2018

# Technicians Support Services

## INDUSTRY REFERENCE COMMITTEE
## INDUSTRY SKILLS FORECAST

SKILLSIQ

CAPABLE PEOPLE MAKE CLEVER BUSINESS

# Contents



# Skills Forecast

**Name of IRC:**

Technicians Support Services

**Name of SSO:**

SkillsIQ Limited

**About SkillsIQ:**

SkillsIQ supports 18 Industry Reference Committees (IRCs) representing diverse 'people-facing' sectors. These sectors provide services to people in a variety of contexts such as customer, patient or client. The IRCs are collectively responsible for overseeing the development and review of training package products, including qualifications, serving the skills needs of sectors comprising almost 50% of the Australian workforce.

*Our qualifications deliver skilled people that are valued and make a difference to others.*

**- Cross Sector Skills Committee, February 2018**

# Executive Summary

The Technicians Support Services Industry Reference Committee (IRC) is responsible for ensuring that nationally recognised qualifications deliver the skills and knowledge required to equip the sectors under its remit with a highly skilled workforce. The Technicians Support Services IRC has responsibility for sixteen qualifications packaged within the HLT Health Training Package, and aligned to job roles within the following sectors:

- Audiometry
- Cardiac Technology
- Health Administration
- Hospital Pharmacies
- Medical Practice Assisting
- Operating Theatre Support
- Optometry
- Pathology
- Sterilisation Services.

The National Schedule details the training package review and development work commissioned by the Australian Industry and Skills Committee (AISC). The National Schedule is informed by this Industry Skills Forecast which outlines the proposed timing for updating existing training package products. This Forecast has been informed using a number of sources, including a range of literature and databases, IRC member input and expertise, public consultation feedback, and an industry analysis of both new and emerging workforce skills needs within the Technicians Support Services sectors.

Employment growth in these sectors is expected to reflect the growth in the broader health care and social assistance industry. The September 2016 *Department of Employment Industry Outlook* report projected strong employment growth (23.3%) over the five years to November 2020 for the health care and social assistance industry. The 2017 report similarly projects that this industry will make the largest contribution to employment growth (16.1%, increasing by 250,500 people) over the five years to May 2022.

Currently, the sector is experiencing a number of challenges impacting workforce skills needs, including:

- increasing demand for health-related services resulting from population and demographic change
- consumer-directed care models that provide the consumer with greater choice when selecting a health care provider
- digital health technologies and their potential to improve health and medical care as well as the likelihood of greater data sharing
- the potential for automation and artificial intelligence (AI) to supplement the existing workforce
- increasingly personalised and accessible health care stemming from technological advancements
- the increasing need for Science, Technology, Engineering and Mathematics (STEM) capabilities
- a demand for leadership and management that creates operational efficiencies, and
- the opportunities and challenges associated with industry work placement for learners.

The update of the two Hospital Pharmacy qualifications will seek to address a number of key issues relating to qualification outcomes, including industry concern regarding the level and strength of skills and knowledge contained within individual units of competency and their associated assessment requirements. Additionally, new training package products have been proposed to reflect the job roles related to Cast Technicians and Clinical Coders. Cases for Change in these three areas have been approved and has commenced.

The IRC proposes to review the *HLT47315 Certificate IV in Health Administration* in 2018–19. Job roles within the scope of this qualification will seek to explore their potential to fill gaps in regional and remote areas where there is reduced access to doctors and nurses. The remaining Technicians Support Services training package products have been proposed for update in the 2019–2020 year given that the training package products contained within this Industry Skills Forecast were extensively reviewed in 2015 and no pressing skills gaps have been identified which require immediate action. Industry also notes the continued need to allow for the proper implementation and testing of training products within the system, prior to any further review work.

# Sector Overview

Within the Australian and New Zealand Standard Industrial Classification (ANZSIC), *Technicians Support Services* are classified under Health Care and Social Assistance and are defined as units mainly engaged in providing human health care and social assistance. Units engaged in providing these services apply common processes, where the labour inputs of practitioners with the requisite expertise and qualifications are integral to service delivery.

The sector includes the following sub-sectors: pathology, audiometry, cardiac technology, health administration, medical practice assisting, operating theatre support, optometry, hospital pharmacy and sterilisation services. Businesses operating in these sectors are diverse and include both public and private organisations. Occupations include:

- Admissions clerk
- Anaesthesia technician
- Audiometrist
- Biomedical laboratory assistant
- Cardiac technician
- Cast technician
- Clinical coding clerk
- Central Sterilising Service Department (CSSD) supervisor
- Dispensing technician or assistant
- Health administrative worker or supervisor
- Hospital pharmacy assistant or technician
- Instrument technician (CSSD)
- Medical practice assistant
- Medical records section leader
- Medical secretary or receptionist
- Optical dispenser
- Pathology collector
- Pharmacy assistant or technician
- Practice manager
- Senior clinical coder
- Senior pharmacy technician
- Senior theatre technician or wardsperson
- Screening audiometrist
- Specialist specimen collector (pathology).

## Nationally Recognised Technicians Support Services Qualifications – Current as at June 2018

The VET qualifications that cater to this sector are:

- HLT37015 Certificate III in Sterilisation Services
- HLT37115 Certificate III in Hospital/Health Services Pharmacy Support
- HLT37215 Certificate III in Pathology Collection
- HLT37315 Certificate III in Health Administration
- HLT37415 Certificate III in Pathology Assistance
- HLT47015 Certificate IV in Sterilisation Services
- HLT47115 Certificate IV in Hospital/Health Services Pharmacy Support
- HLT47315 Certificate IV in Health Administration
- HLT47415 Certificate IV in Audiometry
- HLT47515 Certificate IV in Operating Theatre Technical Support
- HLT47615 Certificate IV in Cardiac Technology
- HLT47715 Certificate IV in Medical Practice Assisting
- HLT47815 Certificate IV in Optical Dispensing
- HLT57415 Diploma of Audiometry
- HLT57715 Diploma of Practice Management
- HLT57915 Diploma of Anaesthetic Technology.

