produce corrective orthoses

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor This unit covers the skills and knowledge required for the production and fitting of corrective orthoses.

Application of the Unit

Application of the Unit

This unit applies to activities associated with producing corrective orthoses. Corrective orthoses are made to assist with problems that require corrective posting or support of the foot or ankle, for example, a drop foot splint, arthrodeses inner shoe to stabilise foot or ankle complex and exclude movement, or to correct excessive rear foot pronation. Work is generally conducted in a small business situation.

Translation of measurements and general foot shape from casts includes variables such as individual tissue tolerances, the nature and extent of demands as a consequence of the client condition, existing foot characteristics, including joint stiffness and prominent deformities, functional and biomechanical requirements, casting styles and material characteristics

This unit is applied according to OHS and workplace practices of the enterprise, which may include:

- requirements prescribed by legislation, awards, agreements and conditions of employment
- standard operating procedures
- work instructions
- oral, written and visual communication
- quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team or section output
- housekeeping
- tasks related to environmental protection, waste disposal, pollution control and recycling

This unit requires the application of skill associated with communication to consult with other health professionals, produce accurate technical drawings, provide relevant information to the client and maintain client records. Team work skills are applied in working as part of a health team and in working with the client to ensure correct fit. Planning and organising, problem solving, initiative and enterprise are used to produce corrective orthoses to client specifications. Self management skills are required to analyse all stages of work to ensure client needs and quality standards are achieved.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Select corrective orthoses materials	1.1 Materials are selected that reflect client condition requirements and requirements for durability and performance 1.2 Other health professionals are consulted if necessary, to clarify or provide additional information
2 Make initial 3D design on cast	2.1 Design is consistent with material characteristics 2.2 Design is consistent with client anatomical features and condition needs
3 Produce technical drawing of corrective orthoses	3.1 Drawing correctly specifies materials to be used in corrective orthoses construction 3.2 Drawing correctly specifies anatomical matching, key references and specific performance requirements of corrective orthoses 3.3 Dimensions and tolerances are correctly specified, including appropriate use of drawing symbols
4 Review the cast	4.1 Cast is reviewed for accuracy, material selection, three-dimensional design and consistency with technical drawing and prescription if present 4.2 Changes and refinements are made as necessary, including balancing aesthetic needs with condition and footwear requirements
5 Make diagnostic fitting if appropriate	5.1 Mock orthoses are made to specified dimensions and allowance made for final materials if necessary 5.2 Diagnostic fitting is made and results interpreted for possible changes to corrective orthoses design and materials
6 Produce and post basic form	6.1 Basic form is produced to fitting accuracy 6.2 Basic form reflects features that need to be checked for modification or refinement 6.3 Basic form is corrected and posted to corrective orthoses standard
7 Produce trial fitting corrective orthoses and conduct trial fitting	7.1 Trial fitting corrective orthoses are produced 7.2 Trial fitting corrective orthoses simulate key characteristics of corrective orthoses, including desired corrective action and dimensions 7.3 Diagnostic fitting is made and results interpreted for possible changes to corrective orthoses design and materials 7.4 Existing shoes, if provided, are modified for trial corrective orthoses
8 Produce corrective orthoses	8.1 Corrective orthoses are produced, taking into account original assessment of client needs and results of trial fitting, in accordance with OHS practices 8.2 Allowance is made for any variation between trial orthoses and

ELEMENT	PERFORMANCE CRITERIA
	final corrective orthoses for example temporary posting 8.3 Dimension and shape of corrective orthoses are checked against specifications in technical drawing 8.4 Lining closures and additional padding are fitted as required 8.5 Existing shoes, if provided, are checked against corrective orthoses and modified if necessary 8.6 Corrective orthoses are finished off to established quality standards
9 Deliver and fit corrective orthoses	9.1 A check is made of fitting and adjustments made if necessary 9.2 Client is informed of function, management and maintenance procedures for corrective orthoses 9.3 Arrangements for follow-up are explained to client 9.4 Other health professionals are informed of supply of corrective orthoses where appropriate 9.5 Supply of corrective orthoses is noted in client records
10 Follow up client	10.1 Client is followed up according to schedule set at time of corrective orthoses supply and appointments made if necessary 10.2 Function and state of corrective orthoses are checked 10.3 Client condition is assessed and further medical grade footwear treatment or other health professional treatment arranged if necessary

