



SKILLSIQ

CAPABLE PEOPLE MAKE CLEVER BUSINESS

STAKEHOLDERS



OUTCOMES



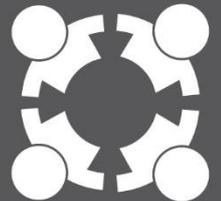
INTEGRITY



BOLDNESS



TEAMWORK



DRAFT

DENTAL

INDUSTRY REFERENCE COMMITTEE

INDUSTRY SKILLS FORECAST 2018

Skills Forecast

Name of IRC: Dental

Name of SSO: SkillsIQ Limited

About SkillsIQ Ltd.

SkillsIQ supports 17 Industry Reference Committees representing diverse ‘people-facing’ sectors. These sectors provide services to people in a variety of contexts such as customer, patient or client. The Industry Reference Committees are collectively responsible for overseeing the development and review of training products, including qualifications, serving the skills needs of sectors comprising almost 50 per cent of the Australian workforce.

Sector Overview

Within the Australian and New Zealand Standard Industrial Classification (ANZSIC)¹, *Dental Services* are defined as those businesses engaged in the practice of general or specialised dentistry with the primary purpose of delivering improved oral health. This can include delivering a range of diagnostic, preventative and/or restorative treatments for oral health care including oral examinations, cleans, fillings, insertions, extractions and specialist services such as orthodontics, periodontics and oral pathology. The sector is also involved in educative functions to promote oral health. Government policy and programs such as Australia’s *National Oral Health Plan* and the Child Dental Benefits Schedule (CDBS) have meant that the dental health sector is regularly involved in working with other industries such as child care, education and community services to achieve high levels of oral health across different population groups.

Oral health care is delivered by both public and private sector providers. However, the majority of providers represent independent sole proprietors operating small-scale dental practices.² The private sector employs approximately 85% of dentists, which equates to a national average of 47.7 private practice dentists per 100,000 population compared to 8.6 public sector practising dentists per 100,000 population.³ Public sector services are co-ordinated through state and territory health providers which include public hospitals and community dental clinics. The latest industry reports show that fewer than 5% of dentists are working in a community health care setting.⁴ The majority of dental practices operate as stand-alone establishments; however, there has been a recent trend towards corporatisation within the sector and several groups such as Dental Partners, Maven Dental Group, Pacific Smiles Group and 1300Smiles have been gaining scale through acquisitions or the set-up of new dental centres.⁵

The distribution of dental health providers is heavily skewed towards urban locations, with approximately 80% of dentists operating in Australia’s major cities. Areas with higher than average

¹ Australian Bureau of Statistics (ABS) 2013, 1292.0 Australian and New Zealand Standard Industrial Classification (ANZSIC), viewed 23 November 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/mf/1292.0>

² IBISWorld Industry Report (Q8531) Dental Services in Australia November 2017

³ Australian Institute of Health and Welfare (AIHW) and The University of Adelaide, *Oral health and dental care in Australia Key facts and figures 2015* (Released 2016)

⁴ IBISWorld Industry Report (Q8531) Dental Services in Australia November 2017

⁵ IBISWorld Industry Report Q8531 Dental Services in Australia November 2017

incomes, typically urban locations, experience a greater presence of dental services and, in some instances, are over-represented with dental practices compared to population shares. The contrary is true for many rural and remote locations where these populations have reduced access to dental services. For example, the Northern Territory only represents 0.6% of business locations in Australia.⁶

The dental workforce consists of both registered and non-registered health care professionals. Registered occupations in the dental health sector are:

- Dentists
- Dental specialists
- Dental therapists
- Dental hygienists
- Oral health therapists
- Dental prosthetists.*

The non-registered dental workforce consists of:

- Dental technicians*
- Dental practice managers
- Dental assistants* ^
- Dental laboratory assistants.*

Note: * Denotes occupations that directly align to nationally recognised dental qualifications within the HLT Health Training Package.
^ Dental assistants who have completed a *Certificate IV in Dental Assisting (Radiography)* must hold the relevant radiation license with the respective state or territory Radiation Health office.

There is also a range of broader health and community service workers providing some basic oral health care services and referrals, some of whom may have undertaken specific oral health care training available through nationally recognised training products.

Dental Qualifications - Current at March 2018

The VET qualifications that cater to this sector are:

- HLT35015 Certificate III in Dental Assisting
- HLT35115 Certificate III in Dental Laboratory Assisting
- HLT45015 Certificate IV in Dental Assisting
- HLT55118 Diploma of Dental Technology
- HLT65015 Advanced Diploma of Dental Prosthetics

⁶ IBISWorld Industry Report Q8531 Dental Services in Australia November 2017

Registered Training Organisation Scope of Registration

The following table (**Table 1**) indicates the number of Registered Training Providers (RTOs) with Dental qualifications on scope. This data is current as at March 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 – Dental Training Package

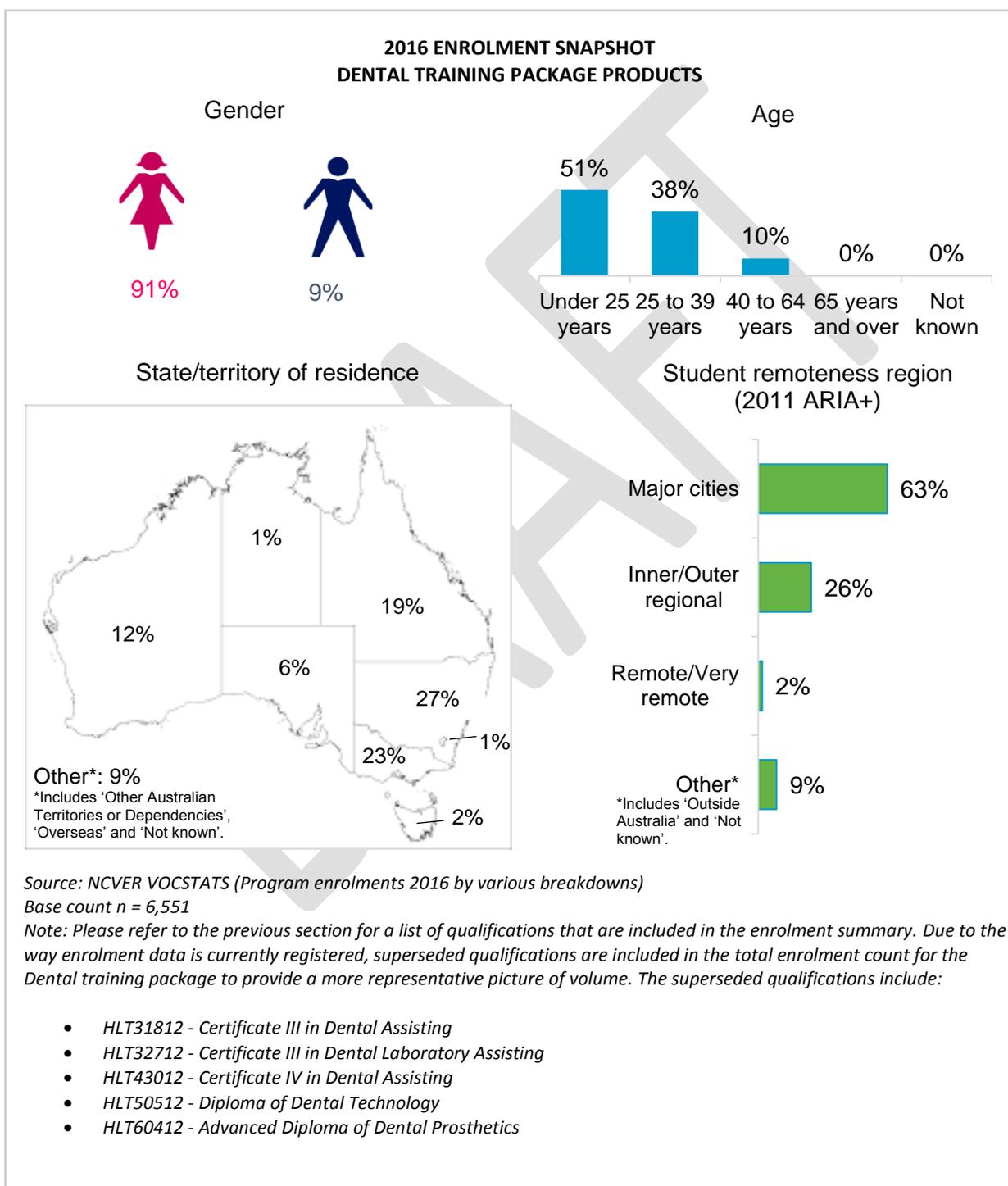
Code	Qualification title	No. of RTOs with qualification on scope
HLT35015	Certificate III in Dental Assisting	26
HLT35115	Certificate III in Dental Laboratory Assisting	7
HLT45015	Certificate IV in Dental Assisting	27
HLT55118	Diploma of Dental Technology (released 14 March 2018)	0
<i>HLT55115</i>	<i>Diploma of Dental Technology (superseded)</i>	16
HLT65015	Advanced Diploma of Dental Prosthetics	4