## Registered Training Organisation Scope of Registration

Table 1 indicates the number of Registered Training Organisations (RTOs) with Technicians Support Services qualifications on scope. This data is current as at June 2018, per the listing on the National Register of VET (www.training.gov.au).

**Table 1:** Number of RTOs by nationally recognised qualifications on scope – Technicians Support Services Training Package Products

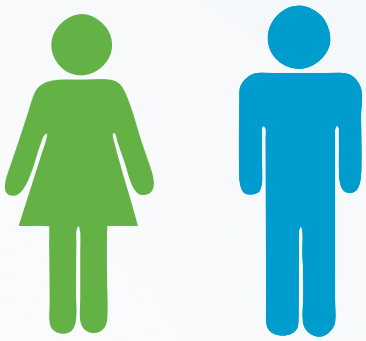
| Qualification Code | Qualification Title | No. of RTOs with Qualification on Scope |
|---|---|---|
| HLT37015 | Certificate III in Sterilisation Services | 20 |
| HLT37115 | Certificate III in Hospital/Health Services Pharmacy Support | 4 |
| HLT37215 | Certificate III in Pathology Collection | 37* |
| HLT37315 | Certificate III in Health Administration | 36 |
| HLT37415 | Certificate III in Pathology Assistance | 8 |
| HLT47015 | Certificate IV in Sterilisation Services | 4 |
| HLT47115 | Certificate IV in Hospital/Health Services Pharmacy Support | 5 |
| HLT47315 | Certificate IV in Health Administration | 31 |
| HLT47415 | Certificate IV in Audiometry | 2 |
| HLT47515 | Certificate IV in Operating Theatre Technical Support | 6 |
| HLT47615 | Certificate IV in Cardiac Technology | 0 |
| HLT47715 | Certificate IV in Medical Practice Assisting | 5 |
| HLT47815 | Certificate IV in Optical Dispensing | 8 |
| HLT57415 | Diploma of Audiometry | 3 |
| HLT57715 | Diploma of Practice Management | 30 |
| HLT57915 | Diploma of Anaesthetic Technology | 4 |

Source: Training.gov.au. RTOs approved to deliver this qualification. Accessed 26 June 2018.
Note: *The national register lists 38 RTOs with this qualification on scope. However, it is noted that one RTO is listed twice.

# 2016 ENROLMENT SNAPSHOT

# TECHNICIANS SUPPORT SERVICES TRAINING PACKAGE PRODUCTS

## GENDER

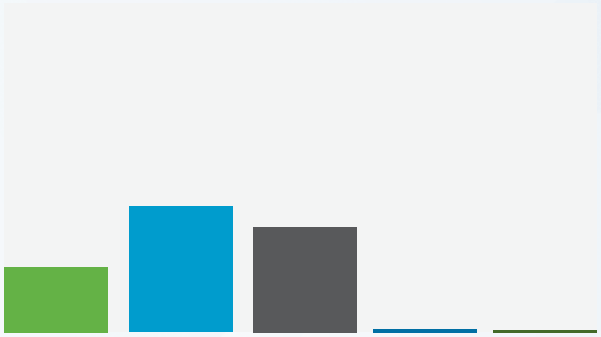


81%

19%

## AGE

Percentage Years of age



20% UNDER 25

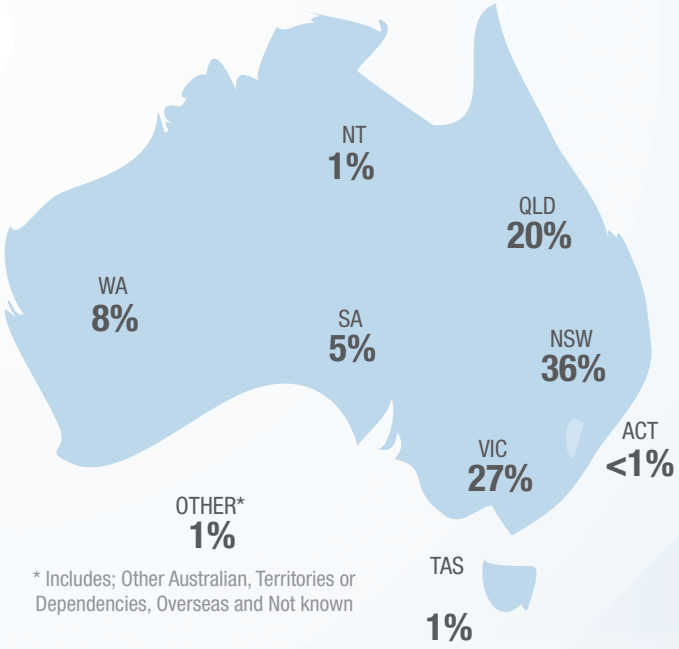
41% 25 – 39

38% 40 – 64

0.4% 65 and over

0% Not known

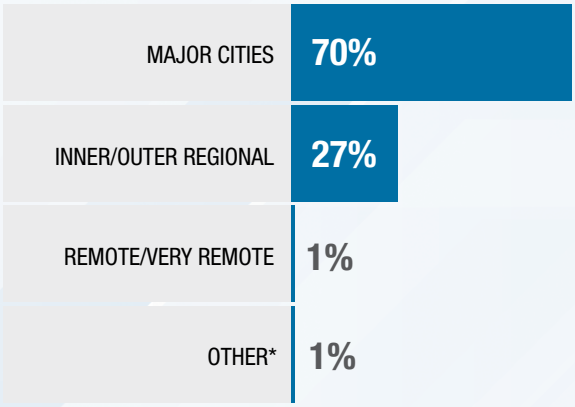
## STATE/TERRITORY OF RESIDENCE




* Includes; Other Australian, Territories or Dependencies, Overseas and Not known