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Demonstrates knowledge of:

- the elements and principles of medical grade orthoses and footwear design and how orthoses can be used to meet specified requirements
- applied anthropometrics of the foot, the variables in and effects of physical force systems (orthotic and footwear) on the body and dimensional, shape and other physical characteristics of commercial orthoses and footwear
- knowledge of the effects of different types of corrective orthoses on the foot, ankle, leg and pelvic and lower back functions
- footwear construction and standards; terminology; diagnostic and definitive constructions; modification processes; materials and tools and equipment used
- safety and environmental aspects of relevant workplace activities
- OHS practices, including hazard identification and control measures
- quality practices
- workplace practices
- recording and reporting practices

Demonstrates skills to:

- use hand and machine tools, and operating computer equipment
- apply skills in a wide variety of cast materials
- produce, assessing and modifying casts
- evaluate, problem solve and address a variety of common footwear problems
- communicate and working effectively and professionally within the workplace
- communicate and interacting effectively with clients, component suppliers and in the workplace
- establish and interpret procedures and processes
- determine report requirements and presenting reports and information in appropriate formats
- read, interpret and follow information on work specifications, , standard operating procedures and work instructions and other reference material
- maintain accurate records
- communicate within the workplace
- sequence operations
- meet specifications
- clarify and check task-related information
- carry out work according to OHS practices

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 the Training Package.

Critical aspects of evidence to be considered

Demonstrates skills and knowledge to:

- obtain and clarify instructions and requirements
- identify special construction details and constraints
- take accurate measurements
- consider factors such as biomechanical requirements, volume expansion, functional and positioning requirements and consequences of corrective orthoses
- translate information into working patterns
- select appropriate materials
- check cast
- produce and fit corrective orthoses, including ankle or foot orthoses (AFO)
- identify and confirm timelines and costs
- communicate effectively with design team, customers, etc.
- apply OHS policies in work operations
- maintain accurate records
- apply administrative functions related to the construction of custom-made medical grade footwear

Consistently applies skills and knowledge when:

- organising work
- completing tasks
- identifying improvements
- using workplace practices
- using OHS practices
- recording and reporting accidents and incidents
- assessing operational readiness of equipment used and work processes
- recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions
- completing work systematically with attention to detail without damage to goods and equipment

Context and specific resources for assessment

Assessment may occur on the job or in an appropriately simulated environment and requires access to work areas, materials and equipment and to information on workplace practices and OHS practices.

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 the Training Package.

**Guidance
information for
assessment**

This unit may be assessed independently or in combination with other relevant units.

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. Bold italicised wording, if used in the Performance Criteria, is detailed below. 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.

Legislative/regulatory requirements	All work must comply with relevant Federal and State or Territory legislative or regulatory requirements.
Corrective orthoses may include:	• removable inserts • incorporated ankle or foot orthoses • shoes • post-operative • therapy footwear
Materials may include:	• rubber • ethyl vinyl acetate (EVA) and PVC adhesive foams • PVC resins • plastics • vacuum moulding and laminating carbon glass • kevlar fibre
OHS practices	OHS practices must include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit, and may include: • manual handling techniques • standard operating procedures • personal protective equipment • safe materials handling • taking of rest breaks • ergonomic arrangement of workplaces • following marked walkways • safe storage of equipment • housekeeping • reporting accidents and incidents • other OHS practices relevant to the job and enterprise

Unit Sector(s)

Sector Medical Grade Footwear