Source: Training.gov.au. RTOs approved to deliver this qualification. Accessed 26 March 2018

Qualification Enrolments and Completions

In 2016, there were approximately 6,500 enrolments across all VET qualifications catered for by the Dental training package products. The most popular qualification in 2016 was the *Certificate III in Dental Assisting* (4,577 enrolments), followed by the *Certificate IV in Dental Assisting* (with 1,067 enrolments).

An overview of key traits regarding Dental training package product enrolments for 2016 is provided below, followed by a breakdown of enrolments and completions for individual qualifications.



General notes on statistics:

1. Enrolment and completion data is sourced from NCVER VOCSTATS (Program enrolments and completions 2014 – 2016), accessed October 2017.
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 underrepresent 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 and 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.
4. Completion data for 2016 represents preliminary outcomes (i.e. not a full year).
5. 'E' represents Enrolment.
6. 'C' represents Completion.
7. Superseded qualifications are listed in *italics*.

All Student Programs – Enrolments and Completions

Qualification	E/C	2014	2015	2016	Total
HLT35015 - Certificate III in Dental Assisting	E	-	-	378	378
	C	-	-	36	36
<i>HLT31812 - Certificate III in Dental Assisting (Superseded)</i>	E	3,757	4,185	4,199	12,136
	C	1,582	1,885	1,853	5,320
HLT35115 - Certificate III in Dental Laboratory Assisting	E	-	-	27	27
	C	-	-	3	3
<i>HLT32712 - Certificate III in Dental Laboratory Assisting (Superseded)</i>	E	19	34	28	80
	C	7	13	13	29
HLT45015 - Certificate IV in Dental Assisting	E	-	-	83	83
	C	-	-	8	8
<i>HLT43012 - Certificate IV in Dental Assisting (Superseded)</i>	E	853	834	984	2,673
	C	387	377	473	1,236
HLT55118 - Diploma of Dental Technology	E	-	-	-	-
	C	-	-	-	-
<i>HLT55115 - Diploma of Dental Technology (Superseded)</i>	E	-	-	34	34
	C	-	-	-	-
<i>HLT50512 - Diploma of Dental Technology (Superseded)</i>	E	681	795	710	2,182
	C	175	210	197	582
HLT65015 - Advanced Diploma of Dental Prosthetics	E	-	-	7	7
	C	-	-	-	-
<i>HLT60412 - Advanced Diploma of Dental Prosthetics (Superseded)</i>	E	119	120	96	334
	C	49	42	48	139

Businesses Involved

The latest ABS data available on Australian businesses shows that, across Australia, there are approximately 13,700 businesses operating dental services.⁷ Other industry reports vary slightly in their reporting and estimate that in 2017–18 there were 14,555 businesses across Australia involved in dental services.⁸ Discrepancies in figures between sources will be attributed to variations in data collection and definitions applied. However, for the purposes of this report, the size of the sector is estimated to range from between 13,700 and 14,600 businesses.

Distribution of businesses reflects the distribution of the population, with 80% of businesses located in New South Wales (35%), Victoria (25%) and Queensland (20%). 10% of dental service businesses are based in Western Australia, followed by 7% in South Australia, ACT (2%) and Tasmania and Northern Territory with 1% respectively.

The majority of businesses are small private enterprises with a turnover of less than \$2 million (with 66% registering a turnover of between \$200,000 and \$2 million). Dental services delivered through the public sector are provided by state and territory governments and specialised dental hospitals and practices.

Stakeholders

National peak bodies and key industry players

Organisations which perform a variety of key roles in this sector are listed below. These organisations and their networks are well-placed to offer industry insights at the time of training package product review.

- Government departments and agencies, such as
 - Commonwealth Department of Health
 - State and territory health departments
- Peak and industry associations, such as
 - Australian Dental Association
 - Australian Dental and Oral Health Therapists Association
 - Australian Dental Prosthetists Association
 - Dental Assistants Professional Association
 - Dental Hygienists' Association of Australia
 - Oral Health Professionals Association
- Employee associations, such as
 - Australian Nursing and Midwifery Federation
 - Health Services Union
 - United Voice
 - Australian Liquor, Hospitality and Miscellaneous Workers Union
- Regulators, such as
 - Australian Dental Council

⁷ Australian Bureau of Statistics (ABS) 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2016

⁸ IBISWorld Industry Report Q8531 Dental Services in Australia (November 2017)

- Australian Health Practitioner Regulation Agency
- Dental Board of Australia
- Health care complaints entities in most jurisdictions
- Australian Commission on Safety and Quality in Health Care
- Large employers, such as
 - Health insurers (provider arms)
 - Defence
 - Public dental services (represented by National Dental Directors)
 - Corporate dental companies
- Employers both large and small across metropolitan, regional, rural and remote areas
- Registered Training Organisations both public and private.

Challenges and Opportunities

Health expenditure

In Australia, dental health care services are delivered by both private and public dental providers. Public dental services are administered by the Health Department in each state and territory, and clinics can be based in hospitals, schools, community health centres or run as mobile units (especially in rural areas). Eligibility to access publicly funded dental health care is prescribed by the respective state and territory health departments, and can vary across each jurisdiction. Dental health services provided by private dental health practices set their own service fees (as they are not regulated by Medicare), and fees can differ significantly from practice to practice, depending on factors such as location and population demographics of the local area.