## STUDENT REMOTENESS REGION

(2011 ARIA+)




* Includes; Outside Australia and Not known

Source: NCVER VOCSTATS (Program enrolments 2016 by various breakdowns). Base count n = 9,140

### General notes on statistics

1. Enrolment data is sourced from NCVER VOCSTATS (program enrolments 2016), accessed March 2018.
2. It is important to note that not all training providers are currently required to submit enrolment and completion data, and some figures presented may therefore under-represent the true count of enrolments and completions for a qualification. From 2018, all training providers will be required to submit data, and current discrepancies noted in the national NCVER figures versus actual attendance should therefore be minimal in future releases. The data presented in this report is shown for indicative purposes.
3. Figures reflect public and private RTO data.

## Stakeholders

### National Peak Bodies and Key Industry Players

The following list represents a range of organisations that perform a variety of key roles in this sector. These organisations and their networks are well placed to offer industry insights at the time of training package review. Engagement and consultation activities will include a broad range of industry stakeholders beyond those included in this list.

- Government departments and agencies
- Peak bodies and industry associations
  - Australian Association of Practice Managers
  - Australian Anaesthesia Allied Health Professionals
  - Australian Private Hospitals Association
  - Federal Sterilising Research Advisory Councils of Australia
  - Hearing Aid Audiometrist Society of Australia
  - Optometry Australia
  - Pathology Australia
  - Public Pathology Australia
  - The Society of Hospital Pharmacists of Australia
  - The Royal College of Pathologists of Australasia
- · Employee associations
  - Australian Nursing and Midwifery Federation
  - Health Services Union.

# Sector Outlook

The health services sector in Australia includes a range of health services and facilities. Australia's age profile and private health insurance coverage are expected to continue rising over the next five years, which should strengthen demand for most health services. Health services revenue is expected to grow at an annualised 2.8% over the five years from 2017–18, supported by rapidly increasing patient volumes. This result includes forecast growth of 2.0% in the current year, to total $124.5 billion.[1] Total government health expenditure ($114.6 billion), which is about two-thirds (67.3%) of all health expenditure, grew by 4.1% in real terms in 2015–16.[2] Funding from all levels of government, including private health insurance premium rebates paid out by the federal government, accounts for a large proportion of revenue. While the ageing population has helped drive subdivision revenue, it is placing a significant burden on state budgets for hospital funding. In 2011, the federal and state governments signed the National Health Reform Agreement (NHRA) to reform health service funding. However, in its 2014–15 federal budget, the federal government planned to revoke the NHRA, committing instead to transfer the burden of hospital funding back to state governments from July 2017. These cuts were subsequently overturned in the 2016–17 federal budget, in which the government agreed to continue to fund 45.0% of growth in hospital services based on the National Efficient Price for three years from 2017–18, capped at 6.5% per annum.[3] This will help ensure that more and more people have access to health services, and there will therefore be a need for more qualified staff to handle the increased demand on the health system.

The key driver of the demand for health services is demographic change. Australia, like most developed nations, is experiencing a long-term ageing of its population. The 2015 Intergenerational Report (IGR) shows that both the number and proportion of Australians aged 65–84 and 85 years and over are projected to grow substantially. In 2015, approximately 3 million people, or 13.0% of the population, were aged 65–84, and 500,000 people, or 2.0%, were aged 85 years and over.[4] By 2054–55, the 65–84 year-old cohort is projected to be around 7 million people, or just under 18.0% of the population, and the 85 years-and-over cohort is projected to be around two million people, or 5.0% of the population.[5] With these changing demographics comes an increasing demand for, and use of, health services, particularly in the areas of pathology, pharmacy, audiology and optometry.

*My Aged Care* came into effect in February 2017. It was one of an important set of reforms in Australia's human services sector. Home care packages are a taxpayer-funded subsidy provided by the federal government enabling people with complex and multiple ageing-related needs to gain access to home-based care and support services. This is intended to enable them to live safely and well in their own homes. Having access to fully portable home care packages means ageing Australians have for the first time been empowered with the freedom to choose the type and mix of home-based age care services they wish to receive, and have been given the freedom to choose the service provider they favour.[6]

With changes to the health care system through the implementation of the Consumer-Directed Care (CDC) model, health care consumers continue to be involved as active participants in managing their own health. As the health system moves toward a devolved model of care, the need to focus on consumers' needs is increasingly important at both a policy and practice level. The growing body of literature on health value co-creation and its benefits to the health sector shows that value can be co-created for the individual consumer, clinical practices, health care organisations, and governments.[7] Value co-creation has been shown to benefit the health system on a range of levels. The benefits to individual users of the health system include an increased level of trust and confidence in services; provision of services that offer personalised care and value for money; recognition of the right to equitable access to health care; and increased rates of health literacy. The benefits to health service providers and practitioners include an increased perception of public value; robust and enduring partnerships; and compliance with treatment regimens. The benefits to the health system at a macro level include efficiency gains and, consequently, a reduction in overall health care costs; outcomes that consumers value; improved health outcomes; and improved patient satisfaction.[8]

