Administrative Information

Industry Reference Committee (IRC) name: Technicians Support Services Industry Reference Committee
Skills Service Organisation (SSO) name: SkillsIQ Limited
Training Package name examined: HLT Health Training Package
Change proposed: See Attachment A
Stakeholder consultation method and scale: See Attachment B

Background

SkillsIQ has been commissioned by the Australian Industry and Skills Committee (AISC) to complete the necessary research and consultation to develop a proposal that presents the strategic and evidentiary Case for Change to develop a new nationally recognised Cast Technology Qualification that will be packaged within the HLT Health Training Package.

The proposed development will seek to ensure that Plaster/Cast Technicians (also known as Orthopaedic Technicians) have access to the appropriate skills and knowledge to meet the current and future needs of the Australian health care system.

Advice on **New** Training Package Products

This Case for Change proposes to review content from the *HLT41412 Certificate IV in Cast Technology* and seven associated Units of Competency which were deleted from the HLT Health Training Package in 2015. This is due to the fact that industry believes that these Training Package Products were deleted in error and without appropriate industry consultation by the former Industry Skills Council. The proposal is to develop a new Qualification, *Certificate IV in Cast Technology*, that retains the required content from the previous Units of Competency and also includes additional content identified by industry as being required by Cast Technicians in order to meet current and future industry needs.

This Case for Change is proposing to develop **1 new Qualification and 7 new Units of Competency** covering the following key areas:

- Apply casts
- Modify casts
- Remove casts
- Apply and remove traction
- Apply orthopaedic devices
- Modify orthopaedic devices
- Remove orthopaedic devices.

Further analysis and consultation will assist in determining the actual number of new Units of Competency.

Additional Units of Competency that cover the following generic skills and knowledge will be imported from current Training Package Products:

- *HLTAAP002 Confirm physical health status*
- *CHCCOM005 Communicate and work in health or community services*
- *CHCLEG003 Manage legal and ethical compliance*

- *HLTINF001 Comply with infection prevention and control policies and procedures*
- *HLTWHS001 Participate in workplace health and safety*
- *CHCDIV001 Work with diverse people*
- *CHCDIV002 Promote Aboriginal and/or Torres Strait Islander cultural safety*
- *HLTAID003 Provide first aid*
- *HLTINF002 Process reusable medical devices and equipment.*

See *Attachment A* for the full list of Training Package Products proposed to be developed.

The Case for Change

Skills that Meet the Current and Future Demand for Cast Technicians' Job Roles

The *HLT41412 Certificate IV in Cast Technology* was designed by orthopaedic technicians in Australia specifically as a national Qualification for orthopaedic technicians. The Qualification was initially registered in December 2001 and all senior technicians worked their way through it in order to become qualified.

Orthopaedic technicians, also known as cast technicians, are employed in **all** the states of Australia except for New South Wales (NSW), where the workload is taken up by physiotherapists and nurses. However, there are no guidelines or benchmarks for physiotherapists and nurses, and industry reports that cast technology skills are not covered in any detail during university studies in these areas, resulting in graduates who lack specific skills.

A cast technician employed at a major hospital has a very busy workload. The role has evolved over the last 30 years, requiring greater technical skills. The job role demands specialised skills, acquired and developed whilst working alongside orthopaedic surgeons. Cast technicians work in conjunction with orthopaedic surgeons, neurosurgeons and vascular surgeons to handle both simple and complex fractures. The cast technicians are responsible for all trauma-related splinting, casting, orthopaedic tractions and, in certain regions, cervical halos.

SkillsIQ consulted cast/orthopaedic technicians from Victoria, Tasmania, South Australia, Northern Territory and Queensland. All the cast technicians and managers from these states that employed cast technicians confirmed the urgent need for a new Qualification. One senior orthopaedic technician who was consulted has been training other cast technicians for almost 30 years. The stakeholder reiterated the importance of cast technicians having the appropriate skills to allow them to mould the fracture in the proper way so as to ensure effective surgical outcomes for patients. Orthopaedic technicians must also have the skills and knowledge to apply splints in the right way to make the experience for the patient safe and effective.