Dental service fees are not covered by Medicare, and not all Australians are eligible for free dental care via the public system. Dental services instead are often privately funded by individuals. The latest health expenditure data released by the Australian Institute of Health and Welfare (AIHW) shows that the annual spend by individuals on dental services was \$5.74 billion, representing 58% of the total \$9.904 billion spent on dental services in Australia. Government expenditure (national, state and territory) on dental services was equivalent to \$2.331 billion (equivalent to 23.6% of total spend).⁹ Many Australians are able to subsidise dental services through private health insurance rebates, using private health insurance as a co-payment mechanism. In some instances, full rebates can be provided for certain dental services such as check-ups and cleans. Spending on dental services by private health insurance funds was \$1.791 billion (equivalent to 18.1% of the total spend).

Overall, spend on dental services (government and non-government) has been rising, and cost is increasingly a barrier quoted by adults (especially those aged 25 to 44 years old) as to why they avoid or delay visiting a dentist.¹⁰ Cost is also cited as a barrier for getting recommended dental treatment which, in the long-term, can create additional health implications for individuals. Reasons for visiting a dentist have slowly been changing over time, with demand trends showing that visits for scale and clean services have been rising, and visits for fillings instead have been falling.¹¹ Given that cost is a

⁹ Australian Institute of Health and Welfare (AIHW) Health expenditure Australia 2015-16 (Released 2017)

¹⁰ Australian Institute of Health and Welfare (AIHW) *Oral health and dental care in Australia 2015* (Released January 2016)

¹¹ Australian Institute of Health and Welfare (AIHW) and University of Adelaide, *Oral health and dental care in Australia Key facts and figures 2015* (Released January 2016)

factor driving demand in the sector, dental practices are challenged to provide cost-effective services. This means reviewing and implementing different technologies and techniques to meet the price sensitivities of customers. Workforce skills will need to evolve with technological and technique developments to support dental practices to continue to offer high quality services at a competitive cost.

Registration and regulation

The Health Practitioner Regulation National Law, enacted by all state and territory governments, governs the registration of dental practitioners. The national law established the Australian Health Practitioner Regulation Agency (AHPRA), a national agency responsible for the national registration and accreditation of health practitioners in Australia, including dentists and other dental practitioners. The Dental Board of Australia was also established under AHPRA. The Dental Board of Australia is a national professional board whose role includes registering practitioners and developing professional standards, among other functions. The national board is supported by state and territory Registration and Notification Committees in each state and territory, all of whom make individual registration and notification decisions based on national policies and standards.

The activities of practitioners and private practices are regulated by various state Dental Practice Acts. Regulations impact on areas such as practice advertising, ownership of and employment within practices, practice title (or trade) names, and infection control. While ultimately the dentist and other dental practitioners assume responsibility in relation to infection control, all staff must adhere to the infection control guidelines in their everyday roles. It is imperative that all staff within a dental practice are trained in the appropriate infection control protocols and that skilling in this area is undertaken on an ongoing basis.

Government policy and programs

Australia's *National Oral Health Plan 2015–2024* outlines the guiding principles to ensure that all Australians have access to oral health services. A key focus of the plan is preventative oral health and identifies training opportunities within several sectors such as aged care, disability care and childcare.¹²

There are several initiatives and programs funded by the Australian Government with the intent of supporting improved dental outcomes. The **Child Dental Benefits Schedule** (CDBS) provides \$1,000 in benefits for basic dental services for children aged 2–17. The CDBS commenced on 1 January 2014, and provides access to benefits for basic dental services to around 3 million children aged 2–17 years.¹³

In December 2016, the government announced the continuation of the **National Partnership Agreement on Adult Public Dental Services**, allocating total funding of \$320 million over three years through National Partnership Agreements to assist jurisdictions to provide public dental services to adults¹⁴. Public dental health care services are administered by each state and territory's Health Department. Each state and territory offers a range of dental services to the community, including

¹² IBISWorld Industry Report Q8531 Dental Services in Australia November 2017

¹³ The Child Dental Benefits Schedule <http://www.health.gov.au/internet/main/publishing.nsf/Content/childdental>

¹⁴ The Department of Health Dental website, viewed 1 December 2017 <http://www.health.gov.au/dental>

emergency care. However, the eligibility criteria for public dental services vary in each state and territory. Public dental health services are generally delivered in dental clinics based in community health centres, hospitals and schools, and include general dentistry such as examinations, fillings and dentures.

Dental health policy and programs are important influencers in the sector in terms of shifting individuals from accessing private to public dental health care, and vice versa. Consequently, the operating environment of dental practices has been changing to respond to government initiatives¹⁵ and future changes will certainly impact service and skills demand for the sector.

Digital technologies

Digital technology is today commonplace in dental health practices. For example, storing patient records electronically, and generating digital dental imaging to better assess and monitor oral conditions are now part of routine workplace operations. As technologies have evolved in dental practices, so too has the role of dental assistants and other dental practitioners to support the implementation of technologies. Key activities dental assistants can be involved in undertaking on a regular basis can range from maintaining, updating and managing client records on electronic databases, to supporting colleagues in using and maintaining technology devices in the practice. As a result, digital competency is a vital skill for the workforce.

Modern information and communications technology has led to efficiencies in the operation and provision of dental practices. Such examples include:

- **Access and links to national and international databases** which enable the dental workforce to seek support outside their own practices for clinical decisions, diagnoses and treatment options
- Introduction of new software to better **track clients** and proactively identify potential issues for early intervention
- **Telehealth** and the use of telecommunication techniques for the purpose of providing telemedicine and medical education, and communicating dental data and information between practitioners in different locations
- **Digital imagery** advancements in **scanning technology** which now provide high-resolution images, reduced scanning time and lower radiation dosages
- **Advances in materials** in specialised areas, such as restorative and aesthetic dentistry, which have created modern alternatives to traditional dental treatments.

Laboratory services are also rapidly moving to digital design and construction methods, such as 3D printing, which require specific skills for the use of such technologies in dental laboratories. These skills needs have been addressed by the training package, with the recent update of the *Diploma of Dental Technology* to include two new units of competency related to computer-aided design and computer-aided manufacturing.

¹⁵ IBISWorld Industry Report Q8531 Dental Services in Australia November 2017

Digitalisation has also affected the everyday living practices of the general public and, as a result, online and social media engagement has become common practice for individuals. The dental health sector and its customers are no exception to this trend and so it is increasingly becoming important for dental health care providers to understand the potential scope and benefits of online engagement. For example, customers are now more accustomed to booking appointments online, interacting with businesses via emails and Chatbots, and making online payments. Findings from SkillsIQ's Cross-Sector project, *Consumer Engagement via Online & Social Media*,¹⁶ showed that the challenges raised by businesses (predominantly small-to-medium-sized enterprises) to effectively engage with consumers via online and social media include lack of skills and knowledge on the part of the workforce. For the dental health sector, this means that workforce skills training is an imperative component to support dental practices in building internal capacity to respond to online engagement demands.