# Challenges and Opportunities

## Digital Health

Digital health technologies have the potential for improving health and medical care. These technologies can effectively provide information, support and social networks for health consumers and improve health care access and delivery. Some technologies include applications and self-monitoring wearable devices such as Fitbits and smartwatches; Telehealth technologies and electronic health records; and patient portals. With regard to electronic health records and patient portals one example is the digital medical record (DMR) which is increasing in its use within the sector. The use of electronic information can help with communication and the development of electronic health records with shared access to facilitate continuity in care.[9]

Health technologies will likely lead to greater sharing of data and information. This is where real value is created for both consumers and service providers. Software that links health data across health care and social services, such as the National Disability Insurance Scheme (NDIS) and aged care, provides greater information for all in delivering appropriate health care to connect communities. It will improve care provision and data integration and decrease 'silos'.[10] This can also have an impact on safety within the health system. Data registries need to share information more widely, capture a greater proportion of the care given, and get data back to clinicians more quickly. The increase in the provision of clear and detailed information to clinicians, including routine data and patient-experience data, will allow clinical teams to see how they are performing compared with their peers, and how they can improve.[11]

With new technology comes the need for training to ensure skills are sufficient to implement technologies to their full capacity. A study of the effectiveness and efficiency of training in digital health care packages revealed that staff benefit from formal training on new software systems.[12]

Society's reliance on technology systems and processes makes it increasingly more vulnerable to the threat of cyber-attacks. This is seen by many as one of the biggest challenges in the current digital age. The main barrier is a lack of understanding and research around creating resilience in the modern era. As a result, there are insufficient skills to develop resilient infrastructure and manage these threats.[13] There needs to be awareness of the issues in ensuring data security, but only through training and education can this issue be addressed and, ultimately, be less disruptive.

## Automation and Artificial Intelligence (AI)

Automation is not a new phenomenon. However, it is becoming increasingly considered with regard to supplementing the workforce. Fewer than 5.0% of occupations are candidates for **full** automation today, where every activity constituting these occupations is automated. However, almost every occupation has **partial** automation potential, where a significant percentage of its activities could be automated. It is estimated that about half of all paid activities in the world's workforce could potentially be automated by adapting currently demonstrated technologies. The pace and extent of automation, and thus its impact on workers, will vary across different activities, occupations, and wage and skill levels. Many workers will continue to work alongside machines as various activities are automated. Activities that are likely to be automated in the first instance include predictable physical activities, especially prevalent in manufacturing and the retail trade, as well as the collection and processing of data, which are activities that exist across the entire spectrum of sectors, skills and wages.[14]

Automation and AI have scope for inclusion in medical diagnostics and care to complement the workforce in the health care sector.[15] Technology will also change the way in which hospitals are run. AI has the potential to support admission and clinical and operational decisions, and to

give patients access to their medical records in real time.[16] It is becoming especially critical that workers in this sector have the skills to work in and around AI and automation that can support their daily tasks. Automated guided vehicles (AGVs) have been used to deliver pharmacy medications as well as other items such as linen and food in hospitals. Further, the hospital pharmacy sector has seen an increase in the number of automated or robotic dispensing machines. The automation of dispensing scripts frees up staff to focus on customer interactions and improve efficiency.[17]

## Patient Support and Care

An array of new technological advancements, including 3-D printing, robotics, nanotechnology, genetic coding and therapeutic options, can permit more personalised and accessible patient care. Many devices and pieces of equipment are getting smaller and more portable, and treatments will likely become more targeted—all of which can make future health care more mobile and precise. This, in turn, should increase staff and process efficacy and improve patient outcomes, as clinicians will be able to quickly find the best treatment option rather than trying multiple interventions.[18] Personalisation of medications, for instance, will be based on a patient's genetic profile and the use of precision medicine, and designs for 3-D-printed prostheses will be based largely on a patient's specific anatomy.

As medical equipment and sensors become smaller and more portable, clinicians may be able to perform various tests and procedures at a patient's bedside rather than transporting the patient to different areas of a hospital. Robots can be used to deliver medications to patients. Patient rooms can be built to include more equipment options, or the equipment can easily be moved to the patient. In some countries, it is also possible that mobile hospitals may come to the patient. Additionally, medical interventions could become less invasive, resulting in better outcomes and faster recoveries.[19] These advances will have a significant impact on the sector, and it is essential that workers within the industry have the necessary understanding and skills to be able to perform their job functions. It is noted, though, that not all of this training will or should be delivered via national qualifications. Care must be taken that training package products do not become time-locked, by listing specific types or models of equipment or automation that may change over time, in some cases rapidly. Training package products should, rather, focus on the output, the method and skills required to deliver patient support and care, instead of the tools needed to carry out the process.

# Employment and Skills Outlook

## Labour Force Data

According to the Department of Jobs and Small Business report, Australian Jobs 2018, the wider health care industry employed 1.663 million people in 2017 (up by 8.0% from November 2016). There were an estimated 33,200 workers under the occupation of **Medical Technician** in 2017, according to the Department of Jobs and Small Business. This occupation covers job titles such as Anaesthetic Technician, Pharmacy or Dispensary Technician, Cardiac Technician, Operating Theatre Technician, and Pathology Collector.[20] Figure 1 below shows the employment projection for the next five years in the health-related technician occupation, Medical Technician.

**FIGURE 1** Projected growth in selected health-related technician occupation group, 2017-2022 (%)


Source: Australian Government Department of Jobs and Small Business, 2017 Occupational Projections – five years to May 2022.