Industry reports that orthopaedic surgeons usually have only 2–3 hours of placement to learn casting which is not enough. If fractures are not plastered correctly there may be serious complications for patients, in some instances even resulting in death.

Casting is, often, the definitive treatment for a range of orthopaedic, neurological and paediatric conditions. It takes a great deal of skill and experience to apply a cast well. Good application of a cast relies on the ability to understand the condition being treated, being able to tailor communication to individual patient needs (including vulnerable patients in significant pain), as well as cross-cultural communication skills and the ability to work in a multi-disciplinary team. An understanding of limb anatomy and biomechanics, together with a solid understanding of the materials used and their benefits/risks, is also essential, as is the ability to read X-rays. The ability to manage patient flow in a

fracture clinic and the ability to carry out some managerial/administrative tasks is also an essential skill requirement. Being adept at these skills enhances patient-centred care and compliance in the various fracture clinics around Australia.

Senior orthopaedic technicians educate patients in limb monitoring, care and risks during the healing process, and advise patients on the appropriate symptoms in the event of complications so that they can access the Emergency Department at the appropriate time if required. They are responsible for training and upskilling currently employed staff to remove and apply casts on the job.

The following underpinning knowledge is an essential requirement for a cast technician:

- Wide range of anatomy, physiology, pathology, infection control knowledge
- Basic wound management
- Oedema causes and management
- Bone healing rates
- Teaching skills (because, although not in a formal teaching role, cast technicians teach staff correcting techniques)
- Product testing and review
- Product knowledge and matching for casting technique and purpose
- Ordering systems for products/inventory systems
- Care, repair and maintenance of equipment
- Work Health & Safety
- Client management – instruction, advice, calming distressed clients and/or parents

The range and depth of skill required demands an appropriate Qualification.

Enrolment statistics for the previous Units of Competency show varying patterns. Overall uptake of the Qualifications and Units of Competency shows that this is a niche market that requires specialist skills for an identified health concern. Enrolments were significantly reduced in 2017 as the previous Training Package Products had been deleted and were in a transition period. However, the fact that there were still enrolments following the deletion of the Qualification is an indication of industry's need and support for the new Training Package Products being proposed.

Unit of Competency	2014	2015	2016	2017	Total
HLTCT401D Apply casts	91	75	70	18	254
HLTCT402D Modify casts	90	73	70	17	250
HLTCT403D Remove casts	94	69	70	14	247
HLTCT404D Apply and remove traction	24	14	8	2	48
HLTCT405D Apply orthopaedic devices	0	10	11	1	22
HLTCT406D Modify orthopaedic devices	1	14	12	4	31
HLTCT407D Remove orthopaedic devices	1	10	14	2	27

Current Situation

Orthopaedic/Cast/Plaster technicians are part of a niche sector. Senior qualified technicians currently responsible for training other technicians are ageing. The number of skilled and qualified cast technicians is low. It is a concern for the Australian Health sector, because if the current skilled and qualified cast technicians retire or leave the sector there will be insufficient numbers of cast technicians in the health care system. Physiotherapists, nurses, orderlies and laboratory technicians who receive only a minimum amount of training won't be able to acquire the skills and knowledge that must be acquired through a specialised Qualification and on-the-job training.

Consultation identified cases where casting was done incorrectly and led to complications for the patient, families and communities. In remote Indigenous communities, patients have to travel a long way to have a casts put on. However, complications can ensue if these casts are not applied correctly, leading to complications which can potentially add more cost to individuals, families and Indigenous communities. In many instances, there is frustration as to why the casting was not carried out correctly. Legal fees spike up due to lawsuits towards the hospital and health clinics. Mental health issues also increase, due to patients not receiving the right treatment and eventually losing their limbs.

Recommendations

Based on initial discussions with industry, it is proposed that a new Qualification and associated Units of Competency will provide industry with skilled cast technicians with the appropriate knowledge and skills to cater for patients visiting hospitals and outpatient services.

Proposed Pathways

Graduates acquiring the Certificate IV Qualification will gain valuable skills and experience. This may, in turn, provide opportunities to progress to degree programs both nationally and internationally.