Oral health promotion

Oral health promotion aims to prevent and reduce the extent and impact of oral disease in the community. One of the six foundation areas of Australia's *National Oral Health Plan 2015–2024* focuses on oral health promotion with the goal that "all Australians have access to oral health promoting environments and appropriate evidence-based information and programs that support them to make informed decisions about their oral health".¹⁷ To achieve this goal, a whole-of-community partnership approach is required that involves collaboration between the dental and broader health sectors, education and community organisations and all levels of government.

It is crucial that workforce capacity continues to develop and that skills are strengthened in this area of oral health. The dental health sector requires the skills to work collaboratively with other organisations and sectors such as schools and community services, in order to implement promotion tactics that effectively contribute to better quality oral health.

There is also a high need to continue to develop evidence-based, cost effective and sustainable oral health promotion programs and services that target vulnerable population groups who are most at risk of oral disease. People with special needs, including individuals with mental health issues, socio-economic disadvantaged households, and people in rural and regional locations are some of the key groups targeted in the *National Oral Health Plan* to improve oral health outcomes.¹⁸ Mental health is especially a growing problem in Australia, and recent estimates indicate that 4 million people have experienced a common mental disorder.¹⁹ As mental health becomes a more prevalent condition in the population, treating and caring for patients with mental health issues in dental practices will be more common. Equipping the dental workforce with the right skills and knowledge (i.e. communication, understanding conditions etc.) to treat such patients will grow in importance over time to ensure the oral health care and patient experience is maximised.

¹⁶ SkillsIQ's Cross-Sector Project: Consumer Engagement via Online & Social Media, Case for Change Final (Available at <https://www.skillsiq.com.au/CurrentProjectsandCaseStudies/Consumerengagement>)

¹⁷ Oral Health Monitoring Group. Australia's National oral Health Plan 2015-2024. COAG Health Council. 2015)

¹⁸ 10th National Rural Health Conference, Various authors, *Translating evidence to practice: improving oral health outcomes for rural mental health clients*.

¹⁹ Australian Institute of Health and Welfare (AIHW) Mental health services in Australia (February 2018) (Available at: <https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/summary>)

Dental tourism and globalisation

The local dental health sector is challenged to compete with cheaper overseas options. Australian dental practices face growing competition from overseas providers as an increasing number of individuals are using overseas holidays to obtain cheap dental work.²⁰ Dental tourism can involve tour companies that focus solely on making arrangements on behalf of individuals to receive dental treatments from overseas dental practices. It can also involve individuals making their own arrangements by liaising directly with overseas practices. Popular destinations for Australians to receive discount dental work are Malaysia and Thailand.²¹ These types of trips are increasingly more appealing as individuals experience a combination of a relaxing travel destination, coupled with lower-cost treatments or surgeries. It is estimated that every year up to 10,000 Australians seek dental services overseas.²² Overseas treatments, however, come with an element of risk. Incidents of individuals experiencing problems due to having had dental work performed overseas by a dental practitioner who is underqualified and/or who uses unsafe procedures are not unfamiliar. Despite the risks involved, dental tourism is a growing trend and it is shifting local demand to overseas markets. As individuals go overseas to receive costly treatments (e.g. full mouth reconstructions, crowns, etc.) the supply of such services from the local dental health sector will be impacted.

Outsourcing dental material and product development work to overseas dental laboratories is also an issue for the Australian dental health sector.²³ The production of dental products is delivered at cheaper prices overseas, especially products from countries such as China, Korea and Bangladesh,²⁴ and so demand for products and technician skills has been shifting to overseas markets. The training package has responded to the structural shifts occurring (i.e. the closure of Australian laboratories as demand increases for products made overseas), and the need to generate a workforce with globally competitive skills in this area by including CAD and CAM skills in the *Diploma of Dental Technology* (introduced in March 2018). This update allows Australian-trained dental technicians to stay up-to-date with global skills demands and offer heightened standards of quality compared to those countries to which the domestic dental health sector currently outsources its production requirements. It is imperative for the industry that local laboratories continue to review the skills needs of their workforce in the context of global trends to ensure Australia remains internationally competitive.

Quality and safety

There is an expectation that dental health services, both public and private, will provide a high quality and safe environment for both patients and dental health care practitioners. This environment includes compliance with the Dental Board of Australia's *Guidelines for Infection Control* ('the Guidelines') and safe manual handling per the relevant work health and safety legislation, as well as best-practice posture and ergonomics. All staff in a dental practice have a level of responsibility to ensure the work environment complies with infection control procedures per the Guidelines. This includes dental assistants and the range of other roles supported by this training package. As

²⁰ Australian Dental Association, Dental Tourism (Available at <https://www.ada.org.au/Your-Dental-Health/Adults-31-64/Dental-Tourism> Accessed 2 April 2018)

²¹ Dentists warn overseas discount dental work will cost more in long run viewed March 2018 <http://www.abc.net.au/news/2015-02-15/dentists-warn-against-overseas-discount-dental-work/6107124>

²² Dentists warn overseas discount dental work will cost more in long run viewed March 2018 <http://www.abc.net.au/news/2015-02-15/dentists-warn-against-overseas-discount-dental-work/6107124>

²³ Australian Dental Industry Association (ADIA) (Available at <https://www.adia.org.au/for-dental-labs/home> Accessed 3 April 2018)

²⁴ Outsourcing laboratory work overseas: how it can impact you (7 February 2017)(Available at <http://www.dentalquarters.com.au/blog/outsourcing-laboratory-work-overseas-how-it-can-impact-you/> Accessed 3 April 2018)

accountability for quality and safety procedures increases for dental health sector staff, so too will the need to increase awareness, knowledge and skills of the procedures among the workforce. The training package will need to evolve in line with quality and safety changes to ensure a sufficiently skilled workforce is available.

Workforce distribution

The range of cost-effective services that dental practices perform has been expanded through the increased training of staff and the availability of new technologies. An increase in the number of dental practitioners within the sector has seen a related increase in the number of dental practices (of 4.2%, annualised over the past five years), and generally improved access to services. Between June 2013 and June 2017, the number of registered general and specialist dental practitioners grew by 12.4% to over 22,000.²⁵ While the industry has seen a growth in the number of dental practitioners enter the sector, as well as more diversity in the services offered, distribution of the workforce continues to be heavily skewed towards urban areas. Access to suitable dental health care services is an issue for regional Australia, and the latest workforce statistics show the following number of roles per 100,000 population:²⁶

Major cities:	63.1 Dentists; 5.8 Dental Hygienists; 3.4 Oral Health Therapists
Inner regional:	41.1 Dentists; 2.8 Dental Hygienists; 2.8 Oral Health Therapists
Outer regional:	38.2 Dentists; 3.3 Dental Hygienists; 2.9 Oral Health Therapists
Remote/Very remote:	25.7 Dentists; 2.5 Dental Hygienists; 0.7 Oral Health Therapists

The Royal Flying Doctors Service (RFDS) is a crucial service in regional Australia which provides oral health services through fly-in fly-out, mobile and outreach delivery models. In 2016–17, the RFDS provided 10,832 episodes of dental care across Australia²⁷, and it is a service funded by a combination of state and territory governments, private investments, and donor funds. Despite this service, access to dental care services in regional Australia can be limited.