### Medical Technician roles

**Top Skills Areas**

- Active Listening
- Reading Comprehension
- Critical Thinking
- Speaking
- Science

Source: Australian Government Department of Jobs and Small Business, Job Outlook.

Over three-quarters of workers within this occupation (i.e. Medical Technician) are employed in the Health Care and Social Assistance sector. Most of the people within this occupation are employed on the east coast of Australia (79%). Eight out of ten people employed in these job roles are female. Over half of the workers within this occupation have a Certificate III/IV or a Diploma/Advanced Diploma.[21]

Nationally, about 360,000 full-time equivalent (FTE) staff were employed in providing public hospital services in 2015–16. Of these, about 307,000 were employed in hospitals, 30,000 at the Local Health Network (LHN) level and 22,000 at the Health Authority level. About 45% (140,000 FTE) of public hospital staff employed in hospitals were nurses, while the 40,000 FTE salaried medical officers represented about 13.0% of the public hospital labour force. A further breakdown shows that there were 63,327 administrative and clerical staff and 56,520 diagnostic and allied health professionals.[22]

According to Optometry Australia's Annual Report of 2016–2017, there were 5,343 optometry practitioners delivering services throughout Australia. This was equivalent to $408 million of Medicare benefits paid.[23]

With responsibility for registered health professionals, the Australian Health Practitioner Regulation Agency (AHPRA) through its various health professional boards provides data on registered health practitioners. Data on health support services workers (as represented by the Technicians Support Services IRC) is less readily available.

Industry notes the challenges across the health sector in sourcing reliable data which accurately reflects numbers for specific occupations.

## Future Skills Needs

### Science, Technology, Engineering and Mathematics (STEM) Skills

With the constant evolution of technology through automation, artificial intelligence (AI) and robots, the skills needed by the workforce in the coming years will be vastly different to those required today. It is imperative that this be factored into training packages that are being developed, adapted and updated. Technology disruption, as it has done in the past, will replace some industries, companies and workers, especially those that lack the flexibility to adapt.

Australians are generally welcoming of technology, and most believe that innovation and new technology development is vital for Australia's future prosperity.[24] There is some speculation that, as a result of technological developments, approximately 40% of the workforce will be replaced by computers in the next 10 to 15 years.[25] This does not take into account the fact that technology also creates new jobs and often replaces inefficient processes. Also, rather than replacing a worker's role, the rise of technology and automation won't necessarily change what jobs workers do; instead, it will change the way in which workers carry out their jobs. Technological advancement has the ability to not merely impact low-skilled workers by replacing menial tasks with automation, but also has the potential to affect highly skilled workers through AI supplementation, or even by replacing cognitive tasks.[26]

In order to succeed in the wave of automation and innovation, many believe that STEM (Science, Technology, Engineering and Maths) skills are part of the answer when it comes to preparing workers for jobs of the future. The focus on STEM, while not new, is crucial to building a twenty-first century knowledge-based economy underpinned by data, digital technologies and innovation, which are essential for growth.[27] Both digital literacy and competency in the use of different technological platforms will be essential skills in the future. Without basic digital competencies a person will not have the skills to negotiate the digitally connected world which has now become the norm.[28] Workers will need the ability to use digital technology in their jobs to access and use information and digital content; communicate and collaborate through digital technologies; manage their digital identity; develop digital content; and use and protect their digital devices, personal and organisational data, and privacy.[29] This is especially critical for workers within the Technicians Support Services sectors, as more and more data is collected about patients in order to streamline and centralise patient information. As health and patient data systems become more integrated in the future, workers will need to be constantly learning and receiving training in how best to maximise the technology for the patient. Not only will this data collection be a skill workers will require, but they will also need to know how best to use that data for patients' benefit through analysis, etc.

While STEM skills are critical for the needs of the future, other 'softer' skills are just as important. Soft skills include things like communication, teamwork, problem solving, emotional judgement, professional ethics and global citizenship. Deloitte Access Economics forecasts that two-thirds of jobs will be soft skill-intensive by 2030.[30] Businesses are aware of the importance of soft skills. A survey conducted in 2015 of over 450 business managers and executives in Western Sydney cited teamwork, communication skills and time management as vital skills for applicants to possess (TAFE NSW 2015). Megatrends like technology advancement and globalisation will contribute to more demand for people with soft skills as the geographical barriers fall due to technology, making it easier to connect people across countries.[31] The need for soft skills is even more essential in leadership positions. A survey conducted by Deloitte found that soft skills were more important for determining the success of a leader than technical knowledge.[32] For decision-makers the ability to effectively communicate, problem solve and think critically is important for success. Credentials for soft skills are beginning to emerge. The benefits to businesses are twofold. Firstly, recruitment processes can be made more efficient as credentials allow recruiters to pre-screen potential candidates for the required soft skills. The second benefit is the fact that more targeted recruitment for soft-skilled candidates allows businesses to make savings in training and developing their own workforce later on.[33] These skills going forward will be vital to workers within the remit of this IRC as new frameworks such as the NDIS become established and change the dynamic of patient-centric care. Workers will need to be able to show empathy towards their patients and display ethical judgement as they work to foster long-term working relationships with them.

Current training package products within the HLT Health Training Package have considerable content regarding soft skills, so it is important to ensure industry is aware of these options and the ability to tailor training to meet their specific job role requirements.