Industry Support for Change

Method and Scale of Stakeholder Consultation

The Technicians Support Services Industry Reference Committee (IRC) has provided the direction for the Case for Change development. SkillsIQ gathered initial information and industry feedback and then conducted desktop research from industry publications. Broad industry feedback was acquired from stakeholders within the SkillsIQ database, who were notified of public consultation through the SkillsIQ website and IRC networks. See ***Attachment B*** for the Stakeholder Consultation Method and Scale document.

Unresolved Issues and Sensitivities

ASQA has recently approved an extended transition period for *HLT41412 Certificate IV in Cast Technology*. The new transition date, which allows for the extended training, assessment and certification issuance period for this Qualification, is 30 June 2019.

Where ASQA has approved an extended transition period, that arrangement applies to all RTOs delivering the specific Training Product to the identified learner cohort regardless of who made the application. New learners may continue to be enrolled in this Qualification, with the proviso that the learners will be able to complete their training and assessment and be issued their certification on or prior to the new transition date.

Two RTOs have this Qualification on scope. However, course delivery has now ceased as there is insufficient time remaining in the transition period for learners to complete training.

Impact of Change

Impact Analysis

The impacts of the proposed changes on stakeholders can be summarised as follows:

Industry and Employers

Access to a skilled cast technician workforce as well as appropriate Qualifications that support the skills and knowledge requirements of the job roles as defined by industry are critical. Both industry

and employers would significantly benefit from clearer training pathways and strengthened Qualifications to address current gaps due to changes in career and job structures. A current analysis of job roles and occupational outcomes aligned to Training Package Products is required. Collaborative engagement within the orthopaedic sector, which includes cast technicians, will be required to achieve this.

The risk to the workforce of **not** developing a new training pathway is that there will be a shortage of work-ready cast technicians in Australia. This will result in a continuing undersupply of appropriately skilled staff to meet demand, resulting in ongoing variability in on-the-job training and a potential increase in staff turnover due to the lack of appropriate training and clear employment pathways.

The risks to society are even more significant, including casts not applied in the correct way, leading to lack of trust in the Australian health care system; mental health issues; added cost to public expenditure as patients keep coming back to have the casts applied correctly; expertise, knowledge and skills lost with expert cast technicians retiring; a lack of timely accurate data impacting health services; accuracy in financial accounting practices; and potential impacts on the quality and appropriateness of care.

Registered Training Organisations (RTOs)

Increased relevance of the Training Package Products serving this sector will improve opportunities for Registered Training Organisations (RTOs) to partner with industry in the provision of programs better aligned to job outcomes.

Endorsement of the proposed *Certificate IV in Cast Technology* would provide opportunities for newly trained and entry-level cast technicians to gain a nationally accredited Qualification that will assist in meeting the demand for skilled cast technicians. The risk of **no** change is that the current inadequate numbers of cast technicians will continue to decline further as the training offered fails to sufficiently meet industry needs.

Learners

Learners will benefit from improved employment opportunities as a result of their obtaining expected entry-level skills and being able to access appropriate Training Package Products that industry confirms reflect the current skills and knowledge required for cast technician job roles within the health sector. Qualifications which standardise educational outcomes will provide national standards for training and will also enhance occupational mobility within the sector and across jurisdictions.

The risk of **no** change is that the learners may not be able to gain nationally recognised Qualifications for training acquired on the job. Validity of learners' skills to support the sector will be compromised, thereby limiting opportunities for further training and career pathways.

General Public

The enhancement of skills within the cast technician workforce will result in better health service operations.

The risks of **not** implementing the proposed changes are widespread, as the public depends on the health system to provide the appropriate care and service for a range of orthopaedic, neurological and paediatric conditions. If these services are not provided in the right way, the public will lose trust in the Australian health care system. There is a risk that the perception of care at fracture clinics may be negatively impacted, due to casts and splints not being applied correctly.

Estimated Timeframes

Central to the update process is the ongoing involvement and engagement of industry and national stakeholders. It is estimated that development will take approximately twelve months. This work will be conducted under the guidance of the Technicians Support Services IRC and the orthopaedic technicians and stakeholders who have expressed interest in providing feedback.