While regional and remote communities are experiencing shortages in supply, a 2014 report released by the former Health Workforce Australia has concluded that there will be a persistent dental practitioner workforce *oversupply* until at least 2025. This is mainly due to the high number of university graduates and overseas qualified dental practitioners entering the workforce. The mismatch between supply and demand for services is not only an issue for regional communities, but also for other sub-groups of the population such as Aboriginal and Torres Strait Islander communities, and socio-economically disadvantaged households.²⁸ Initiatives and programs to promote workforce distribution to regional and remote communities will benefit the sector in addressing oversupply issues.

The retention of dental assistants is also a workforce issue raised by the sector, with contributing factors cited as including the relatively low rate of pay and the perceived lack of defined career

²⁵ IBISWorld Industry Report Q8531 Dental Services in Australia November 2017

²⁶ Australian Institute of Health and Welfare (AIHW) and The University of Adelaide, *Oral health and dental care in Australia Key facts and figures 2015* (Released 2016)

²⁷ RFDS website <https://www.flyingdoctor.org.au/what-we-do/oral-health/>

²⁸ Bite Magazine (November 2015) The dental workforce fights for its life (Available at <https://bitemagazine.com.au/the-dental-workforce-fights-for-its-life/> Accessed 3 April 2018)

pathways or clear career progression. To address these issues, further exploration of pathways for dental assistants via the *Certificate III and IV in Dental Assisting* is proposed for the upcoming 2018–2019 year. Establishing progression opportunities for assistants and other dental practitioners will aid dental practices in retaining staff and growing their businesses.

Leadership, management and administration skills

The dental health sector offers opportunities for staff at all levels, especially administrative staff, to progress and develop management and leadership qualities. Dental assistants are encouraged by the industry to upskill within their own job roles, as they are in a position to be able to assume additional responsibilities in relation to quality and safety compliance, infection control, or on-the-job training of their colleagues. Examples of pathways for dental assistants with a Certificate III qualification include moving into practice management, treatment or care co-ordinator roles, or moving into the workforce of dental industry companies such as Colgate Oral Care, Gunz Dental and Henry Schein Halas. Dental assistants can also study courses in Dental Hygiene and Oral Health Therapy. The benefits to the business are that health practitioners are able to focus on the delivery of quality care. In addition, this reduces the burden on other staff, creates efficiencies and promotes greater job satisfaction for individuals.

Patient interaction

All dental practitioners need to have some knowledge of the health industry in general, and an understanding of common health conditions. Patients visiting dental practices for oral health care may have underlying health conditions such as diabetes, heart or respiratory conditions, chronic illness or mental health issues, of which as a health practitioner it is important to be aware in order to ensure that appropriate contact and care is provided. Understanding an individual's health status can support dental practices to improve the quality of service delivered and encourage better patient experiences. Patients will also be diverse in age, gender, ethnicity, customs and beliefs. The ability to communicate with a diverse range of individuals is an important skill to ensure a dental practice offers high quality services and can distinguish itself from other dental practices.

Employment Skills and Outlook

Labour force data

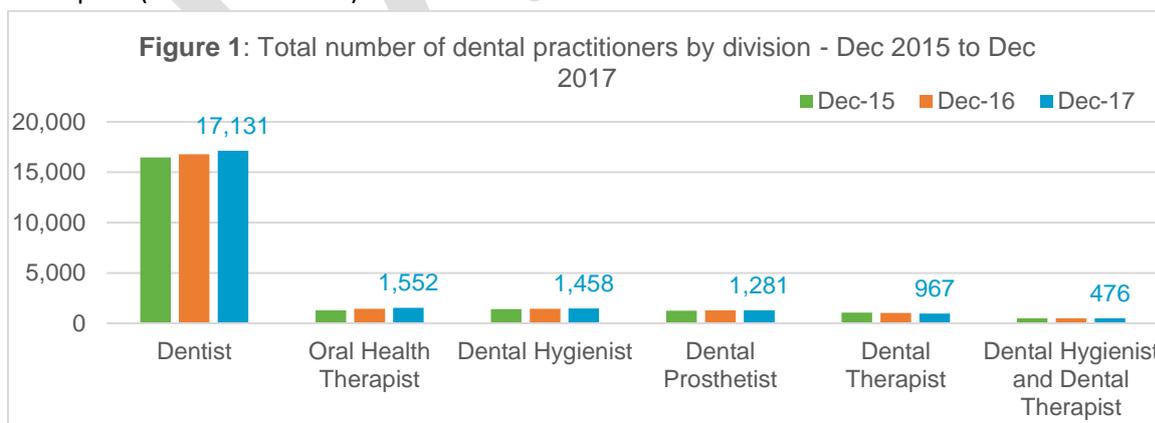
There are various national data collections that provide workforce data and trends regarding roles of relevance to this training package. The three main collections are:

- National Health Workforce Data Set (NHWDS) [Department of Health] – provides a combination of registration and survey data collected through registration renewal processes for registered health practitioners, including various dental practitioners such as dentists, dental hygienists and dental therapists.
- Census data collections [Department of Jobs and Small Business] – provides workforce data and projections based on Census collections and reported according to prescribed Australian and New Zealand Standard Classification of Occupations (ANZSCO) classifications.
- Dental Board of Australia Registrant data [Dental Board of Australia] – provides registration information about dentists, students, dental specialists, dental therapists, oral health therapists and dental prosthetists.

Variations in how roles are defined and categorised across data collections, as well as the timings of reporting, mean that the workforce counts reported across sources can differ. For the purposes of providing an up-to-date and comprehensive summary of the relevant workforce, all three data collections have been used and are referenced accordingly.

Overall Registered Workforce

According to the Dental Board of Australia, as of December 2017 the total number of dental practitioner registrants was equivalent to 22,910²⁹ (see **Figure 1**). Three-quarters of practitioners were dentists (equivalent to 17,131), having increased marginally by 4% since December 2015. Registrations in Oral Health Therapist roles has increased noticeably over the last three years compared to other role types. The total growth noted was 21%, to reach 1,552 practitioners, which surpassed the number of Dental Hygienists in December 2017 (1,458). Falls in registrations instead were noted for Dental Therapists (experiencing a decrease of 9%) and dual-registered Dental Hygienists and Dental Therapists (a decrease of 2%).