## Leadership

Leadership in the workplace is another important emerging trend in future skills needs. As Australia potentially enters a period of slow economic growth it is essential that Australian organisational leaders are ready to meet these new challenges. Formal training provides a foundation for the diverse skills associated with leadership, from technical skills to solving problems and managing change. Investing in leadership development is positively associated with leadership capabilities and self-efficacy, which in turn significantly improves workplace performance and innovation. Yet the findings reveal that many workplaces do not invest in leadership development at all, or invest very little. Frontline leadership matters most for employees, shaping the experience of work and creating a positive climate for innovation and performance.[34] Within the Technicians Support Services sector it is essential that administrative staff have the skills to ensure service-delivering staff can focus on the provision of care. As demand for health services is increasingly driven through patient-centric frameworks, workers within this sector will need supportive leadership in order to be competitive and help ensure innovation in service delivery.

## Work Placement

Clinical placements are commonplace in the course of achieving many health professional qualifications. They are not only an essential component of health training programs but are required for accreditation to professional bodies. As demands on our health services increase, there is a greater need to train more health professionals. An increase in student numbers requires an increase in the number of quality clinical placements to ensure that health professionals are able to perform their clinical roles when they graduate.

The benefits of clinical placements for health service providers include the ability of students to add to the service provision of the host organisation. Participation in clinical placement programs has also been found to aid health service organisations in the recruitment of future staff. Other benefits of clinical placements, both tangible and intangible, may include supervisory opportunities, professional development via involvement in the non-clinical aspects of the placements, and the acquisition of academic titles for staff. In addition, involvement in clinical placement programs can improve the public perception of the service (i.e. an 'academic centre'), lead to improved support from education providers to host organisations, and potentially improve health service facilities.[35] Given that clinical placements have the ability to add value to an organisation, the learnings of the student organisations within this sector should consider placing greater emphasis on them. Organisations must also ensure that there are qualified trainers and assessors within the context of clinical placement in order to maximise the potential benefits of such placements.

The value of clinical placement is noted above. However, industry must also have the willingness and capacity to accommodate learners on placements. Significant time is contributed by existing workers to supervise students on placement, and there are also complex ethical and legal compliance requirements. The lack of placements for learners in rural areas has also been identified by industry as presenting some difficulty. There are some measures in place to alleviate this. One such example is the NSW Rural Allied Health Clinical Placement Grant,[36] which provides learners with financial assistance towards the travel and accommodation costs associated with rural clinical placements.

# Key Generic Skills – Ranked in Order of Importance

Note: The 12 generic skills listed below, including the descriptors, were provided by the Department of Education and Training for the purpose of being ranked by industry representatives. For the 2018 ranking exercise, an 'Other' generic skill option was included in the list to capture any additional key skills considered important for an industry. Please note that, in this case, no other generic skills were identified.

| | | |
|---|---|---|
| 1 | LANGUAGE, LITERACY & NUMERACY (LLN) | Foundation skills of literacy and numeracy. |
| 2 | COMMUNICATION / COLLABORATION / SOCIAL INTELLIGENCE | Ability to understand/apply principles of creating more value for customers and collaborative skills. Ability to critically assess and develop content with new media forms and persuasive communications. Ability to connect in a deep and direct way. |
| 3 | TECHNOLOGY AND APPLICATION | Ability to create/use technical means, understand their interrelation with life, society, and the environment. Ability to understand/apply scientific or industrial processes, inventions, methods. Ability to deal with mechanisation/automation /computerisation. |
| 4 | LEARNING AGILITY / INFORMATION LITERACY / INTELLECTUAL AUTONOMY / SELF-MANAGEMENT | Ability to identify a need for information. Ability to identify, locate, evaluate, and effectively use and cite the information. Ability to develop a working knowledge of new systems. Ability to work without direct leadership and independently. |
| 5 | DESIGN MINDSET / THINKING CRITICALLY / SYSTEM THINKING / PROBLEM SOLVING | Ability to adapt products to rapidly shifting consumer tastes and trends. Ability to determine the deeper meaning or significance of what is being expressed via technology. Ability to understand how things that are regarded as systems influence one another within a complete entity, or larger system. Ability to think holistically. |
| 6 | STEM (Science, Technology, Engineering and Maths) | Sciences, mathematics and scientific literacy. |
| 7 | DATA ANALYSIS | Ability to translate vast amounts of data into abstract concepts and understand data-based reasoning. Ability to use data effectively to improve programs, processes and business outcomes. Ability to work with large amounts of data. |
| 8 | ENVIRONMENTAL / SUSTAINABILITY | Ability to focus on problem solving and the development of applied solutions to environmental issues and resource pressures at local, national and international levels. |
| 9 | CUSTOMER SERVICE / MARKETING | Ability to interact with other people, whether helping them find, choose or buy something. Ability to supply customers' wants and needs. Ability to manage online sales and marketing. Ability to understand and manage digital products. |
| 10 | MANAGERIAL / LEADERSHIP | Ability to effectively communicate with all functional areas in the organisation. Ability to represent and develop tasks and processes for desired outcomes. Ability to oversee processes, guide initiatives and steer employees toward achievement of goals. |
| 11 | FINANCIAL | Ability to understand and apply core financial literacy concepts and metrics, streamlining processes such as budgeting, forecasting, and reporting, and stepping up compliance. Ability to manage costs and resources, and drive efficiency. |
| 12 | ENTREPRENEURIAL | Ability to take any idea and turn that concept into reality/make it a viable product and/or service. Ability to focus on the next step/move closer to the ultimate goal. Ability to sell ideas, products or services to customers, investors or employees, etc. |

# Key Drivers for Change and Proposed Responses

## Key Drivers for Change

### Hospital Pharmacy

In 2016, the Society of Hospital Pharmacists of Australia (SHPA) conducted a comprehensive workforce study of hospital pharmacy technicians and assistants. SHPA's White Paper, titled *Exploring the role of hospital pharmacy technicians and assistants to enhance the delivery of patient-centred care*, showed that:

- 95.0% of hospital pharmacy services employ pharmacy technicians/assistants
- Pharmacy technicians/assistants are integral to the provision of pharmacy services to patients in Australian hospitals and can be instrumental in increasing the availability and impact of these services
- There is concern regarding the lack of a career structure for hospital pharmacy technicians/assistants in Australia
- High staff turnover is linked to a lack of career opportunities, and is particularly prevalent in rural and remote locations
- Technicians/assistants are indeed interested in career advancement opportunities, and
- A lack of training opportunities, limited incentives to undertake training and few opportunities for progression are reported as major obstacles.

