

## **COMPETENCY STANDARDS MEDICAL GRADE FOOTWEAR**

*An Australian approach to education and training needs for (orthopaedic) Medical Grade Footwear*

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### **Background**

This presentation will introduce the process and outcome of looking at the skills needed in the Medical Grade Footwear (MGF) sector. In Australia each industry through an industry governed Board develops formal descriptions of their skills known as competency standards. These competency standards are then registered by a Government agency known as the Australian National Training Authority. The competency standards, once endorsed by the Australian National Training Authority, form the basis for all national qualifications.

Competency Standards are national standards that define the standard of skill required for effective performance in the workplace. A competency comprises the specification of knowledge and skill, and the application of that knowledge and skill at an industry level, to the standard of performance required in employment.

The Australian Government initiated this process across all industries for vocational level qualifications. The qualification based on the competency standards fits within the Australian Qualification Framework (AQF). The AQF is a single, coherent framework for qualifications from Senior Secondary Certificates through to Doctoral Degrees. The table below shows the vocational qualifications and their relationship to other qualifications.

### ***AQF Qualifications by Educational Sector***

<b><i>Schools Sector</i></b>	<b><i>Vocational Education and Training Sector</i></b>	<b><i>Higher Education Sector</i></b>
		<u>Doctoral Degree</u>
		<u>Masters Degree</u>
		<u>Graduate Diploma</u>
		<u>Graduate Certificate</u>
		<u>Bachelor Degree</u>
	<u>Advanced Diploma</u>	<u>Advanced Diploma</u>
	<u>Diploma</u>	<u>Diploma</u>
<u>Senior Secondary Certificate of Education</u>	<u>Certificate IV</u>	
	<u>Certificate III</u>	
	<u>Certificate II</u>	
	<u>Certificate I</u>	

Three qualification levels have been developed for MGF:

- **An AQF 4 Medical Grade Footwear retail level ;**
- **An AQF 5 Diploma in Medical Grade Footwear;**
- **An AQF 6 Advanced Diploma in Medical Grade Footwear.**

### **Process for Medical Grade Footwear**

The process started about 10 years ago and examined what work is done in the workplace, especially what knowledge and skill is required to do work efficiently in the MGF sector. Various consultants were appointed to meet with people working in the industry to define the competency standards for the MGF sector. The consultants visited people in their work place, observed their activities and discussed with them what kind of work they are doing and what competencies are required. Focus groups were formed and industry meetings were held at various locations throughout Australia. Further, it was tried to include future directions.

What was included or excluded into the MGF sector was influenced by a great number of factors, including input of other professions like orthopaedic surgeons and podiatrists, major funding agencies and participation of individuals. This resulted in the development of the three qualifications described below.

### **Outcome**

#### **MGF Qualifications Guide**

As a result of research and discussions with the Australian MGF industry. the following principles have been used to guide the development of the MGF qualifications and standards:

- The medical grade footwear qualifications will take as their starting point the needs of employees who require some level of medical grade footwear assessment skills;
- The highest level of qualification will incorporate a level of medical grade footwear assessment skill that covers the ability to assess conditions/clients to provide the best possible medical grade footwear outcome or a referral to other health professionals; and
- The qualifications will be consistent with the Australian National Training Authority Guidelines for Training Packages. This means the medical grade footwear qualifications must be based on competency standards that describe the actual skills used in the workplace.

#### **AQF 4 Medical Grade Footwear retail level**

This qualification covers the skills needed to supply and fit pre – manufactured MGF. It includes a basic level of modification skills.

Core competencies are:

1. Conduct MGF assessments for clients with footwear related medical conditions including up to medium complexity and risk conditions
2. Select and adjust prefabricated footwear and related orthoses
3. select and adjust prefabricated MGF and accessories

Other competencies are required that relate to general matters of business and are not specific to MGF. These are not discussed in this presentation.

#### **AQF 5 Diploma in Medical Grade Footwear**

This qualification is designed for a practitioner who modifies and sells prefabricated MGF or other footwear and makes custom orthosis. While there is some commonality with the AQF 4 qualification, the Diploma includes assessment of MGF related conditions to a high level as well as sell and modify prefabricated MGF and to make accommodative orthosis.