Source: Dental Board of Australia Registrant data. Various reporting periods (Table 1.1)

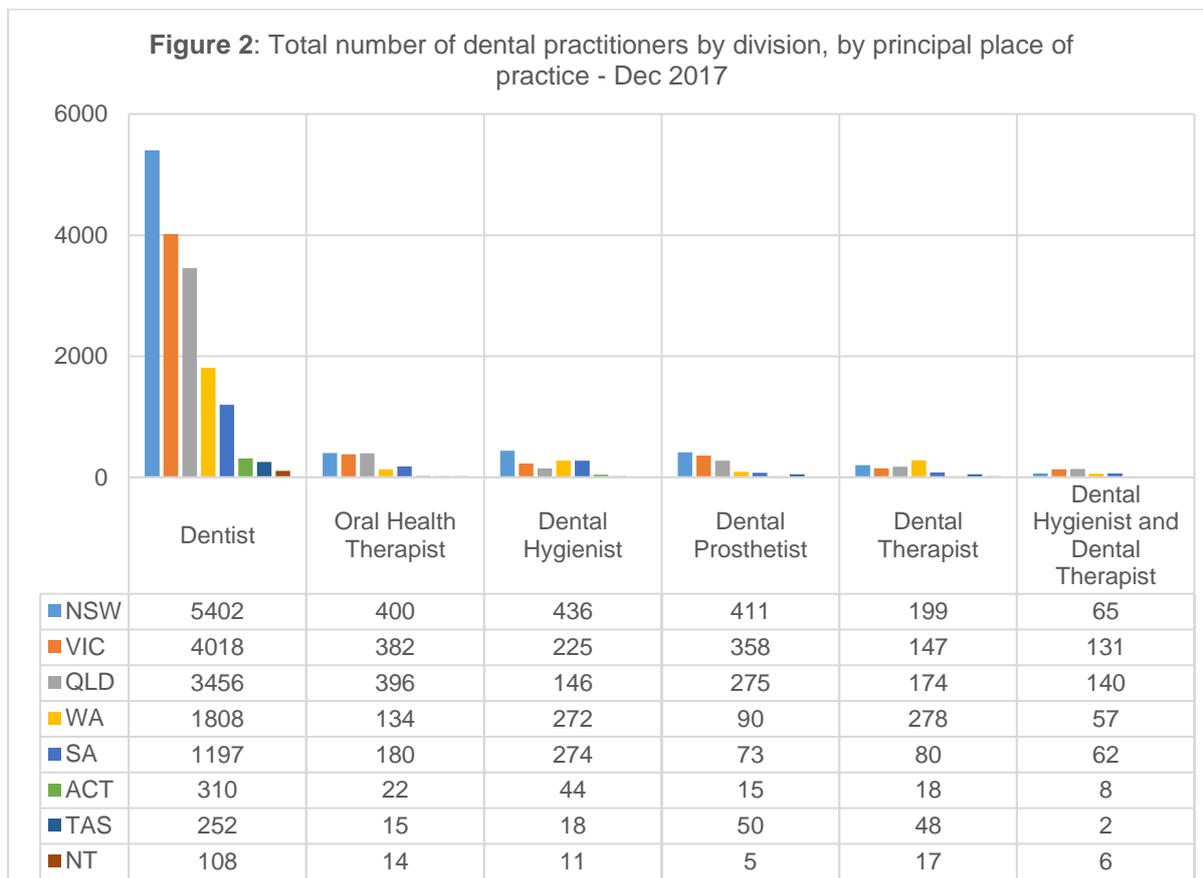
Note: Figures reflect the quarter 1 October to 31 December of the respective year.

Roles with 10 or fewer registrations have not been charted. They represent a range of dual registrations in roles charted above and total between 30 and 45 registrations per year.

²⁹ This includes 45 registrations in dual-registered roles which are not charted in Figure 1.

Registered workforce – by principal place of practice

Across the country, the highest number of practitioners across the reported registration types are predominantly based in **New South Wales**, which is reflective of the population distribution across states and territories (see **Figure 2**). Victoria and Queensland are in general the second and third largest states in terms of practitioner numbers. Western Australia registered the highest number of Dental Therapists (299) compared to all other States and Territories.



Source: Dental Board of Australia Registrant data. Reporting period 1 October – 31 December 2017 (Table 1.1)

As mentioned earlier, the **largest proportionate growth** in registrations (i.e. 21%) was noted in Oral Health Therapists (see also **Table 1** overleaf). Other key trends observed across states and territories include the following:

- Dental Hygienists – Victoria (7%) experienced higher than average increases in registration numbers.
- Oral Health Therapists – Western Australia (41%) and Victoria (28%) noted a significantly high increase in practitioner numbers compared to all other states and territories.
- Dental Prosthetists – South Australia (11%) experienced significantly high increases in registration numbers.

The number of Dental Therapists instead contracted across all states and territories, with the national average decrease measured to be 9%.

Table 1: Percentage change in total number of practitioners with general registrations by division, by state/territory – Dec 2015 to Dec 2017

	Dentist	Oral Health Therapist	Dental Hygienist	Dental Prosthetist	Dental Therapist	Dental Hygienist and Dental Therapist
NSW	4%	19%	5%	-2%	-10%	3%
VIC	5%	28%	7%	3%	-11%	2%
QLD	6%	8%	1%	3%	-8%	-7%
WA	4%	41%	-4%	2%	-7%	4%
SA	1%	22%	4%	11%	-10%	-3%
ACT*	5%	22%	2%	-6%	-5%	-27%
TAS*	6%	15%	0%	2%	-4%	0%
NT*	1%	56%	-15%	25%	0%	-14%
Total	4%	21%	3%	2%	-9%	-2%

Source: Dental Board of Australia Registrant data. Various reporting periods (Table 1.1)

Note: Figures reflect the quarter 1 October to 31 December of the respective year.

*Percentage changes are based on small base sizes (i.e. less than 50). Caution is therefore advised when interpreting trends.

Blue figures represent percentages which are at least three percentage points higher than the national average.

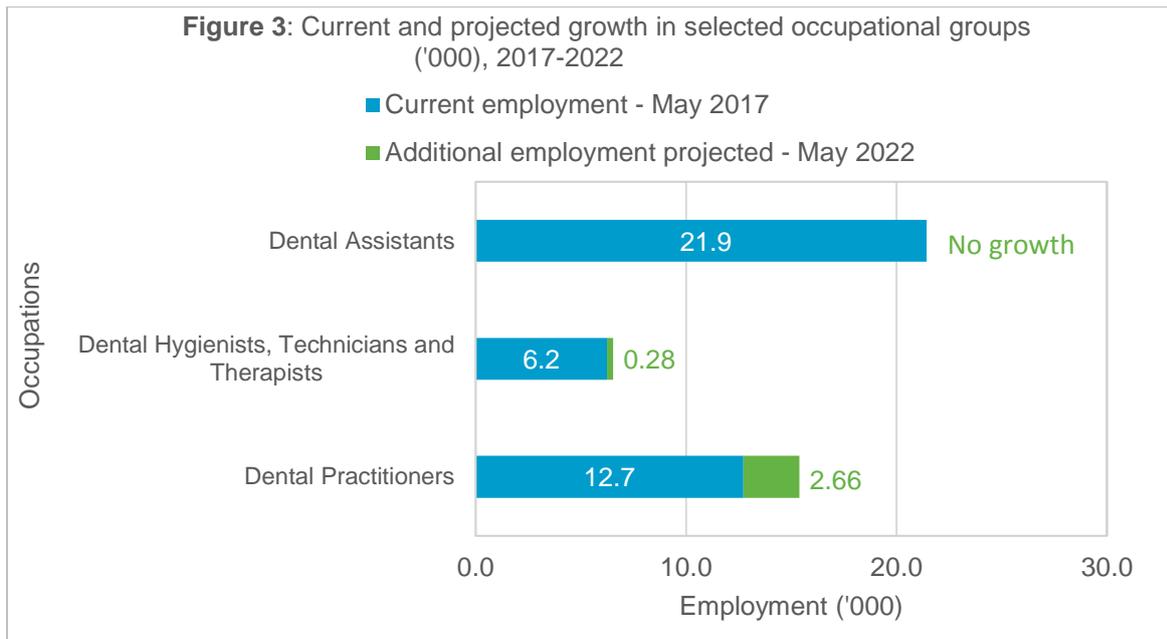
Workforce projections

The Department of Jobs and Small Business' workforce data and projections for roles covered by the Dental Training Package is currently captured across different categories, with examples including:

- ANZSCO 2523 Dental Practitioners (categorised under the *Health Therapy Professionals Worker* ANZSCO code) which represents the sub-groups of Dental Specialists and Dentists.
- ANZSCO 4112 Dental Hygienists, Technicians and Therapists (categorised under the *Health and Welfare Support Workers* ANZSCO code) which represents the sub-groups of Dental Hygienists, Dental Prosthetists, Dental Technicians and Dental Therapists.
- ANZSCO 4232 Dental Assistants (categorised under the *Personal Carers and Assistants* ANZSCO code).