The Case for Change to update the two Hospital Pharmacy qualifications is currently underway and will ensure that these qualifications are adjusted to meet changing industry needs and provide current and relevant skills.

### Clinical Coding

Clinical coders are specialised health administrators who convert information from a patient's medical record into alphanumeric codes according to a health classification system. In Australia, the health classification systems used are the *International Classification of Diseases 10th Revision Australian Modification* (ICD-10-AM), the Australian Classification of Health Interventions (ACHI) and the Australian Coding Standards (ACS).

The use of classification systems makes it easier to store, retrieve and analyse data, and these codes form part of a data collection that is used for research, funding and health care planning.

The *Health Information Workforce Summit Report* (2014) by the Health Information Management Association Australia (HIMAA) suggests that shortages of clinical coders are worsening, with reduced access to highly skilled individuals to fulfil this job role. In addition, it is reported that the supply of clinical coders will not be able to meet predicted future workforce demands.

There is currently no nationally recognised vocational education and training qualification packaged within the HLT Health Training Package to provide the skills and knowledge required by the clinical coding job role. Clinical coders need to have excellent attention to detail in order to produce high levels of accuracy. They must also be able to work as part of a team, have good communication skills and be interested in health care, diseases and procedures. The development of a Case for Change for a new qualification to address the clinical coding job role is currently underway.

### Cast Technology

The Certificate IV in Cast Technology was removed from the HLT Health Training Package in 2015. As a result, there is no longer a current nationally recognised training package product supporting skills development in the cast technician job role. Industry has suggested that a number of units of competency, formerly packaged within the removed qualification, remain relevant and should therefore be re-developed. The Case for Change related to this training package development work is currently underway.

### Health Administration

**Skills that Meet the Current and Future Demand for Health Administration Job Roles**

The National Strategic Framework for Rural and Remote Health notes that it should be recognised that health services experience workforce shortages in non-clinical areas, such as management, finance and health information. It is necessary to provide support and training for non-clinical workers, and to explore opportunities for small health and hospital networks to share their administrative, financial, and health information infrastructure and staff, to minimise the impact of these shortages. It is also important to consider the roles and scope of practice of a wide range of other health care workers, including remote health workers, nurses, allied health workers, midwives, Aboriginal and Torres Strait Islander health workers and vocationally-trained workers. One of the objectives of the National Strategic Framework for Rural and Remote Health is to 'build a health workforce that meets the needs of local communities'.

Three key strategies listed in the framework are to identify opportunities for new or expanded roles; to vary the skill mix of multi-disciplinary team members to enhance services; and to introduce new professional and semi-professional roles, such as vocationally and tertiary-trained assistants, transport providers and coordinators, and Telehealth/e-Health coordinators.

This Industry Skills Forecast, including the Proposed Schedule of Work, was available via SkillsIQ's website for comment and promoted to over 17,000 stakeholders registered in SkillsIQ's network. This final document has been prepared in consultation with the Technicians Support Services IRC, with input from stakeholders. Regional and rural areas continue to be identified as areas for which multi-disciplinary trained staff are crucial.

## Proposed Responses

The *Certificate IV in Health Administration* qualification reflects the role of health workers who provide administrative functions in senior operational or team-leading roles in the health care industry. To address the workforce needs outlined above, an update of the HLT47315 *Certificate IV in Health Administration* and seven units of competency during the 2018–19 year is required to ensure that industry's needs for rural, remote and cross-disciplinary roles can continue to be met. Job roles within the scope of this qualification will look to fill gaps in regional and remote areas where there is reduced access to doctors and nurses.

Five of the six core units of competency within the HLT47315 qualification are imported from other training packages (BSB Business Services and CHC Community Services). It is acknowledged that the content of these units will not be able to be altered. This update seeks to explore how HLT units of competency can be better utilised to achieve the required outcomes, and identify the gaps where new units of competency are required to be developed.

| STAKEHOLDER | IMPACT OF PROPOSED CHANGE |
|---|---|
| Employers and Employees | - Industry requires access to a skilled workforce, and qualifications that support the delivery of critical skills and knowledge are crucial. Both industry and employers would significantly benefit from clearer training pathways that meet the needs of local communities across Australia.<br>- An analysis of job roles and occupational outcomes of training products is a valuable forum for collaborative engagement within the sector. Updating the qualification so that it has increased value to the industry will facilitate investment in training and skills development within the sector through better planning and alignment to workforce development strategies.<br>- RISK: If the qualification is not updated, it will be a lost opportunity to enhance the training options and pathways for learners in rural and remote areas. |
| Students | - Learners will benefit from improved clarity and updated training package products that industry confirms reflect the current skills and knowledge required for job roles in the sector. Qualifications which align to specialisations within the sector will also enhance occupational mobility, both within health administration roles and between health sub-sectors. |
| Registered Training Organisations | - Registered Training Organisations (RTOs) will benefit from increased relevance of training package products and improved opportunities for RTOs to partner with industry to provide programs better aligned to job outcomes. Although change to units of competency and qualifications creates flow-on impacts and costs for RTOs in relation to administrative systems, training resources and assessment materials, a positive impact for all RTOs will be improved clarity around training outcomes and assessment expectations. |

## Estimated Timeframes to Implement the Proposed Changes to the Training Package

The ongoing involvement of industry and national stakeholder engagement is crucial to the process of updating training package products. It is estimated that development will take approximately 12 months.