Broad consultation with employers, industry professionals, graduates and training providers across Australia, including those in metropolitan, regional and rural areas, will be conducted in relation to draft Training Package Products, ensuring that the resulting Products are strongly aligned to the current skills needs of the cast technician workforce.

Implementing the COAG Industry and Skills Council Reforms for Training Packages

The recommended work in this Case for Change is consistent with the Council of Australian Governments' (COAG) Industry and Skills Council (CISC) reforms for Training Packages, as follows:

- As there is no Training Package content currently available for cast technicians, it is unlikely that there will be identified duplication or obsolescence.
- Industry expectations for training delivery and assessment will be identified via the Companion Volume Implementation Guide.
- The proposed new Qualification will provide technical and clinical specialist knowledge and acute skills to focus on patient-centred fracture care.
- New Units of Competency are among the Products proposed for development.

ATTACHMENT A - Training Package Components to Develop

SkillsIQ Limited

Contact details: Melinda Brown, General Manager

Date submitted: September 2018

Material for update:

- **Qualifications:** 1
- **Units of Competency:** 7 new

Training Package Code	Training Package Name	Qualification Code	Qualification Name	Unit of Competency Code	Unit of Competency Name
Qualification					
HLT	Health	New Qualification	*Certificate IV in Cast Technology*		
Units of Competency					
				New Unit of Competency	Apply casts
				New Unit of Competency	Modify casts
				New Unit of Competency	Remove casts
				New Unit of Competency	Apply and remove traction
				New Unit of Competency	Apply orthopaedic devices

Training Package Code	Training Package Name	Qualification Code	Qualification Name	Unit of Competency Code	Unit of Competency Name
				New Unit of Competency	Modify orthopaedic devices
				New Unit of Competency	Remove orthopaedic devices

ATTACHMENT B - Stakeholder Consultation Method and Scale

Stakeholder Consultation

Name of Stakeholder	Organisation	Detail Method(s) and Scale of Consultation
Technicians Support Services Industry Reference Committee (IRC)		
Tony Badrick	Royal College of Pathologists of Australasia	IRC Member
Karyn Calcino	Health Industry Training	IRC Member
Alma Cassells	Fiona Stanley Hospital	IRC Member
Jodie Davis	Australian Nursing and Midwifery Federation	IRC Member
Lorah Hickman	Society of Hospital Pharmacists of Australia (SHPA)	IRC Member
Kim Lally	Australian Private Hospitals Association	IRC Member
Jane O'Keefe	Sonic Healthcare	IRC Member
Elinor Radke	Federation of Sterilising Research Advisory Councils of Australia (FSRACA)	IRC Member
Athanasia (Soula) Siafakas	TAFE NSW, Sydney	IRC Member
Leigh Svendsen	Health Services Union (HSU)	IRC Member
Vicki Swaine	Australian Anaesthesia Allied Health Practitioners (AAAHP)	IRC Member
Cast Technology Stakeholder Consultation		
Terry James	Australian Institute of Orthopaedic Technologists	Provided Letter
Arun Jose	Alice Springs Hospital	Teleconference feedback
Ian Rowan	Alice Springs Hospital	Teleconference feedback
Ray Murtagh	Alice Springs Hospital	Teleconference feedback
Wendy Sorrell	BSN Medical	Teleconference feedback
Errol Bourn	Burnie Hospital	Teleconference feedback
Michael Maw	Institute of Education and Training	Teleconference feedback
Karina Kiely	Ramsay Health Care	Email feedback

Ian Galvin	Ramsay Health Care	Email feedback
Chistobel Margaret Flavell	Royal Darwin Hospital	Teleconference feedback
Clee Tonkin	Royal Darwin Hospital	Teleconference feedback
Mary Mills	Royal Darwin Hospital	Teleconference feedback
Robert Vragovski	Royal Melbourne Hospital	Teleconference feedback
Greg Gysin	Townsville Hospital	Teleconference feedback
John Kinealy	Western Hospital Melbourne	Teleconference feedback

Additional stakeholders will be added following public consultation