Please note that employment and projection data for the sub-groups listed above (i.e. dental specialists, dental hygienists, dental prosthetists, etc.) is not available. The trends presented below therefore represent an aggregate of the sub-groups.

Across the three main dental categories, the largest growth in employment is forecasted for dental practitioners (which includes dentists and dental specialists), with a rise of approximately 2,660 jobs over the next five years (see **Figure 3**). Whilst these roles required higher education qualifications, they are, however, still supported by this training package as it provides learners with vocational pathways to reach the degree qualifications needed. Overall, employment for dental assistant roles is not expected to grow, and only minimal change is expected for the employment categories of Dental Hygienists, Technicians and Therapists.



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

An overview of the profile traits and key skills needs for Dental Assistants is profiled below.³⁰

- Almost three quarters of dental assistants work on the eastern seaboard of Australia – QLD (25.3%), VIC (24.6%) and NSW (24.5%).
- The average age of a worker is 27 years old.
- Nearly all dental assistants are female (98%).
- 40% of the workforce has obtained a VET qualification (either a Certificate III/IV or Advanced Diploma/Diploma).

Dental Assistant roles
Top Skills Areas

- ✓ Active Listening
- ✓ Reading Comprehension
- ✓ Speaking
- ✓ Critical Thinking
- ✓ Service Orientation

³⁰ Australian Department of Jobs and Small Business, Job Outlook, ANZCO ID; 4232

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	TECHNOLOGY AND APPLICATION	Ability to create/use of technical means, understand their interrelation with life, society, and the environment. Ability to understand/apply a scientific or industrial processes, inventions, methods. Ability to deal with mechanisation/ automation / computerisation.
2	LANGUAGE, LITERACY & NUMERACY (LLN)	Foundation skills of literacy and numeracy.
3	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.
4	LEARNING AGILITY / INFORMATION LITERACY / INTELLECTUAL AUTONOMY	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	CUSTOMER SERVICE / MARKETING	Ability to interact with another human being, 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.
6	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.
7	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.
8	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.
9	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.
10	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.
11	STEM Science, Technology, Engineering and Maths (STEM)	Sciences, mathematics and scientific literacy.
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 / 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

Drivers for change and skill needs

The dental health sector has been evolving in line with global trends, national policy, regulations, technology and health quality and safety practice developments. Key trends of impact have included the increase in international competition (i.e. dental tourism and the demand for overseas dental materials), heightened infection control procedures, expanded integration with other sectors (i.e. Education and Community Services), and an increase in demand for specialist services. The latter trend has meant that services offered by dental practices have been changing, including the specialisms conducted, and as a result, so too have the duties and skills needs of dental support staff.

A widespread **multi-channel consultation** involving the following stakeholders has been conducted to identify and validate the exact nature of the skills needs in the industry, and the respective training package product review requirements (if any):

- All Dental Industry Reference Committee (IRC) members representing the following key bodies:
 - Australian Council for Private Education and Training (ACPET)
 - Australian Dental and Oral Health Therapists Association (ADOHTA)
 - Australian Dental Association Incorporated (ADA)
 - Australian Dental Prosthetists Association (ADPA)
 - Australian Nursing and Midwifery Federation (ANMF)
 - CQ University
 - Dental Health Services Victoria
 - Dental Hygienists Association of Australia Ltd (DHAA)
 - Dentists Assistants Professional Association (DAPA)
 - Directorate of Defence Force Dentistry (Defence)
 - Hunter New England Oral Health
 - Oral Health Professional Association (OHPA)
 - Precision Smiles
- Members and networks of the Dental Assistant Professional Association
- 17,000 stakeholders registered in SkillsIQ's network
- Promotion and availability of the Industry Skills Forecast, including the Proposed Schedule of Work via SkillsIQ's website.

Industry has identified two key gaps in the skills training available to dental assistants via the Certificate III and IV qualifications in the training package. These are:

1. *Orthodontic dental assistance*

An increase in demand from the public to improve the aesthetic alignment of their teeth and have the 'Hollywood smile', has seen a rise in demand for orthodontic dental services. The number of registered specialist orthodontists in Australia has been slowly increasing (to reach 612 in Dec 2017)³¹, however there are also an unknown number of general dental practitioners who also offer orthodontic procedures to patients and are not registered as specialists. **Dental assistants are now increasingly involved in supporting orthodontic procedures and selecting and preparing specialist orthodontic appliances** including orthodontic pliers, removable and fixed appliances, bands, spacers, retainers,

³¹ Dental Board of Australia Registrant data. Reporting Period: 1 October 2017 – 31 December 2017

and archwires. A dental assistant can also be responsible for the ordering and stock control of hundreds of items and therefore awareness and knowledge of these items, their terminology, and their application in the workplace is important.

2. Assisting in implant and surgical dental procedures

Similarly to orthodontic services, dental implants are increasing in popularity. The number of registered Oral Surgeons, and Oral and Maxillofacial Surgeons has increased over the years (with a total registered of 265 in December 2017), and there are now also a large number of dental practitioners undertaking implant procedures who are not formally registered. These procedures require support from dental assistants to not only understand and have knowledge of appliances and procedures, but also set up and maintain sterile work environments to maximise patient safety when it comes to preventing infections. All staff need to have knowledge regarding a sterile environment, including hand scrub techniques and appropriate hand washing products.

Many dental assistants are now required to undertake duties to support these specialist procedures which are not covered in the training package. Currently in Australia, **there are no formal vocational units available to train staff in these specialties:** orthodontic assistance, and implant and surgery assistance. **The Certificate III and IV in Dental Assisting do not include sufficient anatomical, instrument or sterility knowledge for the workforce in these specialties.** For example, for orthodontic assistance duties, the qualifications do not include sufficient detail on malocclusions and their treatment which is one prime concern in orthodontics.

Training instead is being covered by either in-house ‘on-the-job’ teachings by senior staff, short (one day) courses being run by orthodontic, implant or appliance supply companies, or overseas online courses that can be purchased. Online courses from the USA are currently popular as the USA recognises orthodontic dental assisting as an important dental specialty and one which requires specific training. There are many courses offered in the USA by individual state training providers and these courses are recognised in dental assistant registration requirements.

The training options available in Australia are varied, inconsistent and often do not cover up-to-date or correct information or practices. The consequences of inconsistent and poor training can mean patients are being exposed to non-sterile and poorly prepared treatment procedures, and their welfare is at risk.