Core competencies are:

1. Conduct MGF assessments for clients with footwear related medical conditions up to medium complexity and risk conditions
2. Select and adjust prefabricated footwear related orthoses
3. Select and adjust prefabricated MGF and accessories
4. Modify MGF
5. Select and / or produce and adjust cast for accommodative orthoses
6. produce accommodative orthoses
7. Fit, trial and review MGF and orthoses (up to medium complexity and risk conditions)

Other competencies are required that relate to general matters of business and are not specific to MGF. These are not discussed in this presentation.

## **AQF 6 Advanced Diploma in Medical Grade Footwear**

This qualification covers the skills needed to undertake MGF assessments, manufacture corrective and accommodative orthosis, and to make and fit all types of MGF and orthoses. This level is the person providing custom-made MGF.

Core competencies are:

1. Conduct MGF assessments for clients with footwear related medical conditions includes high complexity and risk conditions
2. Design, evaluate and make patterns for custom-made MGF
3. Produce negative and positive cast for MGF last and/or corrective orthosis cast
4. Select and/or produce and/or adjust MGF last and cast for accommodative orthosis
5. Produce custom-made MGF
6. Fit, trial and review custom-made MGF and orthosis including high complexity and risk conditions
7. Produce corrective and accommodative orthosis
8. Research and evaluate MGF conditions, processes and products

Other competencies are required that relate to general matters of business that are not specific to MGF. These are not discussed in this presentation.

### **Conclusion**

In the past MGF, or orthopaedic footwear as it was known, could only be provided as custom-made. This was partly because of the nature of the medical conditions being mostly orthopaedic deformities or deficiencies of various causes with significantly non standard shapes and dimension; and partly because no prefabricated footwear was available, that could be used for medical purpose. This historic need for MGF being custom-made meant that those, who wanted to provide such footwear, needed a long time to acquire the technical skills needed. In due course of learning the technical skills, they understood the needed to learn the clinical, medical skills as well.

Today because of better surgery results and a change in clients medical conditions, including many more systemic disorders, people with feet in normal or near normal shape and dimensions have medical footwear needs. An aging population constantly increases this number. The current availability of prefabricated footwear, that can be used for medical purpose, leads to an increasing number of untrained or inadequately trained people to provide such footwear to people with medical conditions. Since there are no regulations, it can appear that selling of prefabricated MGF is only a retail skill with no need of medical knowledge. However many clients with medical conditions come to those shops directly and buy those items relying on the shopkeeper for advice and guidance.

This paper is focused on establishing the key points of knowledge and skill a person has, or should have, who is working with MGF in Australia. Unlike some European countries, where the profession of the Orthopaedic Shoemaker Meister (OSM) is a recognised profession within the health system, in Australia there is no established profession providing MGF services. The process in Australia looked at what is happening in the market place on a daily basis and attempted to identify all levels of MGF skills needed

and not just those at highest level.. The MGF competency standards therefore include sectors of the market, like prefabricated MGF providers, that operate independent from the skill and knowledge of being able to make custom-made MGF. Because there are no regulations on those that provide prefabricated MGF, this makes it particularly important to emphasise the need to have sufficient MGF related medical assessment skills to provide a safe service.

In Japan, there are an increasing number of shops providing prefabricated MGF and foot-health advice with limited or no training. Some even provide modifications and custom orthosis based on a once off seminar that may have only focused on the technical skill. There is an urgent need for the Japanese MGF profession to self regulate its activities in order to provide a safe and reliable service. It is equally important that the Japanese medical doctors take a much more active role in shaping this emerging profession.

### **Sources**

Australian National Training Authority (ANTA) <http://www.anta.gov.au>

National Training Information Service (NTIS) <http://www.ntis.gov.au>

Australian Qualifications Framework (AQF) <http://www.aqf.edu.au/>

Light Manufacturing Training Australia (LMTA) <http://www.almitab.org.au>