# Proposed Schedule of Work

## 2018–19

| YEAR | PROJECT TITLE | DESCRIPTION |
|---|---|---|
| 2018–19 | Health Administration | The IRC proposes to update the following qualification and any associated skill sets and units of competency relating to health administration job roles:<br>• HLT47315 Certificate IV in Health Administration |

## 2019–20

| YEAR | PROJECT TITLE | DESCRIPTION |
|---|---|---|
| 2019–20 | Sterilisation Services | The IRC proposes to update the following qualifications and any associated skill sets and units of competency relating to sterilisation job roles:<br>• HLT37015 Certificate III in Sterilisation Services<br>• HLT47015 Certificate IV in Sterilisation Services |
| 2019–20 | Pathology | The IRC proposes to update the following qualifications and any associated skill sets and units of competency relating to pathology job roles:<br>• HLT37215 Certificate III in Pathology Collection<br>• HLT37415 Certificate III in Pathology Assistance |
| 2019–20 | Medical Practice Assisting and Management | The IRC proposes to update the following qualifications and any associated skill sets and units of competency relating to medical practice management job roles:<br>• HLT47715 Certificate IV in Medical Practice Assisting<br>• HLT57715 Diploma of Practice Management |
| 2019–20 | Audiometry | The IRC proposes to update the following qualifications and any associated skill sets and units of competency relating to audiometry job roles:<br>• HLT47415 Certificate IV in Audiometry<br>• HLT57415 Diploma of Audiometry |
| 2019–20 | Operating Theatre Technical Support | The IRC proposes to update the following qualification and any associated skill sets and units of competency relating to operating theatre technical support job roles:<br>• HLT47515 Certificate IV in Operating Theatre Technical Support |
| 2019–20 | Cardiac Technology | The IRC proposes to update the following qualification and any associated skill sets and units of competency relating to cardiac technology job roles:<br>• HLT47615 Certificate IV in Cardiac Technology |
| 2019–20 | Optical Dispensing | The IRC proposes to update the following qualification and any associated skill sets and units of competency relating to optical dispensing job roles:<br>• HLT47815 Certificate IV in Optical Dispensing |
| 2019–20 | Anaesthetic Technology | The IRC proposes to update the following qualification and any associated skill sets and units of competency relating to anaesthetic technology job roles:<br>• HLT57915 Diploma of Anaesthetic Technology |

## 2018-19 Project Details

| PROJECT TITLE | HEALTH ADMINISTRATION |
|---|---|
| Description: | Qualification outcome reflects the role of individuals who work in a senior operational or team-leading role in the health industry. This job role is important in regional and remote areas where there is limited access to doctors or nurses. |
| Rationale: | Refer to the section of this Industry Skills Forecast titled Key Drivers for Change and Proposed Responses |
| Ministers' Priorities Addressed: | The development of training package products proposed within this Industry Skills Forecast considered opportunities to support the Council of Australian Governments (COAG) Industry and Skills Council and used consultation activities and stakeholder engagement to identify:<br>1. Opportunities to identify and remove obsolete training package products from the system. It is noted this qualification contains several units from the BSB Business Services and CHC Community Services Training Packages.<br>2. Industry expectations for training delivery and assessment to be documented within the Companion Volume Implementation Guide.<br>3. Opportunities to enhance the portability of skills from one related occupation to another.<br>4. Opportunities to remove unnecessary duplication within the system and create training package products that may have application to multiple industry sectors. The existing qualification caters to a broad range of supervisory or team leader roles within the health sector. It is expected to retain this flexibility following the qualification update. Due to the specific nature of the health care industry it may not be possible for training package products to be applied across non-health related industries.<br>5. Opportunities for the development of skill sets. |
| Consultation Plan: | Key stakeholders identified in section National Peak Bodies and Key Industry Players will be consulted throughout the course of the project. National industry consultation will also be conducted via face-to-face workshops, webinars and one-on-one interviews, and there will be opportunities for all interested parties to provide comments online via the SkillsIQ Online Feedback Forum. |
| Timing - Estimated Duration and Key Dates: | July 2018, subject to AISC approval.<br>A detailed project plan outlining key dates will be developed and aligned to the Activity Order date once known.<br>Estimated duration: 12 months. |
| Training Package to be Revised: | HLT Health Training Package |
| Skill Set/s to be Developed/Updated: | Nil |
| Qualification/s to be Developed/Updated: | One qualification to be updated:<br>• HLT47315 Certificate IV in Health Administration |
| Unit/s of Competency to be Developed/Updated: | • Four existing units of competency within HLT47315 Certificate IV in Health Administration:<br>- HLTADM001 Administer and coordinate Telehealth services<br>- HLTADM002 Manage Telehealth technology<br>- HLTADM003 Facilitate a coordinated approach to client care<br>- HLTADM004 Manage health billing and accounting system.<br>• Three new units of competency – titles to be confirmed following consultation with industry. Content to address health information infrastructure, administration, and finance requirements of industry, particularly in rural and remote health. |

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