DAPA, the peak body for dental assistants in Australia, confirms that they have received a large number of requests for skills training in these areas by dental practices, dental assistants and support staff (who find they are lacking skills once they are in the workplace), and students.

[Proposed response](#)

To address this workforce skills issues, it is proposed that an update of the following qualifications and Skill Sets in the training package and skill sets is conducted:

- HLT35015 Certificate III in Dental Assisting
- HLT45015 Certificate IV in Dental Assisting
- Oral Health Skill Set
- Dental Radiography Skill Set

They require updating to reflect the changing duties relevant to the job roles of all dental support staff, including dental assistants.

The two qualifications are similar in core structure, therefore it is proposed that both qualifications are updated simultaneously to ensure consistency in the update process and final outcomes will be suitable and fit-for-purpose. The updates required will be fully explored during industry consultation (see 2018-19 Project Details), however it may involve:

- The development of new Units of Competency which cover the specialist areas e.g. for orthodontic assistance it may include topics of malocclusions, class and divisions used in orthodontics, overbite/overjet and terminology
- The change of current Units of Competency to include some of these specific areas
- The addition of areas to current Skill Sets (e.g. change the Oral Health Skill Set)

A number of key risks have been identified and are tabled below should the update of the training package (in line with addressing the skills needs voiced by industry) not take place.

Stakeholder	Risk of no change
Employers (i.e. Dental practices)	<ul style="list-style-type: none"> - Risk of patient experiencing poor quality care and/or negative effects of treatment are heightened as procedure set up and support have been conducted by an assistant with inadequate knowledge and skills. - Cost implications include time allocated to conduct in-house training with staff which reduces time for patient treatment and practice management. - Staff turnover can be further affected by the lack of progression to specialist support roles (due to lack of specialist support skills).
Employees (i.e. dental assistants)	<ul style="list-style-type: none"> - Inability to conduct all duties of role adequately and/or progress - Increase patient's health risks and consequently compromise the dental practice's reputation - Receive poor and inadequate training by accessing unaccredited and/or unsuitable training options for Australian practices.
Students	<ul style="list-style-type: none"> - Graduate with insufficient skills to support dental practitioners and therefore employability is reduced.
Training Providers	<ul style="list-style-type: none"> - Training offered does not match industry needs and quality and reputation of course delivery is compromised.

The proposed response aims to ensure the dental health sector, and associated sectors (i.e. Education, Community Services etc.) are supported by a high quality trained and skilled dental assistance workforce. Facilitating access to training in these specialisms will support dental practices to improve efficiencies in operations, but also maximise patient health and welfare in all dental services delivered.

Proposed Schedule of Work

2018-2019

Year	Project Title	Description
2018-19	Dental Assisting	<p>The IRC proposes to update the following qualifications and associated skill sets, and Units of Competency relating to dental assistant job roles:</p> <ul style="list-style-type: none"> • HLT35015 Certificate III in Dental Assisting • HLT45015 Certificate IV in Dental Assisting • Oral Health Skill Set • Dental Radiography Skill Set.

2019-20

Year	Project Title	Description
2019-20	Dental Laboratory Assistant	<p>The IRC proposes to update the following qualifications and any associated skill sets and Units of Competency relating to the dental laboratory assistant job roles:</p> <ul style="list-style-type: none"> • HLT35115 Certificate III in Dental Laboratory Assisting.
2019-20	Dental Prosthetics	<p>The IRC proposes to update the following qualifications and any associated skill sets and Units of Competency relating to the dental prosthetist job role:</p> <ul style="list-style-type: none"> • HLT65015 Advanced Diploma of Dental Prosthetics.

2020-21

Year	Project Title	Description
2020-21	Dental Technology	<p>The IRC proposes to update the following qualifications and any associated skill sets and Units of Competency relating to the dental technician job role:</p> <ul style="list-style-type: none"> • Diploma of Dental Technology

2018-19 Project Details

Description	Dental Assisting Qualifications and Skill Sets
Rationale	<i>Refer to section - Key Drivers for Change and Proposed Responses</i>
Ministers' Priorities Addressed:	<p>The development of Training Package products proposed provides opportunities to support the COAG Industry and Skills Council to identify:</p> <ol style="list-style-type: none"> Opportunities to identify and remove obsolete Training Package products from the system. Industry expectations for training delivery and assessment (to be documented within the Companion Volume Implementation Guide). Opportunities to enhance the portability of skills from one related occupation to another. Opportunities to remove unnecessary duplication within the system and create Training Package products that may have application to multiple industry sectors. Note, that due to the specific nature of the dental assistant roles, and the use of some HLT Units of Competency not under the remit of this IRC, this may not be possible. Opportunities for the development of skill sets. This project includes the review of existing skill sets and will explore the potential for the development of new skill sets.
Consultation Plan:	<p>Key stakeholders identified in on page 7 and 8 will be consulted. A national industry consultation will be conducted with key stakeholders, and there will be opportunities for all interested parties to provide their comments online via the SkillsIQ Online Feedback Forum.</p>
Timing - estimate duration of project and key dates	<p>July 2018, subject to AISC approval. Estimated duration: 12months.</p>
Training Package to be revised	<p>HLT Health Training Package</p>
Qualifications to be updated	<p>Two (2) qualifications to be updated:</p> <ul style="list-style-type: none"> HLT35015 Certificate III in Dental Assisting HLT45015 Certificate IV in Dental Assisting
Skill sets to be updated	<p>Two (2) skills sets to be updated:</p> <ul style="list-style-type: none"> Oral Health Skill Set Dental Radiography Skill Set

<p>Units of Competency to be Developed/Updated</p>	<ul style="list-style-type: none"> • Units of Competency within the two dental assisting qualifications, oral health and dental radiography skill set: <ol style="list-style-type: none"> 1. HLTDEN001 Prepare for and assist with oral health care procedures 2. HLTDEN002 Assist with dental radiography 3. HLTDEN003 Assist with administration in dental practice 4. HLTDEN004 Implement an individualised oral hygiene program 5. HLTDEN005 Assist in oral health care procedures during general anaesthesia 6. HLTDEN006 Assist in oral health care procedures during conscious sedation 7. HLTDEN007 Apply the principles of radiation biology and protection in dental practice 8. HLTDEN008 Prepare to expose a prescribed dental radiographic image 9. HLTDEN009 Produce a prescribed dental radiographic image 10. HLTDEN010 Implement an oral hygiene program for older people 11. HLTDEN011 Implement an oral health promotion program 12. HLTDEN012 Take an impression for study models 13. HLTDEN013 Allocate treatment appointments according to priority 14. HLTDEN014 Take a clinical photograph 15. HLTOHC001 Recognise and respond to oral health issues 16. HLTOHC002 Inform and support patients and groups about oral health 17. HLTOHC003 Apply and manage use of basic oral health products 18. HLTOHC004 Provide or assist with oral hygiene 19. HLTOHC005 Use basic oral health screening tools 20. HLTOHC006 Apply fluoride varnish • New Units of Competency may be required- this will be fully confirmed following consultation with industry.
---	--

IRC Sign-off

The 2018 Industry Skills Forecast will be signed off by the IRC Chair before submission to the AISC.